

SHORT TITLE

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Birds of the Monteregian Hills and adjacent areas, P. Q., Canada

BIRDS OF THE MONTEREGIAN HILLS AND ADJACENT
AREAS, PROVINCE OF QUEBEC, CANADA.

by

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requirements for the Degree of Master of Science
in McGill University, Montreal, Canada.

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ABSTRACT

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Department of Zoology

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The bird fauna of the Monteregian Hills Region has been studied. The author reports on 322 species of birds of which 155 have been ascertained to nest. It is proposed that the bird fauna of the primeval forest was that of the deciduous forest. Eleven species are considered as new arrivals. It is also proposed that the region, as a biological unit, be part of the deciduous ecotone in a system recently suggested by the writer.

TABLE OF CONTENTS

	page
Introduction	1
Previous work	1
Present work	2
Geography	3
Geology	7
Soils	8
Climate	8
Vegetation	9
1. Pre-colonial vegetation	9
2. Post-colonial and present vegetation ..	15
Forests stands	19
Open fields	20
Orchards	20
Bogs	20
Swamps	21
Water vegetation	21
Discussion and conclusions	23
I The bird fauna of the Monteregeian Hills Region	23
II Recent changes in the bird fauna of the Monteregeian Hills Region	23
The former bird fauna	24
The present bird fauna	28
Species reduced in numbers	31
Recent range extensions	31

Ardeidae, Anatidae, Phasianidae	32
Rallidae, Scolopacidae, Laridae	33
Columbidae, Cuculidae, Tytonidae ...	34
Strigidae, Caprimulgidae, Hirundi- nidae, Troglodytidae	35
Mimidae, Vireonidae, Sturnidae, Paru- lidae	36
Ploceidae, Fringillidae	37
Species more numerous at the present ...	38
Introduced species.....	39
III Geographic variation in the birds of the Monteregian Hills Region	40
IV Biomes and Ecotones in the Monteregian Hills Region	40
V Conclusions	41
Acknowledgments	42
Annotated list	43
Gaviidae	44
Podicipedidae	46
Hydrobatidae	50
Sulidae	50
Phalacrocoracidae	51
Ardeidae	53
Threskiornithidae	63
Anatidae	64
Cathartidae	99
Accipitridae	100
Pandionidae	113
Falconidae	114
Tetraonidae	117
Phasianidae	120
Rallidae	123
Charadriidae	129
Scolopacidae	134
Phalaropodidae	155
Stercorariidae	156
Laridae	157
Alcidae	167
Columbidae	169
Cuculidae	172
Tytonidae	174
Strigidae	175
Caprimulgidae	185
Apodidae	187
Trochilidae	188

Alcedinidae	189
Picidae	190
Tyrannidae	199
Alaudidae	208
Hirundinidae	209
Corvidae	216
Paridae	220
Sittidae	222
Certhiidae	225
Troglodytidae	226
Mimidae	231
Turdidae	234
Sylviidae	243
Motacillidae	245
Bombycillidae	246
Laniidae	248
Sturnidae	249
Vireonidae	250
Parulidae	254
Ploceidae	284
Icteridae	285
Thraupidae	293
Fringillidae	294
List of references	324
Appendix	332
Map 1.....	333
Table 1, altitude of Monteregean Hills	335
Table 2, mean precipitation	335
Table 3, temperature during breeding season .	336
Table 4, summary on bird fauna of Monteregean Hills Region.....	337
Table 5, Post-Pleistocene vegetation and temperature sequence in southern Quebec	339

INTRODUCTION

The Monteregian Hills and their associated lowland areas (designated in this paper as the Monteregian Hills region) are located in southwestern Quebec (MAP I), where the topography, the vegetation and the ecological conditions are quite different from that of the adjacent regions. These differences appear to be of sufficient magnitude to affect the nature of the bird fauna in the region when compared with surrounding regions. The long colonization of the St. Lawrence Lowland undoubtedly has had a marked influence on bird distribution following the destruction of the primeval forest and its replacement by farmlands; there is no doubt that vegetation changes have resulted in changes in the bird distribution since the arrival of the white man. In this study, the writer will be chiefly concerned with this aspect in reviewing in detail the present bird fauna of the region and by comparing it with the bird fauna of the area as described by previous authors (Hall, 1862; Wintle, 1882; 1896). A list of the birds assumed to have occurred in the primeval forest, according to the nature of the forest community and bird ecology, will also be provided.

PREVIOUS WORK

Some of the birds encountered in the Monteregian Hills region have been mentioned in the writings of the early explorers and writers (Champlain, in Laverdière, 1870; Boucher, 1664; Kalm, 1771). However, a study of the bird fauna of the region was not published until 1862, when Dr. Archibald Hall published his study on the birds of the district of Montreal. In spite of its shortcomings, this work constitutes the first comprehensive source of information available;

indeed, this paper was prepared in the 1830s but was not published until 1862. W.S.M. D'Urban published in 1857 a most useful paper on the birds known to winter in the Montreal area, and Ernest D. Wintle prepared several notes on the birds of the area from 1890 to 1896. In 1896, he published his most comprehensive study "The Birds of Montreal", which proved to be the only available source of information on the birds of the southwestern of the province, for many years, notwithstanding some inaccuracies and shortcomings. Since 1900, many papers by Terrill, Mousley, Brown, Smith, etc., ^{have} provided accurate accounts of ornithological events in the region. The foundation of the Province of Quebec Society for ^{the} Protection of Birds in 1917, and the publication of the annual report some years later, in which are included a "résumé" of the observations recorded by the members during the year, has proved to be a reliable and extremely useful source of distributional data; the data of the annual reports were extensively used in this study. In the late 1950s, the P.Q.S.P.B., launched a program to obtain information on the nesting birds of the region known as the "Nest Record Cards"; these also proved to be most useful in the present study. A complete review of the published work on the birds of the Monteregian Hills region is given in the list of references.

PRESENT WORK

The writer, who resides in the region since the fall of 1964, has studied the bird fauna as follows:

From 29 September 1964 to 26 April 1965 164 days spent in the field, mostly around the Mont St. Hilaire area, although all the region

south of the St. Lawrence River was visited at various intervals. From 27 April to 29 July 1965, study on the breeding birds of the region.

From 16 September 1965 to 17 May 1966, 63 days spent in the field throughout the region.

From 18 May to 21 June 1966, study on the breeding birds of the region.

From 13 September 1966 to 20 May 1967, 27 days in the field throughout the region.

During the summer field season of 1965 and 1966, a total of 396 specimens were collected throughout the region and have been deposited in the Redpath Museum. The author was also fortunate to have the privilege to use the data recorded with the F. N. Smith Egg Collection of the Redpath Museum, which comprises over 800 sets of eggs, many of which were collected in the region covered in this study. It was also the author's privilege to have access to the collections of birds of the Redpath Museum, which comprise many unique specimens.

GEOGRAPHY

The area covered in this study is located in the southwestern corner of the province of Quebec and occupies roughly 2500 square miles (275 square kilometres). It lies between 45 /15' and 45 /40' latitude North, and 72 /30' and 74 /00' longitude West. The area comprises the Hochelaga Archipelago (Montreal Island and surrounding islands including Ile Perrot) and stretches from the northern extremity of Lake of Two Mountains to the Sutton Mountains; its width is about 75 miles.

The area consists of a flat low plain known as the Upper St. Lawrence Lowland from which emerge eight "mountains" called the Monteregian Hills (Adams, 1903) (TABLE I). The region is easily accessible due to the large number of roads which are scattered through it. It is heavily populated and extensively used for agricultural, industrial and residential purposes, leaving only an excessively small percentage of the area undisturbed. It is crossed by two important rivers: the St. Lawrence, in which lies the Hochelaga Archipelago, flows in a southwest-northeast direction, and the Richelieu, a slow moving river which constitutes the outlet of Lake Champlain, flows into the St. Lawrence after having crossed the flat Lowland in a south-north direction. Three wide expanses of water on the St. Lawrence River are now known as Lake St. Louis, Lake St. Francis and Lake of Two Mountains owing to their slow current and large size. Rapids are not uncommon on the St. Lawrence, of which the most important is the Lachine Rapids which remains open all year around.

However, the striking feature of the region consist of the eight hills which are briefly described below; their exact position is indicated on MAP I.

Mount Royal, the most westerly of the Monteregian Hills, lies in the heart of the City of Montreal, although, its original vegetation has been greatly modified, particularly since the establishment of a public park over most of the area. It stands as an oasis of vegetation in a densely populated area, being the only part of the Island of Montreal where a relatively large amount of forest has been preserved.

Mont St. Bruno, the lowest in elevation, has been preserved from human activities until quite recently; indeed, residential developments have caused the forests of the mountain to be cut to a large extent, leaving small stands of old forest vegetation in a few places only.

Mont St. Hilaire, which was bequeathed to Mc Gill University by Brigadier A. Hamilton Gault, has retained more of its original vegetation than any of the other mountains, because most of it became in 1914 the private property of Brigadier Gault who preserved it undisturbed from human activity. Although, forest fires have destroyed some of the original vegetation, most of it was left untouched on the higher elevations. Important quarries deface the mountain on its eastern and north eastern sides.

Mont Rouge, about five miles to the southeast of Mont St. Hilaire, is also readily accessible by road. Its vegetation has been greatly modified since the establishment of a skiing center on its northwestern slope and by the practices involved in Sugar Maple management.

Mont Johnson is the smallest in area of all the Monteregian Hills. It has been modified by human activities to a greater extent than the others: Sugar Maple management and logging have changed its forests.

Mont Yamaska, on which Sugar Maple operations are very active, has preserved most of its original vegetation on the higher elevations and on the steeper hills.

Mont Shefford, due to its low relief, has been extensively used for farming. The most rugged parts of the mountain are covered with second growth vegetation; scrubby fields and second growth stands are quite abundant on the flatter areas since many of the farms have been abandoned.

Mont Brome, the largest of the Monteregian, covers an area nearly thirty square miles. It is the most easterly of the series. Nearly all its original vegetation has been replaced by farmland and second growth stands. Important residential developments, a ski center, and a golf course, have considerably changed its original topography and vegetation.

The Lowland and islands are extremely flat and low-lying, and almost entirely deprived of any forest vegetation. They have been progressively settled since the end of the 17th century and more extensively since the middle of the last century so that nearly every part has been put to use by farmers who have kept only small wooded areas. As the population of Montreal was increasing new urban aggregations and villages have been formed thus reducing considerably the farming areas of the immediate vicinity of Montreal; the industry has also taken a considerable amount of land for its own purposes. At the present, the study area is the most populated of the province, and at the same time, the area where there is the smallest amount of forest, excluding, of course, the Monteregian Hills where extensive stands have been preserved, the land being not suitable for farming. At the present time the forest vegetation of most of the Monteregian Hills is diminishing

rapidly, due to expanding residential area and the establishment of playgrounds, etc.

GEOLOGY

The study area is part of the St. Lawrence Lowland as described by Dresser and Denis (1944). According to these authors it is formed by nearly horizontal Palaeozoic sedimentary strata which reach a great thickness at many places. These strata of Cambrian, Ordovician and Silurian ages consist of quartz sandstone, friable sandstone with dolomitic cement and dolomite beds. The stratification deviates in places from the horizontal and the dip is generally toward the south or the southeast.

Adams (1903) has called "Monteregian Hills", eight hills which dominate the St. Lawrence Lowland of the area defined in this study. These hills are composed of igneous rocks, and have originated, according to geologists, from a common magma (Dresser and Denis, 1944: 455). Their peculiar formation has given rise to several kinds of minerals found nowhere else. The hills have been of the greatest interest to geologists not only in terms of their mineralogical constituents but also in terms of their mode of formation, which is still being studied. To summarize, the study area is comprised in the St. Lawrence Lowland and the Monteregian Hills geological formations, which are unique in southern Quebec. Indeed this region is surrounded to the north by the Precambrian Shield and to the south by the Sutton Range which are of a completely different geological formation.

SOILS

The soils of the Monteregian Hills region belong to the dark grey glesolic soils, but the soils of the forests are brown and podzol soils sometimes occur in certain places (Atlas of Canada, 1957). The distribution of the brown forest soils corresponds with the distribution of the deciduous forest and this type of soil reaches its northern boundary in southwestern Quebec (Grandtner, 1966).

CLIMATE

The climate of the Monteregian Hills region belongs to the great humid microthermal group; it is of a humid continental type with warm summers (Dfa) where the mean temperature of the warmest month is over 71.6 F (Atlas of Canada, 1957). The mean annual number of degree days above 42°F varies between 3500 and 3000 but is never less than 3000. The mean annual total hours of bright sunshine varies between 1,800 and 2,000 hours, while it is less than 1,600 hours only a few miles north of the region. The mean annual percentage of total daylight hours (from sunrise to sunset with bright sunshine) fluctuates between 40% and 45%. The mean precipitation during the growing season varies between 15 and 18 inches but its variability is of the order of 0-20%. The mean summer precipitation (June-August) for several years throughout the St. Lawrence Lowland is 10 inches. The mean precipitation for the months of May, June and July is provided for two localities of the region on TABLE 2, and the data are slightly different from that of the Sutton Mountains or that of the Laurentides. The temperature of the region is also different from that of adjacent areas, and the number of frost-free days averages 140, ranging from 15 May to 1 October; in the

Sutton Mountains and in the Laurentides it averages 100 days or less, The mean annual length of the growing season has been estimated to 180 days, while south of the region it is 200 days, and to the north 160 days. The April mean daily temperature is 40°F, and that of July is 65°F. On TABLE 3 a summary of the mean temperature is provided, and has been compared with data from nearby areas and proved to be different. These differences, according to Villeneuve (1946) and Grandtner (1966) are of sufficient magnitude to explain the differences in the vegetation of the region.

VEGETATION

1. Pre-colonial vegetation

Pleistocene glaciations and post-Pleistocene events in southern Quebec were extremely complex (Dresser and Denis, 1944). The retreat of the glaciers, marine incursions (Flint, 1948), and local ice caps (Osborne, 1951), both near and in the area presently covered by the St. Lawrence Lowland, had no doubt an extraordinary effect on the primary implantation of vegetation in the Monteregian Hills region. The sequence of successive vegetational changes is therefore difficult to establish. However, through bog pollen diagrams, Potzger (1953, 1954) presents a well documented picture of the ecological conditions that have prevailed in the southern part of the Province of Quebec, and a provisional scheme of forest succession since the retreat of the last ice front (see table 5).

The data presented on this table are extremely interesting as they show a pine period (division 3, on table) followed by various forest associations, resulting from climatic changes. It is difficult to determine how long this "great pine period" lasted, but, according to

Potzger, it occupies a prominent place in all pollen profiles of Eastern North America (Potzger, 1954:557). Mixed hardwood forest associations followed the pine period, and the latest forest complexes (divisions 4 and 5, on table) have in turn persisted until historical times, without the complete disappearance of pine.

At the time the first explorers visited the St. Lawrence Lowland area, the forest associations were undoubtedly those of Section 5 of the table reproduced above, as suggested by the writings of the early explorers. Jacques Cartier, who was the first European to give a written account of his travels through the St. Lawrence Lowland, describes in some detail the forest that he saw during his trip of 1535, particularly that of the Island of Montreal:

(the St. Lawrence Lowland, as seen from the River, between Quebec City and Montreal)

"Le lendemain dix-neuvième jour du dit mois de Septembre (1535) comme dit est ... amont le dit fleuve, ou trouvâmes a voir deux cotes d'icelui les plus belles et meilleures terres qu'il soit possible de voir, aussi unies que l'eau, pleine des plus beaux arbres du monde. Depuis le dit jour dix-neuvième jusques au vingt-huitième du dit mois (septembre) nous avons été navigateurs a-mont le dit fleuve, sans perdre heure ni jour, durant lequel temps avons vu et trouve aussi beaucoup de pays et terres aussi unies que l'on saurait desirer, pleines des plus beaux arbres du monde, savoir: chesnes, ormes, noyers, pins, cedres, pruches, fraisnes, bouilles, saules, oziers et force vignes..."

(Cartier, in Soc. litt. hist. Qué., 1842:39-40)

(the Island of Montreal, and surrounding area) "Hochelaga ... Et nous estons en chemin, le trouvasmes aussi battu qu'il soit possible de voir, en la plus belle terre et meilleure pleine: des chesnes aussi beaux qu'il y ait en foret de France, sous lesquels estoit toute la terre couverte de glands ..."

(Cartier, in Soc. litt. hist. Qué., 1842:43)

Nearly a century later, Champlain travelled through the same area and left an accurate account of what he had observed on his trip through the St. Lawrence Lowland:

(Montreal area)

Rivière de Chambly, 30 juin 1603.

" Toutes ces terres sont couvertes d'arbres, terres basses comme celles que i'auois veues auparavant; mais il y a plus de sapins et de cyprès qu'aux autres lieux".

(Champlain, in Laverdière, 1870:34)

Région de Montréal, 1 juillet 1603.

" Le premier jour de juillet, nous costoyames la lande du Nort, où le bois y est fort clair, plus qu'en aucun lieu que nous eussions encore vu auparavant, toute bonne terre ... pour cultiver ... où je veis quantité d'isles, lesquelles sont fort fertilles en fruits, comme vignes, noix, noysettes & une manière de fruit qui semble à des chasteignes, cerises, chesnes, trembles, pible (peuplier), houblon, fresne, érable, hestre, cyprès, fort peu de pins et sapins.

(op. cit. :36)

Saint-Lambert, 2 juillet 1603.

" ... tous les bois y sont fort petits, au regard de ceux que nous avions passé".

(op. cit. :37)

In 1664, Pierre Boucher published in Paris his brief but important study on the natural history of New France, in which are given good descriptions of the land, of the forests and of some of the trees found in them:

Montreal Island

"Mont-Royal, qui est la dernière de nos habitations françoises, est plus avancée dans les terres. Elle est située dans une belle grande isle du Mont-Royal, les terres y sont fort bonnes. C'est terre noire ou pierreuse, qui produit du grain en abondance: tout y vient parfaitement bien ... la pesche et la chasse y est tres bonne ... c'est un Pays plat, une forest où les arbres sont gros & hauts extraordinairement: ce qui monstre la bonté de la terre, ils y sont clairs & point embarssez de petits bois: ce seroit un Pays tout propre à courir le Cerf, dont il y a abondance ... la plupart de ces arbres sont des chesnes ..."

(Boucher, 1664:127)

" Il se trouve de deux sortes de chesnes; l'un est plus poreux que l'autre ... ces arbres viennent hauts, gros, & droits, & sur tout vers le Mont-Royal"

(op. cit. : 134)

He describes some of the Walnuts found in Canada, giving some remarks about their features and their range.

"l'autre sorte de Noyers ... mais le bois de l'arbre est fort dur, & rouge dedans: on commence d'entrouyer au Mont-Royal ..."

(op. cit. : 134)

Further, he describes the oak stands of the area surrounding lake St. Francis, a few miles southwest of Montreal:

" Au lac Saint François qui est environ quatorze ou quinze lieues au dessus du Mont-Royal, il se trouve une des belles chenayes qui soynt dans le monde, tant pour la beauté des arbres, que pour sa grandeur: elle a plus de vingt lieues de long, & l'on ne scait combien elle en a de large."

(op. cit. : 168)

As it can be seen from the statements of these early writers, the forests of the Monteregian Hills area, particularly the sectors adjacent to the St. Lawrence River, which was used extensively as the only route west of Quebec City, and to the Great Lakes are accurately described. It appears that the whole area was more or less heavily forested with deciduous species; coniferous species appear to have been present only in small quantities, as stated by Champlain: "fort peu de pins & sapins" (Champlain, speaking about the area adjacent to the Lachine Rapids, in Laverdière, 1870:36). He adds (op. cit. :40): "tout ce peu de pais du costé dudict sault que nous traverscames par terre, est bois fort clair, où l'on peut aller aysement avecque armes sans beaucoup de peines". It thus appears that the forests of the Montreal area had then reached a state of relative stability, as found in mature forests, where the undergrowth is very reduced.

From the descriptions given previously, it also appears that the forests associations, at least on Montreal Island and around Lake St. Francis, were dominated by oaks. Elms, walnuts, pines, beeches, maples, hemlocks, and chesnuts, which are also mentioned, probably appeared in

various proportions, depending on exposure, moisture, and soil conditions, although one is left with the impression that the importance of these species was much less than it is nowadays.

Very little is said about the other types of plant associations of the region. However, Jacques Cartier mentions that grapevines grew profusely along the St. Lawrence River, between Quebec City and Montreal (Cartier, in Soc. litt. hist. Qué., 1843:39-40). He adds further, going out of the village of Hochelaga: 30 September 1535: "Ce fait, marchames plus outre, et environ demie lieue de la commences a trouver les terres labourées, et belles grandes campagnes pleines de blé de leurs terres (=corn) ... Et au parmi d'icelles campagnes, est située et assise la dite ville de Hochelaga, près et joignant une montagne qui est l'entour d'icelle, bien labourée et fort fertile ..." (op. cit. : 1843:43). Thus, it appears that there were clearings and cultivated fields in the primeval forest of the Island of Montreal, and undoubtedly in other parts of the St. Lawrence Lowland. Indeed, the Iroquoian tribes knew how to grow maize, beans, squashes, sunflowers and tobacco (Jenness, 1958:29-30). The size of the clearings for cultivation might have been considerable at times as the clearing of the land was done by setting fire to the forest. The role of Indians in modifying the primeval forest is also important in that they knew nothing about crop rotation; indeed, when the land had become exhausted after a few years of cultivation they would move elsewhere, leaving behind them open fields, which were colonized, very likely, by grass associations, until the area was completely reforested also, the fact that the Indians, after having used up all

the firewood near their campsites would move to another place, has certainly contributed to a great extent to the destruction of important areas in the primeval forest. Reforestation very likely gave rise to different plant associations.

Champlain gives a brief account regarding the open areas of the Montreal region " nous passasmes aussi par quantité d'autres îles qui sont très bonnes et plaisantes, pour la quantité des prairies qu'il y a, tant du costé de terre ferme que des autres isles.

" (Champlain in Laverdière, 1870:37). Pierre Boucher gives a few details about fields or open areas: " il y a de très belles prairies: mais il est assez dangereux d'avoir le foin, tant que les Iroquois nous ferons la guerre, & sur tout aux habitations des Trois-Rivières & du Mont-Royal ... " (Boucher, 1664:159). The prairies or meadows mentioned by these two writers probably refer to extensive associations of fresh-water shore-plants such as Calamagrostis canadensis or Spartina pectinata.

2. Post-colonial and present vegetation

Since the establishment of the first settlements in the St. Lawrence Lowland, area covered by the original forest has gradually shrunk and the vegetation has been constantly modified.

Accounts on the vegetation from that period are few, and most are unreliable. Therefore, it is almost impossible to determine at what rate the forest disappeared from the Monteregian Hills area yielding to intensive colonization. However, Peter Kalm has left fairly accurate accounts of his observations through part of the Monteregian Hills area; some excerpts, dealing with the region, are quoted below:

Chambly, 21 July 1749.

" The marshes and the low situation of the country, together with the extent of the woods, contribute greatly to their (= mosquitoes) multiplying so much; and when the woods will be cut down, the water drained, and the country cultivated, ..." (Kalm, 1771:47).

This short passage describes very well the process undergone by the lowlands of the area, as nearly all of them are at the present used for agricultural, industrial or residential purposes.

Chambly area, 23 July 1749.

" After we had gone about three French miles, we came out of the woods, and the ground seemed to have been formerly a marsh, which was now dried up. From hence we had a pretty good prospect on all sides. On our right hand at a great distance we saw two high mountains, (= Mont St. Hilaire and Mont Rouge) rising remarkably above the rest; and they were not far from fort Champlain (= Chambly). We could likewise from hence see the high mountain which lies near Montreal (= Mont Royal). Soon after we got again upon wet and low grounds, and after that into a wood which consisted chiefly of the fir with leaves which have a silvery underside (Abies foliis subtus argenteis = Abies balsamea) (op. cit., 50).

St. John's, 23 July 1749.

" The country was always low, woody and pretty wet, though it was in the [^]mist of summer" (op. cit., 49).

Laprairie, 23 July 1749.

" The Zizania aquatica, or Folle Avoine grows plentiful in the rivulet or brook, which flows somewhat below Prairie" (op. cit., 54).

Western sector of Montreal Island, 1 August 1749.

" On the other side of it (= Montreal) is surrounded with excellent corn-fields, charming meadows, and delightful woods" (op. cit., 71) Sault au Récollet, 23 September 1749.

" Near the town there are farms on both sides of the road; but as once advances further on, the country grows woody, and varies in regard to height. It is generally very strong.... A little before I arrived at Sault au Récollet, the woods end, and the country is turned into corn-fields, meadows, and pastures" (op. cit., 284).

Ile Jésus, 25 September 1749.

" Here are abundance of beech trees in the woods, and they now had ripe seeds" (op. cit., 291). From these various excerpts, it is evident that in 1749, a good deal of the original forest had not been substantially altered by farming. There were of course quantities of farms and villages, but it appears that only small areas had been cleared from the forest. However, the population increasing, the needs for larger farms, for greater quantities of timber and stove wood became accordingly more important. Therefore the process of deforestation and land management became accelerated around the population centers, and resulted in the situation that is encountered at the present.

Since the middle of the 18th century, the population has steadily increased in the St. Lawrence Lowland which gave rise to parishes, villages and cities. During that period clearing of the land for agricultural purposes was done at an accelerated rate, until little of the primeval forest was left, at least in readily accessible places. After the forests of the Lowland had been exhausted, those of the Monteregian Hills came in turn, unless circumstances prevented

this. A certain amount of the cut-over areas were left uncultivated after removal of the forest and these areas supported later, wood stands of a different nature from the original ones. This exhaustive process of land clearing has apparently taken place ~~for~~ over 200 years and has become more intensive during the past 25 years, so that almost nothing is left at the present of the forests ~~as~~ described by Cartier, Champlain, Boucher or even Kalm. Even the second growth stands are being cut over in recent years for one reason or another.

The writer has consulted recent aerial photographs and has visited every corner of the region comprised in this study, to evaluate the amount of forest left in this region which spreads over 2,500 square miles. From the data obtained in the field and on the aerial photographs the Monteregian Hills region can be divided as follows on the basis of the physical appearance of its vegetation:

1. Forest stands, various sizes but over two acres	700 sq. mi.= 28%
2. Open fields, cultivated and abandoned	1075 sq. mi.= 43%
3. Residential areas (cities, towns, villages, residential parks etc)	525 sq. mi.= 21%
4. Marshes, bogs, swamps,	75 sq. mi.= 3%
5. Industrial areas, airports, sand and gravel pits, quarries	125 sq. mi.= 5%

The forest of the Monteregian Hills region have been ascribed to the Upper St. Lawrence Section of the Great Lakes St. Lawrence Forest Region by Rowe (1959:44-45, and map) on the basis of their floristic composition and their similarity to the hardwood forests of

Southern Ontario and of northeastern United States (Vermont, New York, New Hampshire). This comprehensive classification has been refined by several other authors such as Raymond (1950), Dansereau (1959) and Grandtner (1966) who have tackled the problem of deciphering the affinities of its flora (Raymond, 1950) or to describe and classify its floristic composition (Dansereau 1959; Grandtner 1966).

Since the present study is not meant to evaluate these various papers, the writer will only describe briefly the various plant associations of the region in terms of their importance as habitats for birds.

1. FOREST STANDS

The wooded areas can be divided into two main groups: a) the forests of the plain and Hochelaga Archipelago, and b) the forests of the Monteregian Hills.

a) The forests of the plain and Hochelaga Archipelago:

All the present forest stands of the St. Lawrence Lowland are apparently of fairly recent origin, and most of them could be called recent second-growth stands. The size of the stands varies from a few acres to several square miles (a second growth stand- mature to recent- near St. Hyacinthe, covers about 11 square miles).

b) The forest of the Monteregian Hills:

Although only the forest of Mont St. Hilaire and Mont Yamaska have been kept relatively free from intensive human disturbances, the Monteregian Hills in general are well wooded if compared with the plain. Undisturbed (or relatively so) forests have been found only on Mont St. Hilaire but the stands examined on the other hills have a fairly similar composition, and the dominant tree species varied considerably on each mountain, depending on exposure, soil conditions, slope, age of succession, etc. The tree species were nearly the same as those found in the plain, except, that the abundance of the species was different, and the stands of the hills are usually characterized by mesic or xeric associations, where the following species are

predominant: Acer saccharum, Quercus rubra and macrocarpa, Pinus strobus, Fraxinus americana and pennsylvanica, Ostrya virginiana, Fagus grandifolia, Tsuga canadensis, and Populus grandidentata.

2. OPEN FIELDS

It is difficult to describe the plant associations of the open fields of the Monteregian Hills region but they can be divided as follows:

- a) cultivated: where cereals, hay or other crops are produced
- b) uncultivated: open fields left in a resting state as a result of crop rotation are rapidly invaded by grasses, primarily of species used for agricultural purposes; these are commonly found in farming district.
- c) pastures: many fields throughout the areas are used extensively as grazing land for cattle; the vegetation is primarily composed of grasses, although a few shrubs are encountered here and there in these fields.
- d) abandoned: certain areas which have deteriorated or are exhausted after intensive cultivation for many years are abandoned. These produce scattered shrubs, many grasses and a great variety of weeds. In the wetter places shrubs are dominant while in dryer sections unpalatable grasses to cattle are most abundant. These occur extensively on the Island of Montreal and less frequently in farming districts.

3. ORCHARDS

Apple orchards are found on all the Monteregian Hills, except on Mount Royal as a result of the thermal belts which prevent the late spring frosts from destroying the blossoms of apple trees. Orchards are quite extensive on all the slopes of the hills but cover about 0.9% of the total area of the region (about 20 sq. mi.).

4. BOGS

Few bogs are to be found in the Monteregian Hills region. The writer has examined three: Farnham, St. Bruno and St. Hubert. The characteristic

plants of these were mosses (Sphagnum sp.), Andromeda sp., Chamaedaphne calyculata, Kalmia sp., Ledum groenlandicum, Vaccinium sp., Salix sp., Drosera sp., several orchids, Alnus sp., and occasionally in extremely small numbers Larix laricina.

5. SWAMPS

Under this heading have been grouped the natural marshes found in many places along the St. Lawrence and Richelieu rivers, and the marshes and swamps resulting of forest clearing and removal of large quantities of soil (abandoned sand and gravel pits). The first type is characterized by plants such as Zizania aquatica, Vallisneria americana, Spartina pectinata, Polygonum sp., Phragmites sp., and the second type by Typha sp., Iris versicolor and various grasses.

6. WATER VEGETATION

Pollution has damaged seriously the water plant associations of the St. Lawrence and Richelieu rivers, and destroyed almost entirely that of the smaller rivers and streams. The following plants have been identified throughout the area in various numbers: Brasenia schreberi, Chara sp., Eleocharis sp., Drepanocladus sp., Eriocaulon septangulare, Sparganium americanum, Nuphar sp., Nymphaea sp., Lobelia sp., Sagittaria sp., Scirpus sp., Potamogeton sp., Vallisneria americana, Zizania aquatica, and Zostera sp.

To summarize, the forest vegetation of the Monteregian Hills, both in the past and at the present, is predominantly deciduous, only a small number of coniferous trees having been found by the writer. This forest vegetation therefore belongs to the mixed hardwood forest described by several authors. The striking feature of the present day forest vegetation is the great scarcity of ~~coniferous~~ species, which occur

only as isolated trees or in small stands. Coniferous species, white pine (Pinus strobus) in particular, were undoubtedly forming important stands in a not too distant past; these have disappeared rapidly with the establishment of the white man in the region, as proposed by Potzger (1953, 1954). Furthermore, Kalm (1771) has pointed out that fir (Abies balsamea) occurred at certain places in the area; it has almost completely disappeared from the region at the present. Terrill (1911) mentions often the numerous cedar bogs (Thuja occidentalis) which were apparently well distributed around the turn of the century; they have also disappeared, and cedar is now found only in very small quantity throughout the region. Therefore the present forest vegetation can be described as predominantly deciduous but as pointed out earlier, the forest vegetation occupies not more than 28% of the territory. The rest is occupied by open habitats, villages, cities and industrial areas.

DISCUSSION AND CONCLUSIONS

I

The Bird Fauna of the Montereian Hills Region

The status of 322 species of birds (belonging to 51 families) of which 288 have been ascertained to occur in the region, is discussed in this study (TABLE 4). The remaining 34 species are considered of doubtful occurrence in the region and have been treated as hypothetical. Land birds predominate with 176 species; they are followed by 63 species of water birds and 49 of marsh birds. Breeding has been established for 155 species, of which there are 122 species of land birds, 19 of marsh birds and 14 of water birds.

II

Recent changes in the bird fauna of the Montereian Hills Region

Important changes in the original vegetation of the region, and of Eastern North America in general, have given rise to important changes in the bird fauna of the Montereian Hills region. Before the arrival of the white man this region was covered by extensive predominantly deciduous forests, rarely broken by openings resulting from fires or clearing of the land by the Indians as described earlier in this paper. With the establishment of the first settlers, the forest has gradually vanished; this process, which started in the middle of the 15th century, is still going on at the present;

Deforestation has therefore had a marked effect on the bird fauna of the region, which has changed through the process from a forest bird fauna to a bird fauna of open or semi-open habitats. Many habitats other than the forest stands have also been destroyed since the establishment of the white man; this has resulted in the disappearance of certain species; on the other hand, some habitats of an artificial nature were created through human activity, which nevertheless has benefited to certain species, and has even favored the establishment of others.

1. THE FORMER BIRD FAUNA

Although little is known about the former bird fauna, at least until the publication of Hall's study in 1862, the present writer, using extensively the data provided ^{by} this author, and his own field data, gathered from 1964 to 1967, presents here an hypothetical list of the birds assumed to have occurred in the Montereian Hills region before the establishment of the white man in the region. The present list is based primarily on modern bird ecology and on the plant associations that have been described by early explorers and travellers. Earlier in this paper, the plant associations have been described and the following classification is proposed:

a) Deciduous forest

It is the author's opinion that the primeval forest of the region was of predominantly deciduous nature with plant associations similar to the present ones. However, since this forest was undoubtedly very mature (after Jacques Cartier and Champlain) the bird fauna was certainly different to a certain extent than the present one and is assumed to have been distributed as follows: Ardea herodias,

Nycticorax nycticorax, Aix sponsa, Accipiter gentilis, Accipiter cooperi, Buteo jamaicensis, Buteo lineatus, Buteo platypterus, Haliaeetus leucocephalus, Pandion haliaetus, Falco sparverius, Bonasa umbellus, Ectopistes migratorius, Coccyzus americanus, Bubo virginianus, Strix varia, Aegolius acadicus, Archilochus colubris, Colaptes auratus, Dryocopus pileatus, Sphyrapicus varius, Dendrocopos villosus, Dendrocopos pubescens, Myiarchus crinitus, Empidonax minimus, Contopus virens, Iridoprocne bicolor, Cyanocitta cristata, Corvus corax, Parus atricapillus, Sitta carolinensis, Certhia familiaris, Troglodytes aedon, Troglodytes troglodytes, Turdus migratorius, Hylocichla guttata, Vireo flavifrons, Vireo olivaceus, Vireo philadelphicus, Vireo gilvus, Mniotilta varia, Vermivora ruficapilla, Parula americana, Dendroica caerulescens, Seiurus aurocapillus, Seiurus noveboracensis, Setophaga ruticilla, Icterus galbula, Molothrus ater, Piranga olivacea, Pheucticus ludovicianus, Carpodacus purpureus, Junco hyemalis, and Zonotrichia albicollis.

b) Coniferous stands

Although the primeval forest was predominantly composed of deciduous species, coniferous stands (Pinus strobus, Tsuga canadensis, Abies balsamea, Thuja occidentalis) occurred formerly in greater abundance than at the present. Coniferous species were apparently removed at a very fast rate from the forest, being in great demand by early settlers. As a result, the bird fauna of these isolated patches of conifers undoubtedly differed from that of the deciduous forest, and the following species are thought by the writer to have occurred during the nesting season: Accipiter gentilis, Bonasa umbellus, Bubo virginianus, Strix varia, Asio otus, Aegolius acadicus, Colaptes auratus,

Empidonax flaviventris, Nuttallornis borealis, Cyanocitta cristata,
Corvus brachyrhynchos, Parus atricapillus, Sitta canadensis, Turdus
migratorius, Hylocichla ustulata, Regulus satrapa, Regulus calendula,
Mniotilta varia, Vermivora peregrina, Parula americana, Dendroica
magnolia, Dendroica virens, Dendroica fusca, Dendroica pinus,
Carpodacus purpureus, Spinus pinus, Loxia curvirostra, Loxia leucoptera,
 and Junco hyemalis.

c) Second growth vegetation and sparsely wooded openings.

Second growth vegetation undoubtedly occurred in the primeval forest of the region, as a result of fires or abandoned open areas used for farming or for the establishment of villages by the Indian tribes. These areas of second growth vegetation were undoubtedly not extensive but probably were regularly present at one place or another in the primeval forest of the region, and supported its peculiar bird fauna. The following species were doubtless present in such a habitat, in addition to some of the others listed previously for the other habitats:

Buteo platypterus, Falco sparverius, Bonasa umbellus, Coccyzus erythrophthalmus,
Caprimulgus vociferus, Chordeiles minor, Colaptes auratus, Sphyrapicus
varius, Dendrocopos villosus, Dendrocopos pubescens, Empidonax traillii,
Parus atricapillus, Dumetella carolinensis, Toxostoma rufum, Hylocichla
fulcescens, Sialia sialis, Bombcilla cedrorum, Lanius ludovicianus,
Vermivora ruficapilla, Dendroica petechia, Dendroica pensylvanica,
Oporornis philadelphia, Wilsonia pusilla, Wilsonia canadensis,
Setophaga ruticilla, Icterus galbula, Quiscalus quiscula, Passerina
cyanea, Spinus tristis, Spizella passerina, and Melospiza melodia.

d) Marshes and similar wet plant associations open or with scattered bushes.

Marshes and semi-open associated wet lands undoubtedly occurred throughout the region in good numbers, particularly near streams and in low areas with poor drainage. The vegetation of these areas was different from the rest, and the bird fauna found there was necessarily different. The author believes that the following species occurred in such habitats: Podilymbus podiceps, Butorides virescens, Ixobrychus exilis, Botaurus lentiginosus, Anas rubripes, Anas acuta, Anas carolinensis, Anas discors, Lophodytes cucullatus, Rallus limicola, Porzana carolina, Fulica americana, Philohela minor, Capella gallinago, Actitis macularia, Chlidonias niger, Asio flammeus, Empidonax traillii, Telmatodytes palustris, Cistothorus platensis, Dendroica petechia, Geothlypis trichas, Agelaius phoeniceus, Quiscalus quiscula, Passerculus sandwichensis, Melospiza georgiana, and Melospiza melodia.

e) Bogs

Although most bogs have presently disappeared from the region, those of Oka, St. Hubert, St. Bruno, Farnham were certainly present at the time of the arrival of the first white men in the region. Bogs indeed date as far back as the end of the last glacial period. Therefore, it is the author's opinion that bogs, prior to the establishment of the white man, until at least the turn of the present century, were particularly rich in species restricted, or nearly so, to this habitat, and that the following species were found in them, although most of them have disappeared in recent years, as a result of human activity: Philohela minor, Capella gallinago, Asio flammeus, Empidonax traillii, Dendroica petechia, Dendroica palmarum, Geothlypis trichas, Wilsonia pusilla,

Passerculus sandwichensis, Melospiza lincolnii, Melospiza georgiana, and Melospiza melodia.

f) Clearings, xeric open areas, and beaches

Under this heading, the author considers the natural meadows that doubtless occurred in the region and the abandoned patches of land cleared by the Indians for their villages and their cultures prior to second growth vegetation. The following species are considered as having occurred in this habitat: Charadrius vociferus, Actitis macularia, Eremophila alpestris, Dolichonyx oryzivorus, Sturnella magna, Passerculus sandwichensis, and Poocetes gramineus.

g) Other habitats

Certain other species undoubtedly occurred in niches that were available in the habitats described above: Gavia immer, on isolated lakes and large streams of the region; Larus argentatus, Larus delawarensis and Sterna hirundo on isolated islands in important streams; Megaceryle alcyon and Riparia riparia in sand or gravel banks; Falco peregrinus and Corvus corax on exposed cliffs.

2. THE PRESENT BIRD FAUNA

In the description of the present vegetation, given earlier in this paper, the plant associations have been divided as follows:

1. Forest stands
 - a) forests of the plain and Hochelaga Archipelago
 - b) forests of the Monteregian Hills
2. Open fields
3. Orchards
4. Bogs
5. Swamps
6. Water habitat

Since the status of the species found in these habitats is discussed in the annotated list, only some the most common ones will be listed by order of abundance:

1a) Forests of the plain and Hochelaga Archipelago

Turdus migratorius, Vireo olivaceus, Empidonax minimus, Pheucticus ludovicianus, Contopus virens, Setophaga ruticilla, Icterus galbula, Hylocichla fuscens, Dendrocopos pubescens, Piranga olivacea, Dendrocopos villosus, Hylocichla mustelina.

1b) Forests of the Monteregian Hills

Setophaga ruticilla, Hylocichla mustelina, Pheucticus ludovicianus, Vireo olivaceus, Empidonax minimus, Hylocichla fuscens, Contopus virens, Turdus migratorius, Dendrocopos pubescens, Piranga ludoviciana, Icterus galbula, Dendrocopos villosus.

2) Open fields

Passerculus sandwichensis, Dolichonyx oryzivorus, Charadrius vociferus, Eremophila alpestris, Sturnella magna, Poocetes gramineus.

3) Orchards

Sturnus vulgaris, Spizella passerina, Melospiza melodia, Zenaidura macroura, Tyrannus tyrannus, Sialia sialis.

4) Bogs

Melospiza melodia, Geothlypis trichas.

5) Swamps

Agelaius phoeniceus, Geothlypis trichas, Actitis macularia, Melospiza melodia.

6) Water habitat

Larus delawarensis, Anas rubripes, Riparia riparia.

3. VANISHED SPECIES

Habitat destruction, as a result of prolonged human activity, has changed

considerably the structure of the bird fauna of the region, firstly by causing the disappearance of certain species throughout the region. Although Gavia immer appears to have never been recorded as a nesting bird on the lakes and most important streams of the region, it has apparently disappeared soon after the establishment of the white man in the region. Among the species of ducks known to breed in the past, it appears that Lophodytes cucullatus disappeared for the same reason but considerably later; it was indeed known to Wintle (1896) as nesting bird. Pandion haliaetus has also disappeared but little is known about its former status, although Wintle (1896) listed it as a nesting bird; it was doubtless fairly numerous in the past owing to the extensive expanses of water throughout the region and the availability of nesting sites (trees). Falco peregrinus persisted at least until 1952, when it nested for the last time on the Sun Life Building in the city of Montreal (Hall, 1955); it has nested at Mont St. Hilaire at least until 1941 (P.Q.S.P.B., 1941:12). The Passenger Pigeon (Ectopistes migratorius) nested in the area until about the middle of the last century, and was apparently recorded for the last time in the area in 1891 (Wintle, 1896:51-52). Nuttallornis borealis, which was never recorded positively as a nesting bird, but which was doubtless doing so, also disappeared with the removal of the coniferous stands. The Raven (Corvus corax), which was undoubtedly breeding on the exposed cliffs of the Monteregian Hills, retreated to more secluded places as a result of deforestation and human activity. Hylocichla ustulata, which is not found breeding any longer, undoubtedly moved outside of the region with the removal of coniferous stands, along with Dendroica magnolia and Dendroica castanea which occur in the same habitat. These are,

in the author's opinion, most of the species that are no longer found as breeding species in the Monteregian Hills region; however, others, about which nothing has been recorded or is known, undoubtedly occurred in the Montreal forest of the past and have gradually disappeared with the establishment of the white man.

4. SPECIES REDUCED IN NUMBERS

Forest dwelling species, other than those that have vanished from the region since the arrival of the white man, have generally suffered greatly from deforestation. Although no quantitative data are available on past bird populations in the region, there are numerous revealing accounts on the decrease of certain species (Hall, 1862; Wintle, 1896; Caulfield, 1890), which ~~are~~ almost always related to the clearing of the land, which has been doubtless detrimental to forest birds in general. Therefore, it appears that deforestation has gradually reduced, sometimes dangerously, the numbers of forest birds since the establishment of the white man in the region. This process is still going on and may endanger several other species, at least, as breeding birds, within a few years, if nothing is done to insure a sound conservation policy.

5. RECENT RANGE EXTENSIONS

Although the process of deforestation has been detrimental to many species, it has nevertheless benefited to others, and has even caused the establishment in the region of certain species which would otherwise have never occurred. These recent arrivals are primarily species of open fields, which have doubtless benefited from farming, crop rotation, pastures etc. These will only be listed here with few details as additional information about their arrival is given in the annotated list.

ARDEIDAE

Although two species, Butorides virescens and Ixobrychus exilis, have been added to the list of breeding birds of the region since 1896, it appears that these two species have been overlooked by previous writers, and that they were formerly breeding in the marshes of the area, at least in small numbers.

ANATIDAE

The following species have been recorded as breeding since the publication of Wintle's book in 1896. Although some of them may, at that time, have been overlooked, most of them are no doubt new arrivals for which it is difficult to account. Habitat destruction has been intensive and widespread for several years, such as the management of the St. Lawrence Seaway and of the islands of the St. Lawrence River for the World Fair of 1967, and has certainly not favored the establishment of these species. The writer suggests here that the great reduction in the numbers of species which were formerly abundant, such as the Black Duck (Anas rubripes) has left vacant part of the ecological niche which has afterwards been occupied by tolerant or less eclectic species. This undoubtedly accounts for the breeding records obtained in recent years for the following species: Mallard (Anas platyrhynchos), Pintail (Anas acuta), Blue-winged Teal (Anas discors), American Widgeon (Mareca americana), Shovelfer (Spatula clypeata), Redhead (Aythya americana).

PHASIANIDAE

The Gray Partridge (Perdix perdix) which was introduced in other parts of its present range, has apparently invaded the Monteregian Hills region by its own means, after the unsuccessful attempt to implant it in the Sutton Mountains. It has invaded the region at a considerably fast rate, being now found in the southwestern corner of the Province

of Quebec. This species has no doubt occupied a niche in the open lowlands to which no other native species was restricted, which explains its recent success.

RALLIDAE

The Common Gallinule (Gallinula chloropus) was found nesting in the region only recently, although it is listed by Wintle (1896:34).

Habitat destruction does not appear to have prevented it from establishing itself in the region. However, the writer thinks that it probably occurred in the past in small numbers and that it has been overlooked by earlier writers.

SCOLOPACIDAE

The Common Snipe (Capella gallinago) which was not recorded as breeding in the region prior to 1896, was doubtless overlooked by earlier authors; therefore, it is not considered here as a recent addition to the bird fauna of the region. On the other hand, the Upland Plover (Bartramia longicauda) which was known to occur in the region only after a few records in Wintle's time (1896), appears to have established itself in the region around the turn of the century. This species has doubtless benefited from forest clearing; deforestation and farming are undoubtedly responsible for its establishment in the region.

LARIDAE

The Ring-billed Gull (Larus delawarensis) appears to have been recorded as a nesting species as late as 1953 (P.Q.S.P.B., 1953:21), although it had previously been recorded fairly regularly in summer on the St. Lawrence River. Prior to 1953, it had always been listed as a transient. Although the nesting of this species has certainly been overlooked for many years, it is very unlikely that it bred in the region in Wintle's time (1896) or before. The writer cannot account for the recent

arrival of this species in the area, although increased protection on its breeding grounds of the Atlantic Coast and in the Gulf of St. Lawrence favored greatly a considerable increase in its numbers, which no doubt resulted in the extension of the range by the establishment of new breeding colonies. The Common Tern (Sterna hirundo) and the Black Tern (Chlidonias niger) had certainly been overlooked by earlier writers as a nesting bird. They are therefore not considered here as a recent arrivals.

COLUMBIDAE

The Mourning Dove (Zenaidura macroura) has apparently arrived in the region in 1913; it has since increased in numbers and is presently well established. Deforestation and second-growth vegetation may account for the spread northward of this species, although there are undoubtedly other reasons, unknown to the writer, which may account for the recent success of this species. Perhaps, the disappearance of the Passenger Pigeon (Ectopistes migratorius) has favored to a certain extent the range extension of this species.

CUCULIDAE

The Yellow-billed Cuckoo (Coccyzus americanus) was apparently never numerous in the region and has never been recorded as a breeding bird by any of the earlier writers, although it was known to occur occasionally. It is however the writer's opinion that this bird is a recent arrival that has benefited from deforestation and the ensuing second-growth vegetation.

TYTONIDAE

Although no actual breeding evidence (see annotated list) has been obtained for the Monteregian Hills region it appears that the Barn Owl

(Tyto alba) has moved into the province of Quebec rather recently, being recorded for the first time in 1926 (Cayouette, 1926:631); the first breeding record comes from Berthierville which is outside the region (op. cit.) in 1931.

STRIGIDAE

Although Otus asio, Asio flammeus and Aegolius acadicus were not recorded as breeding birds by earlier authors, they undoubtedly bred in the region in the past. They are therefore not considered here as new arrivals.

CAPRIMULGIDAE

The Whip-poor-will (Caprimulgus vociferus) which was not recorded as a nesting bird by any of the earlier writers, was certainly overlooked owing to its secretive habits and small population. It is therefore not considered as a new arrival.

HIRUNDINIDAE

The Rough-winged Swallow (Stelgidopteryx ruficollis) is apparently a recent addition to the birds of the region, being reported for the first time in 1948, and regularly ever since. Its recent arrival in the region may possibly be a result of deforestation and of the management of streams where nesting sites became available in smaller quantities on the main breeding grounds thus forcing some individuals to look for new nesting sites outside the regular range.

TROGLODYTIDAE

Although the Short-billed Marsh Wren (Cistothorus platensis) has not been recorded by any of the earlier writers it may have occurred in the past in suitable habitats. However, it may also have arrived recently in the region, new habitats having become available as a result of deforestation.

MIMIDAE

The Mockingbird (Mimus polyglottos) is certainly a recent arrival in the region, its nesting having been recorded for the first time in 1960. The establishment of this species in the region is probably the result of the general range extension that has been recorded in the species in recent years (several authors), and has doubtless been favored by deforestation.

VIREONIDAE

The Philadelphia Vireo (Vireo philadelphicus), which was recorded as nesting in the region in 1965 by the writer had doubtless been overlooked by earlier writers. It is therefore not considered here as a new arrival.

STURNIDAE

Although the Starling (Sturnus vulgaris) was introduced in North America, it has reached the Monteregian Hills region by its own means, being recorded as nesting for the first time in 1922 (Terrill, 1924:58).

PARULIDAE

The Blackburnian Warbler (Dendroica fusca) and the Pine Warbler (Dendroica pinus) which have been recorded in recent years as summer residents cannot be considered as new arrivals as they undoubtedly were overlooked by earlier writers owing to their small numbers and restricted habitats. It is the author's opinion that these species were formerly more numerous and that they have diminished in numbers as a result of deforestation, particularly after the removal of coniferous stands.

The Cerulean Warbler (Dendroica cerulea), as suggested earlier by the writer (Ouellet, 1966b, 1967), is a recent arrival to the southern part of the province of Quebec, being well established on some of the wooded Monteregian Hills. The author cannot offer any explanation for its recent

arrival, except that the population may have increased considerably on its regular breeding range and that some individuals have established themselves on new breeding grounds, having followed the Lake Champlain and Richelieu lowlands.

PLOCEIDAE

The House Sparrow (Passer domesticus) appears to have reached the Monteregian Hills region by its own means in the late 1800's; it was known to nest at Montreal in 1882. However, it had been introduced at Quebec City around 1854, and this original stock, along with other introduced individuals, undoubtedly spread around in farming districts to reach the Montreal area a few years later.

FRINGILLIDAE

The Cardinal (Richmondia cardinalis), for unknown reasons, started to increase its range northward and eastward around the turn of the century, when it was recorded breeding for the first time in the country in southern Ontario (Godfrey, 1966). Its range spread northeastward regularly afterwards and it eventually reached Montreal in the mid 1950's. It has ever since been reported regularly, and nesting has been established on two occasions.

The Evening Grosbeak (Hesperiphona vespertina) was recorded in the region for the first time in 1890. Ever since, it was regularly recorded as a winter resident. It doubtless does not nest in the area owing to a lack of coniferous stands.

The Rufous-sided Towhee (Pipilo erythrophthalmus) which was not recorded by earlier writers, appears to have extended its range eastward in Quebec in recent years, and should certainly be considered as a new arrival to the region; it has undoubtedly been favored by the disappearance of the forest and by its replacement in many places by open extensive stands of second-growth vegetation.

The Grasshopper Sparrow (Ammodramus savannarum) is certainly a species that has benefited from deforestation; indeed, open fields undoubtedly favored its establishment as a breeding bird in certain parts of the region.

The Henslow's Sparrow (Passerherbulus henslowii), which has recently been recorded in summer in the region, and which nests in the Ottawa area (Godfrey, 1966:386) may be a recent arrival to the region; it is the author's opinion, that it will increase in numbers in the years to come throughout the region and extend its range eastward, being favored by the large amounts of open fields found throughout the southern part of the province.

Although the Clay-colored Sparrow (Spizella pallida) was recorded only once in the region, the author believes that it will eventually establish himself in the southern part of the province as a late result of deforestation, as it did recently in the Ottawa region (Godfrey, 1966:393).

The Field Sparrow (Spizella pusilla) also appears to be a newcomer to the local bird fauna, at least since the middle of the last century, being no doubt favored by the general process of deforestation, that was carried on over Eastern North America.

6. SPECIES MORE NUMEROUS AT THE PRESENT

Forest destruction had a detrimental effect on forest birds, but birds of open areas have greatly benefited from this. Although, the status of each species is discussed at length in the annotated list, the author lists here the species which appear to have increased considerably in numbers over the years as a result of forest removal and habitat modification but those species were presumably present in the past;

comments will be found in the annotated list: Killdeer (Charadrius vociferus), Alder Flycatcher (Empidonax traillii), Horned Lark (Eremophila alpestris), American Robin (Turdus migratorius), Bobolink (Dolichonyx oryzivorus), Eastern Meadowlark (Sturnella magna), Red-winged Blackbird (Agelaius phoeniceus), Baltimore Oriole (Icterus galbula), Common Grackle (Quiscalus quiscula), Brown-headed Cowbird (Molothrus ater), Indigo Bunting (Passerina cyanea), Savannah Sparrow (Passerculus sandwichensis), Vesper Sparrow (Pooecetes gramineus), Chipping Sparrow (Spizella passerina), and Song Sparrow (Melospiza melodia).

7. INTRODUCED SPECIES

Three species of Phasianidae constitute the only species which were apparently introduced intentionally in the region. Two of these, the Bobwhite (Colinus virginianus) and the Gray Partridge (Perdix perdix), were seen only for a short while after their liberation, and were therefore unsuccessful (the present stock of the latter species comes from another source). The introduction of the Ring-necked Pheasant (Phasianus colchicus) proved to be partly successful; indeed, the offsprings of the flock introduced on Mount Royal (see annotated list) survived only because they are fed in winter. The author strongly believes that heavy snowfall is the limiting factor for this species which may have otherwise become established successfully in the region. On the other hand, the spread throughout the region of the Rock Dove (Columba livia) is doubtless purely accidental, as the original stock was probably formed of individuals which had escaped captivity or which did not return to their roost.

III

Geographic Variation in the Birds of the Monteregian Hills Region

The geographic variation for each species is discussed in the annotated list.

IV

Biomes and ecotones in the Monteregian Hills Region

To follow up an idea expressed in an earlier paper (Ouellet, 1966a:177-186), the author by using certain typical species of birds as indicators of ecological conditions will attempt to name the biological associations of this area. Several species of forest birds reach their northern limit of their range in the mixed deciduous forest which constitutes the forests of the region and of adjacent areas; they are the Mourning Dove (Zenaidura macroura), Screech Owl (Otus asio), Red-headed Woodpecker (Melanerpes erythrocephalus), Great Crested Flycatcher (Myiarchus crinitus), Eastern Phoebe (Sayornis phoebe), Eastern Wood Pewee (Contopus virens), Purple Martin (Progne subis), White-breasted Nuthatch (Sitta carolinensis), House Wren (Troglodytes aedon), Catbird (Dumetella carolinensis), Brown Thrasher (Toxostoma rufum), Wood Thrush (Hylocichla mustelina), Loggerhead Shrike (Lanius ludovicianus), Yellow-throated Vireo (Vireo flavifrons), Warbling Vireo (Vireo gilvus), Cerulean Warbler (Dendroica cerulea), Chesnut-sided Warbler (Dendroica pensylvanica), Pine Warbler (Dendroica pinus), Baltimore Oriole (Icterus galbula), Rose-breasted Grosbeak (Pheucticus ludovicianus), Indigo Bunting (Passerina cyanea), and Rufous-sided Towhee (Pipilo erythrophthalmus). If the range of these species is compared with the distribution of the deciduous forest in Quebec it corresponds almost exactly for most of the species.

Therefore, since the coniferous stands occur in various proportions throughout the range of the deciduous forest, in which falls the Montereian Hills region, the writer proposes that this biological region be called the DECIDUOUS ECOTONE. This problem will be discussed at length in a forthcoming paper.

V

Conclusions

1. The bird fauna of the primeval forest was characterized by bird species of the deciduous forest.
2. The size and abundance of coniferous stands was proportionally greater in the primeval forest than it is at the present, and the numbers of birds of the coniferous forest was consequently greater than at the present.
3. Since the arrival of the white man the forest has shrunk gradually, so that it covers at the present less than 28% of the area of the region, and coniferous stands have almost completely disappeared.
4. At least eleven species of birds have disappeared as breeding birds in the region as a result of deforestation and human activity.
5. The numbers of many forest birds have decreased considerably for the same reasons.
6. Deforestation has been beneficial to species of open areas and accounts for the establishment of several new ones in the region.
7. The name DECIDUOUS ECOTONE is proposed for the Montereian Hills and adjacent areas, as a biological region, on the basis of its bird fauna, particularly those species found in the remnants of

the deciduous forest.

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ANNOTATED LIST

The status of each species known to have occurred in the Monterey Hills region or quoted in the literature is discussed here. The writer has used the nomenclature proposed by the American Ornithologists' Union (A.O.U. Check-list, 1957) and has followed certain changes proposed by Godfrey (1966).

Many specimens used in this study are listed under "Specimens examined"; "R" preceding a number means a specimen in the collections of the Redpath Museum ; a number alone means a specimen collected by the writer during his field investigations.

The following terminology has been used to determine the status of each species and can be defined as follows:

abundant: in large numbers, in proper habitats, e.g. Melospiza melodia

common: in good numbers in suitable habitats, e.g. Dendroica petechia

uncommon: in small numbers in suitable habitats, e.g. Dendroica virens

rare: a few individuals in a restricted habitat, e.g. Dendroica cerulea

casual: has occurred a few times in the area, e.g. Alca torda

accidental: known to occur after a single specimen or sight record

permanent resident: in the area throughout the year

summer (or winter) resident: in the area at that particular time of the year

transient: in the area in both spring and fall only

spring (or fall) migrant: in the area in either spring or fall but not in both seasons

wanderer: species that often occurs off its breeding range

straggler: species that should normally not occur in this area.

GAVIIDAE

Common Loon

Gavia immer (Brunnich)PRESENT STATUS

Uncommon transient. A few non-breeding birds have occasionally been seen on the St. Lawrence River during the summer (P.Q.S.P.B., 1951:17). Small numbers are regularly observed in spring, from 30 March (P.Q.S.P.B., 1945:10) through the end of April, on the larger streams, particularly on the St. Lawrence River; few reports have been obtained from the Richelieu River (one in flight, near Beloeil, 17 April 1966). In fall, it migrates in numbers through the region in late November (P.Q.S.P.B., 1935-1964), but was recorded from 9 September (P.Q.S.P.B., 1946:10) to late December (P.Q.S.P.B., 1947:13; 1948:24, 1961:16) but it is unlikely that any winter in the region.

FORMER STATUS

This species probably nested on the lakes of the region before most of the habitats were destroyed or modified through human activity. The larger lakes of the Monteregian Hills (e.g., St. Hilaire, St. Bruno and Yamaska mountains) may have been likely places where it could have bred. Hall (1862:53) considers it a common migrant but Wintle's implication (Wintle, 1896:3) that "a few breed here as they are occasionally seen on our lakes during the summer months" certainly applies to the lakes of the Laurentian area, where it is still found breeding in the least disturbed parts.

SPECIMENS EXAMINED

Several specimens without data from the Redpath Museum, in winter and summer plumage, are suspected to have been shot in the study area.

Arctic Loon Gavia arctica (Linnaeus)

Accidental transient. One individual was positively identified near St. Helen's Island on 2 November 1958 (P.Q.S.P.B., 1958:17). This observation constitutes the only record of the species in the southwestern part of the province.

Red-throated Loon Gavia stellata (Pontoppidan)

PRESENT STATUS

Rare fall migrant. All the recent reports on this species were obtained in the fall, from 27 September to 13 December (P.Q.S.P.B., 1945:13; 1949:15; 1951:17; 1953:14; 1958:17; 1959:15; 1960:14); most of the observations have however been made from mid-November to early December. There is an unusual summer record of a bird observed near Oka on 26 July 1958 (P.Q.S.P.B., 1958:17) which certainly deals with a non-breeding individual that has left the nesting sites early or that has not reached the breeding grounds. No spring observations have been recorded. The Red-throated Loon was undoubtedly never more abundant in the area as it is primarily a species of large fresh-water lakes and coastal salt water (Palmer, 1962:53).

FORMER STATUS

Hall (1862:53) considered this species a common migrant in April and December and mentions a female shot in the Lachine Rapids in the spring of 1837. Wintle (1896:3-4) lists it as "scarce transient visitant" and mentions that adult birds in summer plumage are rare in the Montreal area.

SPECIMENS EXAMINED

Several mounted specimens, in fall plumage, in the collections of the Redpath Museum, are thought to have been collected in the Montreal area, even if no data are available. There is also an immature female, found dead at Verdun, 2 November 1964 (R 3704).

PODICIPEDIDAE

Red-necked Grebe Podiceps grisegena holbollii Reinhardt

PRESENT STATUS

Uncommon transient. This species, which is not known to breed east of Ontario (Godfrey, 1966:15-16), can be observed on the waters of the area in greater numbers in the fall than in the spring. It has been regularly observed on the St. Lawrence River, no reports being available from the other water ways of the area, although it can almost certainly be found on the larger ones such as the Richelieu River. The spring records range from 16 April through 14 May (P.Q.S.P.B., 1935-1964). In the fall, observations have been recorded from 22 October to 27 December (P.Q.S.P.B., 1935-1964); the latter, probably concerns a late migrant, as this species more readily winters along the Atlantic coast and on the Great Lakes (Godfrey, 1966:16). There is a late summer report of two birds seen near Cushing, Argenteuil County, 28 August 1952 (P.Q.S.P.B., 1952:14); these were probably two early migrants. This species appears to have decreased in numbers in recent years (since at least 1963), as no reports have been received since.

FORMER STATUS

Although Palmer (1962:66) suggests that this species has perhaps bred formerly in the southern part of the province of Quebec, and that it might still do so to some extent, the writer believes that such state-

ments are not substantiated by good evidence. Hall (1862:53) states that this Grebe occurs in the region from May to September. Wintle (1896:2) lists it as a migrant and adds that a specimen has been obtained on the St. Lawrence River, below the Lachine Rapids, near Nun's Island. These appear to be the only available data on the distribution of this species in the Montreal region before 1900. Therefore, it is very unlikely that it has ever nested in the area, although Hall (1862:53) implies that it formerly did.

Horned Grebe

Podiceps auritus cornutus (Gmelin)

PRESENT STATUS

Uncommon but regular transient. Small numbers were recorded in spring from 25 March to 22 May on the larger water systems of the area; more important numbers have been observed in fall from 8 September to 27 December (P.Q.S.P.B., 1935-1964). Two summer reports, six individuals in Lake St. Louis off Dorval 3 August 1958, and four off Lakeside in Lake St. Louis 23 July 1962 (P.Q.S.P.B., 1958:17; 1959:19), indicate that this Grebe can occasionally be seen on the waters of the region during the summer; these observations are referred to as early fall migrant or to non-breeding individuals, pending more detailed information which may reveal that this species breeds in the Montreal area; the only nesting records for the Horned Grebe in the Province are from Anticosti Island and the Magdalen Islands (Godfrey, 1966:17).

FORMER STATUS

Palmer (1962:74-75) suggests that the breeding range of this species was formerly extending over the southern part of the province of Quebec and New Brunswick. Earlier writers consider it as a migratory species in the Montreal area. Hall (1862:53) writes that it is scarce from May to September, while Wintle (1896:2) states that it is a "transient visitant, scarce in spring and common during autumn", and that he actually saw specimens taken in the Montreal area on 22 April 1886 and 29 October 1893. Therefore, it appears that this species was not much more abundant in the past than it is presently, and that it probably did not breed in the area, although Hall (op. cit.) suggests a different possibility.

SPECIMEN EXAMINED

R 605, m. juvenile, 22 October 1922, Coteau Junction.

TAXONOMY

The single specimen examined has been referred to cornutus the North American subspecies (A.O.U. check-list, 1957:5).

Western Grebe Aechmophorus occidentalis (Lawrence)

Accidental transient. Wintle (1896:1-2) states that this Grebe is a "rare accidental visitant" and that a specimen was obtained on the Montreal market by a local taxidermist. There is no reason not to accept this record even if the species has otherwise been recorded only once in the province of Quebec: Hudson (Raquette River), one positively identified, 31 May 1958 (P.Q.S.P.B., 1958:17-18).

Pied-billed Grebe

Podilymbus podiceps (Linnaeus)PRESENT STATUS

Uncommon summer resident. A nest was observed from 12 May to 21 June 1933, at St. Hubert by Henry Mousley (N.M.C. files). A second nest has been described as having been found, hidden under rushes containing seven eggs, at the mouth of the St. Lambert River (Laprairie Creek) (P.Q.S.P.B., 1950:19). Various other summer reports from Côte Ste. Catherine, Laprairie Bay, and Ile Perrot indicate that this species probably breeds at these localities, although no nests have been found (P.Q.S.P.B., 1945:13; 1953:15; Bull. ornith., 3 (4):2).

Common transient. This grebe was observed in the area as early as 7 March (P.Q.S.P.B., 1964:15) and stays until late fall, rarely as late as 28 December (P.Q.S.P.B., 1953:14). As shown by the observations recorded in recent years (P.Q.S.P.B., 1959-1964), it appears that both the breeding and the transient individuals of this species have greatly diminished in numbers.

FORMER STATUS

This grebe was certainly fairly abundant in the past as a nesting and migratory species even if Wintle (1896:3) states that it was a "common transient visitant", and that "a few probably breed here". While he had previously said (1882:117) that it is a "summer resident" breeding in the Montreal area. Indeed, other authors considered the same species an abundant breeding bird on the St. Lawrence River, a few miles southwest of the Montreal area, and in that part of Ontario adjacent to the Montreal region (Macoun and Macoun, 1909:9).

HYDROBATIDAE

Storm Petrel Hydrobates pelagicus (Linnaeus)

Hypothetical. According to Wintle (1896:9) a specimen of this petrel was secured at Longueuil, around 1890. This record is undoubtedly based on the misidentification of a North American species, since Hydrobates pelagicus has never been recorded with certainty in North America (A.O.U., 1957:645)

Wilson's Petrel Oceanites oceanicus (Kuhl)

Hypothetical. After a hurricane in 1938, Eliot (1939:178) published a record of this species for Montreal; he however expressed some doubt about the accuracy of the locality, since the information had been transmitted verbally to him. Lloyd (1953:140) corrected the report, and the specimen referred to by Eliot appears to have been collected on Lake Deschênes (in Ottawa area) on 23 September 1938, therefore remaining the only record of this species for the interior of Quebec.

SULIDAE

Gannet. Morus bassanus (Linnaeus)

Casual fall migrant. There appears to be a definite southward movement of first year immature Gannets on the St. Lawrence River from the breeding grounds of the Gulf of St. Lawrence, as shown by several fall records obtained at various points in the Montreal area: Contrecoeur, fall of 1882 (Couper, 1882, 12:189); Boucherville (Wintle, 1896:9-10); Montreal, 4 November 1917 (P.Q.S.P.B., 1943:12), 20 October 1934, 13 October 1937 (P.Q.S.P.B., 1937-1938:4), 22 November, 1958 (Bull. ornith., 1959, 4 (1):2), 31 August 1961 (Bull. ornith., 1961, 6 (4):2); Lake St. Louis, 17 October 1943 (P.Q.S.P.B., 1943:12);

Rivière-des-Prairies (Montreal Island), 5 September 1950 (P.Q.S.P.B., 1950:19-20); St. Helen's Island, 23 November 1958 (P.Q.S.P.B., 1958:18); Côte Ste-Catherine, 13 October 1963 (P.Q.S.P.B., 1963:17); Pointe Claire, 27 September 1966. All these records refer to immature birds and nearly all of them are substantiated by specimens, that have either been collected or found dead. There is only one record of an adult which "was flushed at Ste. Rose in early autumn" (Wintle, 1896:9-10). It is indeed very likely that more numerous observations could be recorded on this species if more bird watching were done along the St. Lawrence River, in the fall. The species was reported once during the spring of 1967, but the record is not accepted by the writer.

SPECIMENS EXAMINED

R 3702, m. juvenile, 27 September 1966, Pointe Claire, Quebec
N.M.C., juvenile, 18 November 1940, near Montreal, Quebec.

PHALACROCORACIDAE

Great Cormorant Phalacrocorax carbo carbo (Linnaeus)

Casual transient. Earlier writers considered this species a rare migrant (Wintle, 1896:10; Macoun and Macoun, 1909:68), although they provided no specific information about the records on which their statements are based. There are two recent valid sight records for the Montreal area, which make the writer believe that this cormorant is a rare straggler inland (Palmer, 1962:321). Both observations were made by different observers near Jacques Cartier Bridge, over the St. Lawrence River: spring 1948 (P.Q.S.P.B., 1948:24), and 19 April 1955 (P.Q.S.P.B., 1955:13).

Double-crested Cormorant Phalacrocorax auritus auritus (Lesson)

PRESENT STATUS

Uncommon transient. Although several individuals have been reported in the Montreal region for several summers, on the St. Lawrence River, particularly near the Lachine Rapids, (P.Q.S.P.B., 1941:9; 1943:12; 1947:13; 1949:15; 1950:20; 1951:17; 1953:15; 1956:14), this species is not known to breed in the area. The nearest breeding record is from Pointe Désilets on Lac Saint-Pierre where 25 to 30 nests have been discovered in 1952 (P.Q.S.P.B., 1952:14); this small colony appears to have disappeared since (Bull. ornith., 1958 3 (3): 2). Fewer individuals can be observed in the spring than in the fall; the earliest spring records dates from 8 April (P.Q.S.P.B., 1950:20), although relatively small concentrations of individuals can be observed around the last week of April (various sources, published and unpublished). In the fall, although individuals have been seen as late as 19 December (P.Q.S.P.B., 1948:24), the main migratory movement takes place in late September and early October; concentrations of adults and juveniles, sometimes grouping as many as one hundred individuals (Bull. ornith., 1964, 9 (1) :3) can be seen then. Since the completion of the St. Lawrence Seaway and the management of the small islands and rocks around St. Helen's Island, fewer individuals have been reported from the Montreal area both in spring and fall (P.Q.S.P.B., 1959:16; 1960:14; 1961:16; 1962:19; 1963:17; 1964:15). However, relatively large spring concentrations of up to sixty birds were observed by the writer on several occasions, off Verdun

and Heron Island in late April and early May 1966. Observations in the Montreal area have been made at the following places:

Laprairie Bay (Lewis, 1938:52 (8) :123; (P.Q.S.P.B., 1937-1938:4); Côte Ste-Catherine (P.Q.S.P.B., 1955:13; 1963:17; Bull. ornith., 1966, 11 (1) :2); off St. Lambert (P.Q.S.P.B., 1949:15), and St. Helen's Island (P.Q.S.P.B., 1949:15).

FORMER STATUS

This species was undoubtedly more abundant in the past than it has been reported upon by earlier writers, such as Wintle (1896:10-11) who states that this species is a "scarce transient visitant". It appears that no other author had mentioned this species previously from the area.

ARDEIDAE

Great Blue Heron Ardea herodias herodias Linnaeus

PRESENT STATUS

Common summer resident locally. This heron is known to breed in the Montreal region, on Heron Island (Ile aux Hérons), although several small islands and woodlots of the area would be suitable nesting places. Heron Island appears to have been used as a breeding site only recently, as nesting localities in the immediate vicinity of Montreal were unknown at least until 1941 (P.Q.S.P.B., 1941:9); no data have been published until 1958, when about 150 nests were counted on 14 May on the island (P.Q.S.P.B., 1958:18). This species has been reported as nesting on Heron Island since then (P.Q.S.P.B., 1961:16; 1963:17; 1964:15). Over 200 nests were counted on 10 May 1965 (P.Q.S.P.B., Nest Record Card, fide D. Snow). About 150 adults

and 100 nests were seen by the writer on 30 April 1966. A colony of about 20 birds was found on Ile Villenombre off Les Cèdres (Cedars), where several nests were recorded, on 19 May 1964 (Bull. ornith., 1965, 10 (2): 5-6).

Common transient. As the breeding range of the Great Blue Heron extends considerably farther north than the Monteregian Hills region (Godfrey, 1966:36-37; Palmer, 1962:397), migrant birds can be seen in good numbers in a variety of situations from 20 March (P.Q.S.P.B., 1957:12) to 13 December (P.Q.S.P.B., 1949:15). Migrant individuals are more numerous around the third week in April and in early October (P.Q.S.P.B., 1935-1964). The species was also observed by the writer as follows on Lac Hertel, Mont St. Hilaire: (3) 3 May 1965; (2) 18 May 1966.

FORMER STATUS

The Great Blue Heron was certainly more numerous throughout the region during the pre-colonial period; the destruction of forests and over-shooting probably account for its decline. Champlain (in Laverdière, 1870:246) was much impressed by the large number of herons that he saw on 8 June 1611 on the islands below and in the Lachine Rapids; he also mentions that members of his crew killed so many young ones that they filled up a small boat. The writer, in this instance cannot be sure of the species referred to by Champlain as the French "héron" could apply to the present species and to the Black-crowned Night Heron (Nycticorax nycticorax); however, the herons seen by Champlain probably belonged to both species, as the Great Blue Heron and the Black-crowned Night Heron often nest in mixed colonies (Heron Island for example).

It appears that the local colonies of the Great Blue Heron were unknown to the earlier writers (Hall, 1862:52; Wintle, 1882:117, 1896:30), who considered it only as a migratory species.

ECOLOGY

The colony of Heron Island counts from 100 to 200 nests of the Great Blue Heron; it is indeed difficult to establish in certain cases to which species belongs the nest as the population of Nycticorax nycticorax is also very important. All the nests are variously located from 25 to 50 feet from the ground (7.5-15.3m.). The nest generally consists of a coarse assemblage of sticks, branches and twigs, usually placed in the crutch of a tree (30 April 1966).

TAXONOMY

The population from the province of Quebec belongs to the subspecies herodias on the basis of its relatively light coloration (several specimens in Redpath Museum). A single specimen from the Montreal area (Ile Perrot) has been examined, and is identical to other specimens of herodias.

Green Heron

Butorides virescens virescens (Linnaeus)

PRESENT STATUS

Rare summer resident. The secretive habits of this heron make it difficult to observe, which probably accounts for the relatively few nesting records available from the Monteregian Hills region. Nesting data have been so far obtained from the following localities: Ste. Rose, 2 nests, 20 May 1942, and several nests used in previous

years; they respectively contained 5 and 3 eggs (P.Q.S.P.B., 1942:15); on a subsequent visit, 23 May, a fourth egg had been deposited in the second nest (Mousley, 1945:51); one nest with 6 eggs, 3 June 1951 (P.Q.S.P.B., 1951:18). Ste. Dorothée, one nest with 4 well grown young, 8 July 1950 (P.Q.S.P.B., 1950:20); one nest with 3 young, 17 June 1951 (P.Q.S.P.B., 1951:18). Ste. Geneviève (Montreal Island), 4 nests and 6 adults, 1 July 1960 (Bull. ornith. 1960, 5 (4) :2). Hudson (Pine Lake), 1 immature, 8 June 1961 (P.Q.S.P.B., 1961:16). Several summer observations indicate that the species may also breed at the following places: Caughnawaga (P.Q.S.P.B., 1940:7; Mousley, 1945:51); Ile aux Tourtes (P.Q.S.P.B., 1938-1939:8; 1940:7; Mousley, 1945:51); Ile Perrot (Bull. ornith., 1957, 2 (4) :2); 1964, 9 (3) :2); Vaudreuil (P.Q.S.P.B., 1936-1937:4); Senneville (P.Q.S.P.B., 1945:14; 1949:16); St. Lambert, Laprairie (P.Q.S.P.B., 1949:16), Oka (P.Q.S.P.B., 1958:18). Rare transient. Few spring and fall reports (P.Q.S.P.B., 1936-1964) indicate that this heron does not occur in the region in large numbers during migrations. It was observed from 30 April (P.Q.S.P.B., 1959:12) to 10 October (P.Q.S.P.B., 1960:11).

FORMER STATUS

Although Wintle (1896:31) claims that the Green Heron is a "scarce summer resident", it is probable that it was more abundant in the past than it is at the present. Drainage of marshy woodlands and the destruction of marshes are doubtless responsible to a great extent for its present rarity in the region.

Little Blue Heron Florida caerulea caerulea (Linnaeus)

Accidental straggler. An immature was observed at St. Lambert on two occasions, 10 and 24 September 1960, by two reliable observers (Bull. ornith., 1960, 5 (4) :2). There is no reason not to accept this record as the description given by one of the observers is very accurate; also, it is a well known fact that southern herons often disperse northward after the breeding season.

Cattle Egret Bubulcus ibis ibis (Linnaeus)

Casual spring migrant. This heron has been recorded in the area only twice, although it has been observed (and collected) near the Monteregian Hills area on several occasions. Two birds were seen at Laprairie, 25 May 1963 (P.Q.S.P.B., 1963:18; Bull. ornith., 1963, 8 (3):2); one bird was seen again, at the same place on 6 July (op. cit.; Bull. ornith., 1963, 8 (4):2).

Common Egret Casmerodius albus egretta (Gmelin)

Casual straggler. Wintle (1896:31) mentions a pair, of which one individual was collected, at Beauharnois in the fall of 1889. It has been observed at the following localities in recent years: Chambly, from late August to late September, (P.Q.S.P.B., 1948:24; 1949:15); Les Cèdres, one bird, from 28 May to 9 September during several years (P.Q.S.P.B., 1954:14; 1955:13; 1956:14; 1957:16; 1958:18; 1959:16; 1960:14-15; 1961:16); Ile Bizard, 2 birds, July 1955 (P.Q.S.P.B., 1955:13); Oka, one bird, 24 June 1962 (P.Q.S.P.B., 1962:19);

St. Helen's Island, one bird, 14 October 1962 (op. cit.).

Louisiana Heron Hydranassa tricolor ruficollis (Gosse)

Hypothetical. One bird was supposedly seen by three observers at L'Epiphanie (Terrebonne Co.), 23 May 1966 for several minutes (Bull. ornith., 1966, 11 (2):2). Although the identification of this heron is probably correct, the writer considers it hypothetical, since it is the first record of the species in the Province of Quebec.

^{Night}
Black-crowned Heron Nycticorax nycticorax hoactli (Gmelin)

PRESENT STATUS

Common summer resident locally. It ~~was~~ not until 1958 that this heron has been ascertained to breed on Heron Island, where several nests have been found on 14 May (P.Q.S.P.B., 1958:18). On 30 May 1962, it was reported to be still breeding on the island (P.Q.S.P.B., 1962:16). Twenty nests were counted on 12 May 1963 (P.Q.S.P.B., 1963:19), and between 60-70 on 6 June 1964 (P.Q.S.P.B., 1964:15). On 10 May 1965, about 150 nests were observed by C.D. Snow (P.Q.S.P.B., Nest Record Card), and about the same number by the writer on 30 April 1966. A colony of several nests, about 15 birds seen, was discovered on Ile Villenombre off Les Cèdres (Cedars), on 19 May 1964 (Bull. ornith., 1965, 10 (2):5-6). As pointed out for the Great Blue Heron, it is sometimes difficult to identify positively some of the nests; indeed constant accumulation of sticks and branches to new nests by Nycticorax nycticorax and the use of restored nests make it difficult to identify certain nests in a mixed colony; however, the size of the twigs and

of the branches used in the construction of the nest indicate with some certainty to which species it belongs when none of the adults are sitting on the eggs. The writer has observed a single bird at Mont St. Bruno, 8 June 1966, near one of the ponds of the mountain; it was feeding in the mud of the shore.

Uncommon transient. The nocturnal habits of this heron, make it difficult to observe during the day time; this situation probably accounts for the few observations obtained in the area during its migration. It was observed in the region from 7 April (P.Q.S.P.B., 1946:10) to 4 November (P.Q.S.P.B., 1956:11).

FORMER STATUS

As pointed out for Ardea herodias, the Black-crowned Night Heron was certainly one of the species that Champlain has met on the islands located in, and below, the Lachine Rapids, on 7 June 1611 (in Laverdière, 1870:246). Hall (1862:52) knows this heron only as a "common migratory" species in "May and October". Wintle (1882:117) states that it is a "summer resident" that nests on Nun's Island towards the end of May; later he mentions it as a "common summer resident" (Wintle, 1896:32) and claims that the colony of Nun's Island had disappeared under over shooting. Wintle adds however that "a few" might have been breeding on the other islands of the Lachine Rapids (Heron Island was certainly among these). Terrill (1911:57) confirms Wintle's view that the Black-crowned Night Heron had disappeared from Nun's Island, but states that he has visited on 24 May 1908 and 1909, "two colonies of several hundred pairs, in the flooded ash swamps

bordering Lake of Two Mountains" (= near Oka, confirmed by Terrill, 1967), and could be at the base of Oka Mountain, where 3 eggs have been collected on 24 May 1908 (F.N. Smith Egg Collection 202 2/3). Thus, the Black-crowned Night Heron appears to have been more abundant in the past having reached its present status after heavy shooting on its breeding grounds and the destruction of its habitats. Indeed, as pointed in the previous section, it breeds to-day on Heron Island, which has been relatively protected from human disturbance by the swift waters of the Lachine Rapids, and by the establishment of this island as a Federal Migratory Bird Sanctuary. Otherwise, this colony would undoubtedly have disappeared as that of Nun's Island and those from the "flooded ash swamps bordering Lake of Two Mountains" (Terrill, 1911:57).

ECOLOGY

This gregarious species groups nearly 300 individuals in the Heron Island colony (30 April 1966) and shares the trees used as nesting sites with Ardea herodias. Over 100 nests have positively been identified by the writer (30 April 1966) and all were located between 30 and 45 feet (9.2-13.7 m.) in large deciduous trees (D.B.H. 15-40 in.). All the nests are situated in the crotch of trees or on platforms that are formed by large branches budding out of the trunk. Most of the nests are quite bulky and can be recognized from those of Ardea herodias where the birds are not sitting on them, by the smaller size of the material used in their construction; many were however left unidentified.

TAXONOMY

The North American population of Nycticorax nycticorax has been assi-

gned to hoactli (A.O.U. Check-list, 1957:50; Palmer, 1962:474).

Least Bittern Ixobrychus exilis exilis (Gmelin)

PRESENT STATUS

Rare summer resident. This inconspicuous bird has been found nesting at relatively few places in the Monteregian Hills region: St. Lambert and Chateauguay, summer 1935 (P.Q.S.P.B., 1935-1936:4), and Nun's Island, 1 nest containing 4 eggs, 17 June 1951 (P.Q.S.P.B., 1951:18). Summer observations also suggest that the species probably breeds at the following places: Laprairie Creek (Laprairie), 2 birds, 14 July 1950 (P.Q.S.P.B., 1950:20); Oka, where it was found to be well distributed in the marsh of Grande Baie (P.Q.S.P.B., 1958:18); Lac St. François, summer 1961 (P.Q.S.P.B., 1961:16); Pierrefonds, 3 June 1963 (Bull. ornith., 1963, 8 (4) :2); St. Timothée, 3 June 1962 (Bull. ornith., 1962, 7 (3):2). It is rare during migrations. It was observed in the region from 11 May (P.Q.S.P.B., 1938-1939:8) to 3 September (P.Q.S.P.B., 1950:14).

FORMER STATUS

This elusive species was certainly more abundant in the past that it is suggested by Hall (1862:52) and Wintle (1896:30) who consider it only as a transient species. Extensive drainage of marshes, particularly cattail marshes throughout the region, certainly accounts for the present scarcity of this species.

SPECIMEN EXAMINED

R 682, f. adult, 11 May 1939, Montreal.

This specimen was found dead after a stormy night on the eleventh floor of the Sun Life Building, in the city Montreal (P.Q.S.P.B., 1939:8).

TAXONOMY

The specimen examined has been assigned to exilis the subspecies of eastern America (A.O.U. Check-list, 1957:52).

American Bittern Botaurus lentiginosus (Rackett).

PRESENT STATUS

Uncommon summer resident. The management of wetlands such as marshes, swamps and bogs certainly accounts for the recent decline of this species in the Monteregian Hills region, although a certain number can still be found in the few wet parts that have been left unchanged. Nesting data were obtained mostly from the immediate vicinity of Montreal: Westmount, one nest and 4 eggs, 12 June 1907; 6 other nests found in the Montreal area in 1907 (Brown, 1907:50); Montreal (Côte St. Paul) one nest and 4 fresh eggs, 24 May 1905 (F.N. Smith Egg Collection 190 $\frac{1}{4}$); Côte St. Luc, one nest and 6 eggs, 18 May 1946 (P.Q.S.P.B., 1946:15); Ste. Dorothée, one nest and 3 eggs 1 June 1950, one nest and 1 egg, 20 May 1951 (P.Q.S.P.B., 1950:20); 1951:18); Abord-à-Plouffe, one nest with 4 young, 17 June 1949 (Gollop, 1949:42); Senneville, one nest and 1 egg, 24 May 1952 (P.Q.S.P.B., 1952:15). Summer records indicate that the species may also breed at Richelieu (P.Q.S.P.B., 1951:18) and on Ile Perrot (Bull. ornith., 1957, 2 (4) :2). The writer has observed it

only once during the field season of 1965 and 1966: near Mont St. Hilaire, (1) 16 June 1966, in a wet field.

Uncommon transient. Spring and fall observations indicate that the American Bittern can be observed in suitable habitats in the area during the migrations from 4 April (P.Q.S.P.B., 1957:12) to 27 November (P.Q.S.P.B., 1962:15).

FORMER STATUS

The American Bittern was certainly in the past a common transient and breeder in the Monteregian Hills region, particularly in the Montreal area. Hall (1862:52) says that it was common during the migrations in May and October. Wintle (1882:117) found it a common summer resident and states that it "nests at the end of May". He is more specific further (Wintle, 1896:29), and states that it is "a common summer resident". It is certain that this species was more common at the turn of the present century, before most of its nesting territories were irrigated and used for farming, industrial and residential purposes: indeed, nearly all the swamps, the marshes and the bogs of the Monteregian Hills region have undergone management; consequently, this heron has almost completely vanished from the region.

THRESKIORNITHIDAE

Glossy Ibis Plegadis falcinellus (Linnaeus)

Casual wanderer. This species has been reported only a few times from the province of Quebec, and the majority of these records come from the Montreal area: Montreal, 1 specimen, 27 May 1900 (Bent, 1926:51; Godfrey, 1966:43); Laprairie, several sight records in July and August 1963 (P.Q.S.P.B., 1963:18; Bull. ornith., 1903, 8 (4) :2).

Whistling Swan Olor columbianus (Ord.)

Casual transient. Ten individuals, 8 adults and 2 juveniles, were observed off Heron Island, 18 and 19 November 1938 (P.Q.S.P.B., 1937; 1938:4). This constitutes the only record of the species in the Montereian Hills region, which was certainly more abundant in the past. Indeed, a certain number undoubtedly occurred on the waters of the region during the migrations; the Whistling Swan, or any other swan, was certainly not an abundant species in the area even as early as 1749, when Peter Kalm relates that swans could be seen on the rivers in the country of the Illinois, that is ^{from} western Ontario westward (Kalm, 1771:41).

Trumpeter Swan Olor buccinator (Richardson)

Accidental transient. This swan which has recovered so well from the danger of extinction that endangered its future for a long period, has been identified positively in the Montereian Hills region only once. The record is based on a specimen in the Redpath Museum (R 3462) collected off Longueuil seemingly around 1870. There is no doubt about the identification of the specimen, nor about the locality where it was collected. However, the date that has been assigned by various authors as 1870 (Godfrey, 1966:43), is in the writer's opinion incorrect. Indeed, the specimen now in the Redpath Museum is that handed over by the former Montreal History Society in 1926. Hall (1862:53,414) mentions a specimen "killed opposite Longueuil" which at the time had been identified as Olor columbianus;

later Wintle (1896:IX) talks about the same specimen and states that it is part of the collection of the Montreal Natural History Society. Thus, there is no doubt, that both authors are referring to the same bird. However, Hall's paper was prepared in 1839 and not published until 1862. Therefore, the probable collection date of the Trumpeter Swan (R 3462) would be in the late 1830's, probably after 1835, but not later than 1839.

Canada Goose

Branta canadensis ssp.

PRESENT STATUS

Common transient. The Canada Goose has certainly increased in number as a migratory species in the Monteregian Hills region over the last 30 years, as shown by the records (P.Q.S.P.B., 1932-1964). It is found everywhere in the region as a transient, particularly in those areas adjacent to large expanses of water. It has been observed in the spring from 7 March (P.Q.S.P.B., 1964:16), to 5 June (P.Q.S.P.B., 1961:5), and in the fall from 20 September (P.Q.S.P.B., 1952:9) to early December (P.Q.S.P.B., 1935-1964). Although it was observed as late in winter as 2 January (P.Q.S.P.B., 1954:14), it is not known to winter in the area. The few summer reports mentioned (P.Q.S.P.B., 1935-1964) undoubtedly refer to sterile or injured birds. It appears that the Canada Goose migrates through the region in larger numbers in the fall than in the spring. Migrating flocks can be heard over the City of Montreal on calm nights during spring, and more frequently during the fall. There is an unusual observation of a flock heard over St. Lambert on a few occasions from 21 January 1916 onwards (Terrill, 1916:15-16). The writer has observed the species on many occasions

on Lac Hertel (Mont St. Hilaire), and swimming flocks were observed as follows: 18 October 1964, 21, 29 October 1965; 3,7,11,17, 19 and 21 May 1965; 16, 21 April 1966; 15 October 1966. Flocks of 75-90 individuals were constantly seen flying over Mont St. Hilaire on 15 October 1966, and the writer estimates that no less than 4,000 birds have been flying through the area on that day. It appears, that such a mass migration is unusual in the area.

FORMER STATUS

It appears that the Canada Goose was formerly a common transient in the past (Hall, 1862:53; Wintle, 1882:117; 1896:28-29). It was undoubtedly more abundant in a more distant past even if no data are available to describe the conditions of the species before the settlement of the country. The Migratory Bird Act is certainly responsible for the relative stability that the populations of this species have maintained over the last 40 years.

TAXONOMY

The migrant individuals through the Monteregian Hills region could belong either to canadensis or interior. Although the writer has examined only a few fresh specimens, it appears that most of the individuals found in this area are interior.

Brant Branta bernicla (Linnaeus)

PRESENT STATUS

Uncommon transient. Small flocks, usually not exceeding 100 birds, rarely up to 350 individuals (P.Q.S.P.B., 1950:21) can be seen on

the open waters of the larger rivers of the Montereian Hills region from 30 April (P.Q.S.P.B., 1949:16) to 24 June (P.Q.S.P.B., 1964:11), and from 6 September (P.Q.S.P.B., 1948:9) to 12 December (P.Q.S.P.B., 1964:11). The few summer reports published (P.Q.S.P.B., 1939-1964) probably refer to infertile or injured birds that have not been able to follow the migrating flocks. It is doubtful that the species winters in the area even if an individual has been observed as late as 23 December 1961 (P.Q.S.P.B., 1961:18). It appears that the Brant has become a more abundant migrant in the area over the last 25 years, and that the migrating flocks are both greater and more numerous in the spring than in the fall (P.Q.S.P.B., various annual reports); it also appears that the Brant was extremely scarce as a spring migrant until 1943 (P.Q.S.P.B., 1943:12), and that it has become progressively more common in the spring; on the other hand, the fall reports suggest that it has diminished in number and frequency in the fall. This situation might imply a slight change in the migratory flyway of the species, but this is difficult to assess with certainty as the observations recorded cannot be analysed further.

FORMER STATUS

Hall (1862:53) considers it as a rare migrant in April and November. It is not found in Wintle's work (1896). This species has certainly increased in number since Hall's time, although Wintle does not mention it; it is likely that he has overlooked it. Nevertheless, this species is more abundant on the larger rivers of the area during its migrations, as shown by modern reports. This can possibly be explained by the fact

that most modern records are based on field observation rather than on dead birds; therefore this certainly explains why the Brant, which is a rather difficult bird to hunt, was formerly considered as a rare species.

Barnacle Goose Branta leucopsis (Bechstein)

Hypothetical. Although it is listed in Hall (1862:53) as a rare migrant in April and November, the Barnacle Goose is not known to occur in the Monteregian Hills area; the same author (1862:53) adds that he never saw one in the Montreal district. The species has however been collected nearby on Lac St. Pierre (Godfrey, 1966:50). Until, it is identified positively in the area covered by this study the writer considers it hypothetical for the Monteregian Hills region.

White-fronted Goose Anser albifrons (Scopoli)

Hypothetical. No specimen of the White-fronted Goose has ever been collected in the Monteregian Hills region, although a few specimens have been observed or collected elsewhere in the province of Quebec (Godfrey, 1966:51); Wintle (1896:27-28) considers the species as a rare transient visitant on the basis of a doubtful sight record of three individuals at Isle de la Paix (Lac St. Louis). Even if the species has been collected elsewhere in Quebec, the writer does not accept Wintle's record because he does not provide acceptable data pertaining to the identification of the birds he saw.

Snow Goose

Chen caerulescens (Linnaeus)PRESENT STATUS

Uncommon transient. A few individuals can be observed in the Monteregian Hills region from 31 March (P.Q.S.P.B., 1948:9) to 7 May (P.Q.S.P.B., 1964:11) in the spring, and from 14 September (P.Q.S.P.B., 1963:13) to 19 December (P.Q.S.P.B., 1948:9) in the fall. No large flocks appear to have been seen so far in the area as single birds only or small flocks (3-40) have been reported from the following places: Laprairie, (P.Q.S.P.B., 1945:14); La Salle (P.Q.S.P.B., 1947:14); Lac des Deux-Montagnes, Ile aux Hérons (P.Q.S.P.B., 1948:25); Verdun (P.Q.S.P.B., 1950:21); Montreal (P.Q.S.P.B., 1951:18); Hudson (P.Q.S.P.B., 1952:15); St. Helen's Island (P.Q.S.P.B., 1954:14); Ile Perrot and Senneville (P.Q.S.P.B., 1954:14); Montréal Nord (3 October 1966). Since the species is seen in so small numbers in the area, it appears to be as numerous in the spring as in the fall.

FORMER STATUS

Hall (1862:53) and Wintle (1896:26-27) consider the Snow Goose as a scarce "migratory transient". The species is undoubtedly more abundant at the present than it formerly was as it appears that its eastern population (atlantica) did not have the size it has presently (Dionne, 1906:109-110). The fact that this goose is becoming more abundant certainly accounts for its present status in the area.

SPECIMEN EXAMINED

(R 3663) unsexed sub-adult, Côte Ste. Catherine, 14 November 1963.

The specimen has the plumage of a bird of the "blue phase" and has been identified as hyperborea, on the basis of its measurements:

Wing: 397.0 mm.; Tail: 130.0 mm.; Exposed culmen: 57.0 mm.; Tarsus: 79.0 mm.

Mallard Anas platyrhynchos platyrhynchos Linnaeus

PRESENT STATUS

Uncommon summer resident. The Mallard had been reported regularly in summer for many years (P.Q.S.P.B., 1936-1950) before the first nests were discovered in the Monteregian Hills region. The first breeding records come from Hudson Heights, one nest and 3 eggs, late April 1951; one nest and 10 eggs, 9 May 1951; one nest and 11 eggs, 11 May 1951, and from Laprairie, 7 well-grown young, 6 August 1951 (P.Q.S.P.B., 1951:19). It has been reported as nesting in the Lachine Rapids: Cable Island, one nest and 11 eggs, 22 May 1965 (P.Q.S.P.B., Nest Record Card). Although no other nests appear to have been found, the Mallard probably breeds where it is found in early summer. For that reason, it is suspected that it breeds along the Richelieu River, where suitable habitats are available (author's observations, 1965-1967).

Common transient and uncommon winter resident. The Mallard is more abundant in spring and fall than in summer or winter; it is suggested that great numbers use the important water systems of the area during migrations. Since 1960 (P.Q.S.P.B., 1960-1964, author's observations) this duck winters regularly in small number on the swift waters of the Lachine Rapids; it has also been observed in winter at other places where open water is available: Rivière des Prairies and Richelieu River (at Richelieu) (author's observations, 1965-1967).

FORMER STATUS

Hall (1862:53) considers the Mallard as a common migrant in April and November. Wintle (1882:117, 1896:13) never found it abundant in the area, although he states that it was seen "more often on the Richelieu River". Macoun and Macoun (1909:78) believed that it was becoming more abundant during migrations in Eastern Canada, particularly in the Montreal area, but they never considered it as a breeding species. Although no quantitative data are available, the Mallard has certainly become a common migrant through the area as shown by recent reports (P.Q.S.P.B., 1936-1950). The fact that it is now known to breed in this province, and particularly in this area is most revealing. Increase in the western populations might account to a large extent for the spread eastward of the species but habitat modification is undoubtedly responsible in some ways for the same phenomenon.

TAXONOMY

The North American population of the Mallard has been referred to Anas platyrhynchos platyrhynchos Linnaeus (A.O.U. Check-list, 1957:71).

Black Duck

Anas rubripes Brewster

PRESENT STATUS

Uncommon summer resident. The Black Duck breeds in small number throughout the Monteregian Hills region, where suitable habitats are available. It has been recorded as nesting at the following places: Heron Island, many nests; Laprairie; Verdun; Senneville;

Nun's Island; Iles de la Paix; St. Helen's Island; Ste. Anne de Bellevue; small islands in Lachine Rapids (P.Q.S.P.B., Annual Reports 1938-1964 and, Nest Record Cards; Bull. ornith., 1958, 1961, 1965); Caughnawaga (F.N. Smith Egg Collection). Although no nest appear to have been found elsewhere in the area, it undoubtedly nests where habitats are available along the Richelieu River, and elsewhere. It appears that it has formerly bred on Lac Hertel, Mont St. Hilaire (personal communication, J. Normandin), although no definite record is available. The writer has not observed it in summer on any of the lakes of the Monteregian Hills.

Abundant transient and uncommon winter resident. The Black Duck is one of the most common transient ducks through the area, both in spring and fall. It is more abundant from early April (writer's observations, 1965-1967) to mid-May; the southbound flocks appear in mid-September and stay in this area until freeze-up. However, many individuals (sometimes 300-400) stay all winter on the open waters of the area, particularly where the water is swift, as on the Lachine Rapids. The writer has observed it twice in winter on the Richelieu River (17 January and 20 February 1965, near Richelieu).

FORMER STATUS

Hall (1862:52) states that the Black Duck is a "common migratory" species in April and November. Wintle (1882:117; 1896:13-14) considers it a "common summer resident" and adds that "a few breed in quiet places of the district" but that it does "not winter" in the area. Macoun and Macoun (1909:79-80) believe that its populations have declined in Quebec and Ontario.

There is no doubt that the Black Duck was much more abundant in the past throughout the area during spring, summer and fall. It is however surprising to note that it was not known to winter in the area (Wintle, 1896:13-14) until at least 1944 (P.Q.S.P.B., 1944:11).

Several reasons might account for this situation. It appears that there was formerly much less open water during winter on the St. Lawrence River in the Montreal area than at the present. Observers were less numerous and their optical instruments (binoculars, etc.) were undoubtedly not as perfected as they are to-day. Also, the fact that wintering ducks are generally found in swift waters has probably prevented observers to a great extent from detecting them, particularly when the open water is at great distances from the shore.

Gadwall Anas strepera Linnaeus

Rare transient. Although this species has formerly been recorded as breeding on Anticosti Island (Ouellet, MS) it not known to breed elsewhere in the Province of Quebec. Hall (1862:53, 414) writes that he did not find it in the Montreal district; Wintle (1896:14) and the Macouns (1909:82) consider it as a rare migratory species in the Province. Recent records have been obtained both spring and fall, as follows: Senneville (7) 24 September 1939 (P.Q.S.P.B., 1938-1939:9) and (9) 7 September to early October (P.Q.S.P.B., 1940:7); Laprairie (1) 22 May 1961 (P.Q.S.P.B., 1961:18; Bull. ornith., 1961, 6 (3) :3); Ile Perrot (1) 18 September 1962 (P.Q.S.P.B., 1962:21); Montreal (1 m.) 3 June 1960 (P.Q.S.P.B., 1960:17; Bull. ornith., 1960, 5 (3) :3). There appears to be no other published record available for the area covered in this study.

Pintail

Anas acuta LinnaeusPRESENT STATUS

Rare summer resident. The Pintail was first reported as a breeding bird in the area in 1946: Nun's Island, in a small marsh, one nest and 8 eggs, 3 June (P.Q.S.P.B., 1946:17). Afterwards it has been reported regularly as a summer resident. Additional nesting information was reported as follows: Côte Ste-Catherine, 1 female and 8 ducklings, 14 July 1950 (P.Q.S.P.B., 1950:22); Nun's Island, 1 female and 5 young, 30 May 1956 (P.Q.S.P.B., 1956:16), one nest and 8 eggs, 27 May 1964 (P.Q.S.P.B., 1964:18), one nest and 7 eggs, 12 May 1965, one nest and 8 eggs, 17 May 1965 (P.Q.S.P.B., Nest Record Card); Moffat Island (Lachine Rapids) two nests, 12 June 1963 (P.Q.S.P.B., 1963:20); Devil's Island (Lachine Rapids) one nest and 8 eggs, 12 May 1965 (P.Q.S.P.B., Nest Record Card). Therefore, the data listed above provide sufficient evidence to ascertain that the species is well established as a breeding species in the Monteregian Hills region, particularly near the Lachine Rapids.

Abundant transient and uncommon winter resident. Although the Pintail is reported in small numbers to winter on the open water of the region, particularly in the Lachine Rapids area (P.Q.S.P.B., Annual Reports 1942-1964; author's observations, 1965, 1966, 1967), it is more abundant as a migrant during early April, late October and early November (P.Q.S.P.B., Annual Reports 1938-1964). Large concentrations have been observed particularly in the fall; about 1300 birds off Laprairie, 28 October 1950 (P.Q.S.P.B., 1950:22); flocks of 200 to 300 individuals

are not unusual on the main water ways of the region. It is somewhat less abundant in the spring (P.Q.S.P.B., Annual Reports 1938-1964). It has been found rather commonly on the Richelieu River in early April between Beloeil and St. John's (P.Q.S.P.B., 1963:20; author's observations 1965-1966).

FORMER STATUS

Most of the earlier writers considered the Pintail as an uncommon transient species throughout the Montreal area (Hall, 1862:53; Wintle, 1882:117, 1896:16; Macoun and Macoun, 1909:89); at the time it was not known to breed in the immediate vicinity. This is undoubtedly a species that has become progressively more abundant since the turn of the century, so that it is presently a permanent resident in the region. The writer cannot offer any explanation for the fact that this duck has become established so well in the area in recent years, in spite of increased ^spressure from hunting and habitat destruction.

SPECIMENS EXAMINED

R 517, m. juv., Montreal, 14 October 1920

R 536, m. ad., Laprairie, 10 October 1909

Green-winged Teal Anas carolinensis Gmelin

PRESENT STATUS

Rare summer resident. Although no actual nesting data have been obtained in the Monteregian Hills region so far, there is a possibility that the Green-winged Teal may breed at a few places, as suggested by the following data: St. Lambert, a male on a pond, 16 July 1949

P.Q.S.P.B., 1949:18); Laprairie, a male, 24 July 1949 (P.Q.S.P.B., 1949:18); Oka (Grande Baie), 20, 19 July 1958 (P.Q.S.P.B., 1958:20).

The possibility that this species may breed in the region is strengthened by the fact that it was found nesting in the Sorel area (P.Q.S.P.B., 1959:10).

Common transient. Large concentrations can be seen in the fall on all the water ways of the region; in the spring, large numbers can be seen, although the species does not flock as easily as in the fall. Even if it sometimes stays in the area quite late in the fall, 18 December (P.Q.S.P.B., 1952:16), it is doubtful if it winters. It was observed from 31 March (P.Q.S.P.B., 1946:10) to 8 June (P.Q.S.P.B., 1963:13), and from 7 September (P.Q.S.P.B., 1952:9) to 18 December (P.Q.S.P.B., 1964:12).

FORMER STATUS

Hall (1862:53), Wintle (1883:117, 1896:15), and Macoun and Macoun (1909:85) consider the Green-winged Teal as a migratory species (scarce to common) in the Montreal area. The Macoun's (1909:85) suggest that it "may breed in Quebec" without being specific about the region of the Province where it might do so.

The population of the Green-winged Teal does not appear to have fluctuated considerably through the years, as shown by the data provided above. It is indeed difficult to be sure of the situation as no quantitative data are provided. At any rate, the status of this species as a migrant does not appear to have changed considerably, as it is still one of the most common migratory ducks on the more important rivers of the area. However, water pollution and marsh management have

probably caused a slight decrease which is impossible to assess.

Blue-winged Teal Anas discors Linnaeus

PRESENT STATUS

Uncommon summer resident. This duck breeds in small numbers in the vicinity of the island of Montreal; Verdun, one nest and 3 eggs, 11 May 1951 (P.Q.S.P.B., 1951:20); Ste Helen's Island, 1 adult and young, 24 June 1961 (P.Q.S.P.B., 1961:18); Pointe Claire, 2 nesting pairs, summer 1963 (P.Q.S.P.B., 1963:20); Heron Island and other islands in Lachine Rapids, several nesting pairs, breeding regularly for a few years (fide C.D. Snow).

Abundant transient. It appears that the present species is the most abundant migrating duck in the area. It was observed in various situations throughout the Monteregian Hills region, (Lac Hertel, Mont St. Hilaire, 17 April 1965), from 6 April (P.Q.S.P.B., 1962:13) to 24 November (P.Q.S.P.B., 1945:10). It is not known to winter in the region. Although large flocks counting from 800 to 1200 birds (P.Q.S.P.B., 1940:7; 1941:11; 1945:15) are no longer seen on the waters of the region, the Blue-winged Teal has remained the most common fall transient among the waterfowl; during spring, only small flocks or single individuals can be seen as most of the migratory movements appear to take place at night. This duck is most abundant from the middle of September until the first week of October; then it gradually moves out of the area. The construction of the St. Lawrence Seaway, and probably water pollution, appear to be responsible for the decline suffered by this species in the area during recent years.

FORMER STATUS

Earlier writers (Hall, 1863:53; Wintle, 1883:117, 1896:15; Macoun and Macoun, 1909:86) agree to the fact that the Blue-winged Teal was a common transient through the area, without giving any quantitative data. Wintle (1896:15) is alone to mention that "a few probably breed here". However, the writer strongly believes that this duck was a common breeder throughout the area where suitable habitats were available, and that it has probably escaped notice on account of its retiring habits during the nesting season.

Cinnamon Teal Anas cyanoptera Vieillot

Accidental. This western species was observed twice in the area; there is a possibility that the same bird may have been seen on these two occasions: Nun's Island, a male in full plumage, 12 May 1951; Laprairie, a male in full plumage, 13 May 1951 (P.Q.S.P.B., 1951:20); indeed, the date and the localities make the author believe that the same individual was observed twice. There is no reason not to accept the present record.

European Widgeon Mareca penelope (Linnaeus)

Accidental. This European species is considered by the A.O.U. Checklist (1957:79) as a rare but regular species in North America. It has been recorded at Laprairie, 11 November 1949 (P.Q.S.P.B., 1949:17), and at Côte Ste Catherine, 7 October 1961 (P.Q.S.P.B., 1961:17; Bull. ornith., 1962:7 (1) :2); it was also recorded in the Montreal area in the fall on 1965 and in the spring of 1966 (pers. comm., several observers).

American Widgeon

Mareca americana (Gmelin)PRESENT STATUS

Rare summer resident. It appears that this duck breeds in small number in the Monteregian Hills region, particularly in the Montreal area. It has been observed in summer as follows: Moffat Island (Lachine Rapids) (1) 12 June 1963; Côte Ste-Catherine (1) 19 June 1963 (P.Q.S.P.B., 1963:20-21). A reliable observer has provided the writer with two nesting records, which are considered here as valid, from Heron Island: spring 1965, a female and 11 young; spring 1966, one nest and 10 eggs; unfortunately the exact dates were not recorded (fide C.D. Snow).

Uncommon transient. This duck is more common in the fall from 14 September (P.Q.S.P.B., 1964:12) to 27 December (P.Q.S.P.B., 1953:10) than in the spring; large flocks have never been observed in the area, although flights of 50 birds or more are often seen near the Lachine Rapids (P.Q.S.P.B., 1940-1963). In the spring, single birds or pairs, exceptionally flocks of about 5 birds have been recorded (P.Q.S.P.B., 1940-1963). Although it has been observed as late as 22 December, it is known to winter in the area, except for an observation at Montreal, on 10 January 1965 (Bull. ornith., 1965, 10 (2) :2).

FORMER STATUS

The American Widgeon was formerly considered a rare migratory species in the Montreal area (Hall, 1862:53; Wintle, 1883:117; 1896:15), and throughout the Province of Quebec in general (Dionne, 1906:83; Macoun and Macoun, 1909:84). This is a species that has certainly increased in number during the past 50 years in the southern part of the Province,

particularly along the St. Lawrence River in the Monteregian Hills area. It is most amazing to find it nesting in the Montreal area; this could indeed be an isolated fact; however, the writer believes that a comprehensive nesting survey on isolated islands and beaches throughout the district and the southern sector of the province would reveal that it is regularly dispersed in small number throughout the district. The writer cannot offer any explanation for the spread eastward of this western species; water pollution and habitat destruction do not appear to have had a marked affect on its populations, at least in the Monteregian Hills district. Although, it has not been recorded on the Richelieu River, it certainly occurs there during migrations, and perhaps during the breeding season.

Shoveler

Spatula clypeata (Linnaeus)

PRESENT STATUS

Rare summer resident. The first summer reports for this western species in the Monteregian Hills region were obtained as follows: Nun's Island, (1) 5 June 1957 (P.Q.S.P.B., 1957:17); Laprairie, a pair for several days until 27 May 1960 (P.Q.S.P.B., 1960:17; Moffat Island, nesting, 14 June 1963 (P.Q.S.P.B., 1963:12); Heron Island, several nests and broods, spring 1965 and 1966 (fide D.S. Snow). There is no doubt that the Shoveler is a recent addition to the breeding birds of the area. Although several individuals have been regularly seen in summer near the Lachine Rapids (fide C.D. Snow), the breeding population is certainly very small. The writer doubts very much if its population will ever become larger ^{than} ~~as~~ it is at the present

due to water pollution and limited habitats.

Uncommon transient. Single individuals or small flocks were observed in the area from 11 April (P.Q.S.P.B., 1963:13) to 10 December (P.Q.S.P.B., 1962:15); however, this bird appears to be more common in the fall; flocks of nearly 100 birds have sometimes been observed (P.Q.S.P.B., 1962:21). It is not known to occur on the Richelieu River, although it undoubtedly occurs there.

FORMER STATUS

The Shoveller was formerly considered a rare migratory species through the area, and in the Province of Quebec in general (Hall, 1862:53; Wintle, 1883:117, 1896:16; Macoun and Macoun, 1909:87). This western species has certainly increased in number in the region since the turn of the century, particularly during the last twenty years. The writer knows of no reason that could account for this situation.

Wood Duck

Aix sponsa (Linnaeus)

PRESENT STATUS

Rare summer resident. Lack of habitat probably accounts for the small breeding population of the Wood Duck in the Monteregian Hills region. Although many nesting records were obtained in the immediate vicinity, relatively few come from this region: Senneville, one nest, 31 May 1942 (P.Q.S.P.B., 1942:13); Ste Anne de Bellevue, a female and 4 ducklings (P.Q.S.P.B., 1950:22-23); Sault au Récollet, a pair in nesting box, 8 April 1953; Saraguay, 1 young found in a field, 25 July 1953 (P.Q.S.P.B., 1953:17). It is to be hoped that a sound conservation policy could be adopted for this area, so that this species might increase as a breeding bird.

Uncommon transient. This duck is known to arrive in the area as early as 21 March (P.Q.S.P.B., 1964:18) and to stay until 7 November (P.Q.S.P.B., 1964:18). It is more numerous in the fall than in the spring, when only scattered individuals can be observed; in the fall, small flocks can often be seen in marshes or along the main water ways of the area. The writer has observed it on a few occasions along the Richelieu River in the fall of 1964 and 1965.

FORMER STATUS

Earlier writers considered the Wood Duck a common migratory species (Hall, 1863:53; Wintle, 1883:117, 1896:17-18), and Wintle (1896:18) states that "not many breed here". This species was more abundant in the past and almost became extinct; however, it has recovered very well, being protected from abusive shooting by strict laws. It appears to have reoccupied its former breeding range. Although hunted heavily, it seems to maintain its numbers. Extensive destruction of habitats will probably prevent it from becoming more abundant than it is presently.

Redhead Aythya americana (Eyton)

PRESENT STATUS

Uncommon transient. This duck has been reported very regularly in small number from the St. Lawrence and the Richelieu rivers in spring and fall (P.Q.S.P.B., 1942-1964). It is not known to breed in the Monteregian Hills region, although it was reported as breeding on Lake St. Francis (P.Q.S.P.B., 1961:19). Most of the spring observations consist of single birds or small flocks; in the fall, observations

of single individuals are more frequent but the flocks appear to be larger. It was recorded in spring from 30 March (P.Q.S.P.B., 1952:10) to 9 May (P.Q.S.P.B., 1962:15); the fall observations are scattered between 17 September (P.Q.S.P.B., 1955:10) and 10 December (P.Q.S.P.B., 1950:14). This species is much sought after by hunters, and from information gathered from some^f of them, the Redhead has increased considerably in the area during the last 20 years; it appears, from the data obtained from hunters, to be more abundant in the region than show the published reports.

FORMER STATUS

The status of the Redhead does not appear to have changed considerably since the turn of the century, although Hall (1862:53) considered it a "scarce migratory species". Wintle (1896:18) writes that it is a "common transient visitant" that can be seen "in large flocks on the upper lakes in fall". Although it is difficult to compare the statements quoted above with the present situation, it is the writer's opinion that the population of the Redhead has slightly decreased in size in the southern part of Quebec, even if the species has recently been reported as breeding on Lake St. Francis (Bull. ornith., 1961, 6 (4) :3; P.Q.S.P.B., 1961:19).

Ring-necked Duck Aythya collaris (Donovan)

PRESENT STATUS

Uncommon transient. Although the species is never seen in concentrations it is regularly observed on the St. Lawrence River during migrations (P.Q.S.P.B., 1939-1964), from 27 March (P.Q.S.P.B., 1949:11) to 3 June (P.Q.S.P.B., 1950:14), and from 30 August (P.Q.S.P.B., 1950:14)

to 27 December (P.Q.S.P.B., 1957:12). It is not known to winter in the area. There is a summer record from one of the lakes of Mont St. Bruno where a pair has been observed all summer in 1952 (P.Q.S.P.B., 1952:17) which suggest that the species may breed in the Monteregian Hills area; this is quite possible as this duck is known to have nested at Katevale, Brome Co. (P.Q.S.P.B., 1957:17), just a few miles (about 40) southwest of Mont St. Bruno.

FORMER STATUS

Hall (1862:53) and Wintle (1896:20) state that the Ring-necked Duck was a rare migratory species before the turn of the century. At the time, it was not known to nest in Quebec. It appears that it has since become more numerous, being one of the most abundant breeding ducks of the Lower St. Lawrence River (Reed, 1966:182), and in Eastern Canada in general (Godfrey, 1966:67). In the Monteregian Hills area, its status has changed accordingly; it has become a regular uncommon transient, and a few appear to breed throughout the district. As for some of the other waterfowl, the writer can not offer any explanation for this change in status. Habitat modifications do not appear to have favored its recent range extension because this duck is usually found on moderately acid lakes and ponds, such as in bogs or mixed coniferous forests. Therefore, only a detailed study of its life history and ecology would reveal the causes, if any, of its recent range extension.

Canvasback

Aythya valisineria (Wilson)

PRESENT STATUS

Uncommon transient. The Canvasback can be observed in small numbers,

generally single individuals or pairs, on the St. Lawrence River and on the Richelieu River in the spring and more often in the fall. Large flocks, rarely up to 600 birds (P.Q.S.P.B., 1961:15), have sometimes been recorded in the fall, particularly on Lake St. Louis. This duck appears to have become more numerous in the region during recent years (P.Q.S.P.B., 1947-1964). It was observed in spring from 17 March (P.Q.S.P.B., 1957:13) to 24 May (P.Q.S.P.B., 1950:15), and in fall, from 1 October (P.Q.S.P.B., 1950:15) to 31 December (P.Q.S.P.B., 1961:13). Although it has been observed once on 17 February (P.Q.S.P.B., 1963:13), the writer believes that it does not winter in the area.

FORMER STATUS

Although Wintle (1896:18) lists the Canvasback as a "rare transient visitant" it was undoubtedly more abundant in the area (Macoun and Macoun, 1909:92) than it is at the present. Indeed, overshooting had considerably reduced its numbers although the species seems to have recovered well from the precarious situation which has endangered its future for so many years. Adequate laws have protected this coveted game bird at all times of the year from hunters and poachers.

Greater Scaup Aythya marila (Linnaeus)

PRESENT STATUS

Common transient. Although the present species is difficult to distinguish in the field from Aythya affinis, it has been identified with certainty often enough to ascertain that it is the most common species of the two scaups (P.Q.S.P.B., 1938-1964). It is known to arrive in the area in the spring as early as 17 March (P.Q.S.P.B., 1957:13), exceptionally 17 February (P.Q.S.P.B., 1963:13) and leave

for the breeding grounds as late as 7 June (P.Q.S.P.B., 1956:11). In the fall, it was recorded from 3 September (P.Q.S.P.B., 1959:12) to 31 December (P.Q.S.P.B., 1953:11). Except a late December record (P.Q.S.P.B., 1953:11) and a February observation (P.Q.S.P.B., 1963:13) it is not known to winter in the area. In the spring, the Greater Scaup is seldom seen in flocks exceeding 8-10 individuals, as it appears to be chiefly a night migrant or much less numerous than in the fall; it usually migrates through the area during the first two weeks in May (P.Q.S.P.B., 1938-1964). In the fall, even if a few individuals are noticed from the beginning of October onwards, the chief migratory concentrations appear to go through the area from the last week of October until the end of November (P.Q.S.P.B., 1938-1964); large concentrations as those described by previous writers (Wintle, 1896:19) appear to be exceptional at the present, even if several thousands individuals were observed off Ile Perrot from 17 to 20 November 1958 (P.Q.S.P.B., 1958:21-22).

It was recorded in small numbers on the Richelieu River, both in the spring and fall, between Beloeil and St. Johns (P.Q.S.P.B., 1961:19; author's observations).

FORMER STATUS

Hall (1862:53) considered the Greater Scaup a "scarce migratory" species. Wintle (1896:19) found it a "common transient visitant" that is more numerous in the fall from "October till November"; the same author adds that it "forms rafts miles long on our lakes, but by the middle of November, the bulk have departed south". From this statement, there is no doubt that the Greater Scaup is at the present less abundant than it was formerly, although it is still

one of the most numerous fall migratory ducks, particularly on the lakes or large expanses of water in the St. Lawrence River. Habitat destruction, over-shooting and water pollution are certainly responsible for its decline.

Lesser Scaup Aythya affinis (Eyton)

PRESENT STATUS

Common transient. This species which is difficult to identify in the field from Aythya marila is somewhat less numerous, and appears to be more localized (lower Ottawa River, personal observations). In the spring, it is relatively rare having been observed only on a few occasions: Laprairie, 19 June 1949 (P.Q.S.P.B., 1949:18-19); Richelieu River, between Beloeil and St. Johns, a few times in May (P.Q.S.P.B., 1961:19; author's observations). In the fall, it is often found associated with Aythya marila, although it appears to migrate a week to ten days earlier, arriving in the area before him and leaving it earlier (P.Q.S.P.B., 1938-1964; C.D. Snow personal communication). This species is regularly found in October and November on the calm waters of the St. Lawrence and Ottawa Rivers, and does not seem to prefer as much as Aythya marila the "lakes" of the St. Lawrence River.

FORMER STATUS

Wintle (1896:19) claims that the Lesser Scaup was a "common transient visitant" which was nevertheless less abundant than the Greater Scaup. It appears that the relative proportions between these two species have not changed considerably, although both species are certainly less numerous at the present than they were formerly.

Common Goldeneye

Bucephala clangula (Linnaeus)PRESENT STATUS

Rare summer resident. This species is known to have bred at two places at least in the Monteregian Hills region: Senneville, a female and 5 young, 25 June 1950 (P.Q.S.P.B., 1950:24) and Hudson, one nest and 12 eggs in a hole of a tree, about 8 feet from the ground (P.Q.S.P.B., 1957:18).

Abundant transient. The Common Goldeneye can be seen in good numbers on the waters of the area, from late March until the third week of April, and from the middle of October until early December (P.Q.S.P.B., 1938-1964). Flocks of about 1,000 birds are rare in the spring (P.Q.S.P.B., 1950:17). In the fall, flocks of 1,000 or more are not unusual, and concentrations of 4,000-5,000 have sometimes been noted (P.Q.S.P.B., 1950:24) on the St. Lawrence River. The writer has observed it on a few occasions on Lac Hertel, Mont St. Hilaire, (2) 16 April 1965, (7) 18 April 1965; and several times on the Richelieu River in the spring and fall of 1964, 1965 and 1966.

Common winter resident. The Common Goldeneye has been known to winter regularly in the area for many years (P.Q.S.P.B., 1938-1964), particularly, in the swift waters of the St. Lawrence River. Flocks grouping from 1,000 to 1,700 individuals have been occasionally observed in winter (P.Q.S.P.B., 1951:21; 1963:21), although the average winter population does not appear to exceed 1,000 birds (P.Q.S.P.B., 1938-1964; writer's observations 1964-1967).

FORMER STATUS

Hall (1862:53) and Wintle (1896:20) consider this species a common transient, and Wintle (1896:21) suspected that there might have been a small local breeding population; he adds that "a few may winter".

It appears that the status of the Common Goldeneye has not changed considerably in the area since then, although it is difficult to evaluate the statements quoted above, particularly Wintle's "plentiful in fall on our lakes" (1896:20). However, the Common Goldeneye is the most abundant diving duck of the area during the fall migration, along with the Greater and the Lesser Scaups.

Barrow's Goldeneye Bucephala islandica (Gmelin)

Rare transient. This species has been observed fairly regularly in small numbers in the Monteregian Hills region, although all the records come from the St. Lawrence River (P.Q.S.P.B., 1938-1964); however, it almost certainly could be found in small numbers on the Richelieu River. Observations were obtained from many places from 26 March to 11 April, and from 13 October to 16 December (P.Q.S.P.B., 1943-1951); it is not known to winter on the waters of the area although it has wintered in the Eastern Townships (P.Q.S.P.B., 1960-1964). Wintle (1896:21-22) states that it was a rare migrant. Therefore its present status does not appear to have changed appreciably in the region since the turn of the present century.

SPECIMENS EXAMINED

R 780, m. adult, Verdun, 26 October 1952

R 781, m. adult, Pointe St. Charles, 25 November 1951.

Bufflehead

Bucephala albeola (Linnaeus)PRESENT STATUS

Uncommon transient. The migrating population of the Bufflehead varies considerably in size from year to year, both in spring and fall, although it appears to be less numerous in fall (P.Q.S.P.B., 1938-1964). It was observed from 28 March (P.Q.S.P.B., 1964:12) to 24 May (P.Q.S.P.B., 1949:11), and from 25 September (P.Q.S.P.B., 1962:15) to 26 December (P.Q.S.P.B., 1954:10); it has recently become known to winter in the area (author's observations, 1965-1967). Most of the observations were obtained from the St. Lawrence River and its "Lakes" but it is also known to occur on the Richelieu River between Beloeil and St. Johns (P.Q.S.P.B., 1964:19; author's observations), on Beaver Lake, Mount Royal (P.Q.S.P.B., 1953:18), and on Lac Hertel, Mont St. Hilaire (6-12) 16 October to 4 November 1964; (5) 3 November 1965 (author's observations).

FORMER STATUS

Hall (1862:53), Wintle (1896:23), and Macoun and Macoun (1909:101) say that the Bufflehead was a common migratory species in Quebec and in the Montreal area. It appears that it is presently less numerous than it was formerly on the waters of the area. Water pollution, habitat destruction and over-shooting undoubtedly account for the present situation.

Oldsquaw

Clangula hyemalis (Linnaeus)PRESENT STATUS

Uncommon transient. The Oldsquaw is more numerous in fall than in spring on the waters of the Monteregian Hills region, although

it has been observed only on the St. Lawrence and Richelieu rivers (P.Q.S.P.B., 1939-1964; author's observation); it is seldom seen in concentration as the migrating flocks usually vary from 6 to 15 birds (op. cit.; author's observation). It was observed in the region from 9 April (P.Q.S.P.B., 1950:15) to 30 April (P.Q.S.P.B., 1961:13), and from 7 October (P.Q.S.P.B., 1952:10) to 3 January (P.Q.S.P.B., 1959:18). Although it was reported as late as 3 January, it is not known to winter in the region; this situation appears to be unusual since it winters abundantly on the Great Lakes (Godfrey, 1966:73).

FORMER STATUS

Hall (1862:53) states that the Oldsquaw is a "common migratory" species in "April and November", and Wintle (1882:23) found it a "scarce transient visitant" and adds (1882:24) that "the adults are seldom found here, and the occasional young is shot in fall". These two contradictory statements are probably correct, since Wintle is describing the situation of the species in the district of Montreal, whereas Hall refers to southern Quebec in general, rather than specifically to the region adjacent to Montreal. Therefore, the present status of the Oldsquaw does not appear to be significantly different at least in the Monteregian Hills region, although it is undoubtedly somewhat less numerous than it was formerly.

Harlequin Duck

Histrionicus histrionicus (Linnaeus)

Rare fall migrant. Although Hall (1862:53) states that the present species is "a rare migratory" duck in May and October, the Harlequin

Duck has never been recorded recently in spring in the Monteregian Hills area. Macoun and Macoun (1909:105) state that it is "occasional" in Quebec. In recent years, the following observations were obtained in the Montreal area: Nun's Island, 1 shot, 18 November 1944; (5) 22 October; (4) 18 November, and (4) 10 December 1944 (P.Q.S.P.B., 1944:12). Ste. Anne de Bellevue, 1 f. shot, 27 October 1951 (P.Q.S.P.B., 1951:21). Heron Island (1) 6, 8 November 1952 (P.Q.S.P.B., 1944:12). The specimen shot on 18 November 1944, which, according to the P.Q.S.P.B. Report (1951:21) should be in the Redpath Museum, has not been found by the writer in the collection, and appears to have never reached the Museum.

SPECIMEN EXAMINED

R 750, f. imm., Lake of Two Mountains, Ste. Anne de Bellevue, 26 October 1951. There appears to be a mistake on the date of capture of this specimen, either on the original label or in publication (P.Q.S.P.B., 1951:21).

Labrador Duck Camptorhynchus labradorium (Gmelin)

Extinct. This species was reported with certainty at least once in the Monteregian Hills area: Laprairie, an adult male shot in the spring of 1862 (Hall, 1862:427; Wintle, 1896:X; Dutcher, 1894:4-12, 1894:74). This specimen became later the property of William Dutcher, and the writer has been unable to trace the specimen further.

SPECIMEN EXAMINED

There is a mounted immature male in the Redpath Museum, without any data; it can be assumed that it may have been taken in the Montreal area, although nothing is known about its origin.

Common Eider Somateria mollissima (Linnaeus)

Rare transient. Wintle (1896:24) states that this duck is a "rare transient visitant" and that it is "occasionally" shot in the fall. Recent reports from Côte Ste. Catherine (1) 12 January 1957, (1) 1-10 February 1958 (P.Q.S.P.B., 1957:18; 1958:22) appear to be referable to this species. Although it has not been reported more often, the Common Eider is undoubtedly more numerous than suspected on the waters of the region, particularly in fall.

SPECIMEN EXAMINED

R 3741, m. immature, Verdun, 8 October 1966.

TAXONOMY

The specimen collected at Verdun has been identified subspecifically as dresseri.

King Eider Somateria spectabilis (Linnaeus)

Casual fall migrant. Two specimens, an immature male and an adult female, from Ste. Anne de Bellevue, 12 November 1966, constitute the only definite records of the species for the Monteregian Hills region, although it certainly occurs here more frequently than suggested above. Wintle (1896:135) mentions that a pair was shot on 9 October 1895, at Trestler Island (near Vaudreuil). It is known to occur irregularly in small number on the Ottawa River and on the Great Lakes (Godfrey, 1966:78).

SPECIMENS EXAMINED

R 3719, m. immature, 12 November 1966, Ste. Anne de Bellevue

R 3720, f. adult, 12 November 1966, Ste. Anne de Bellevue.

White-winged Scoter Melanitta deglandi (Bonaparte)

PRESENT STATUS

Uncommon transient. Although the White-winged Scoter can be seen in considerable numbers (a few to several hundreds) on the most important rivers of the Monteregean Hills area in fall from 25 September (P.Q.S.P.B., 1962:15) to 26 December (P.Q.S.P.B., 1955:10), it is much less numerous in spring, only a few individuals having been reported from 12 May (P.Q.S.P.B., 1947:10) to 19 May (P.Q.S.P.B., 1955:10). It was reported twice in winter, 4 and 9 January off St. Helen's Island, and 9 January off St. Lambert (P.Q.S.P.B., 1949:19), but it does not appear to winter regularly on the waters of the area. In fall, the peak of the migration activity takes place from the middle to the end of October (P.Q.S.P.B., 1938-1964; author's observations 1964-1966).

FORMER STATUS

Hall (1862:53) and Wintle (1896:25) considered it a common migrant. Indeed, it was undoubtedly reduced in numbers as a migrant species in the area since the turn of the century, probably more as a result of water pollution and habitat destruction than from over-shooting since its flesh is not highly praised by hunters.

Surf Scoter Melanitta perspicillata (Linnaeus)

PRESENT STATUS

Rare fall migrant. A few observations were recorded in the Monteregean Hills region, particularly near the Lachine Rapids from 21 September (P.Q.S.P.B., 1951:13) to 29 November (P.Q.S.P.B., 1952:10). It is not

known to occur in the region in spring.

FORMER STATUS

Hall (1862:53) and Wintle (1896:26) state that the present species is a rare migratory bird in the Montreal area. It appears that its status has slightly changed since.

Common Scoter Oidemia nigra (Linnaeus)

PRESENT STATUS

Uncommon transient. The Common Scoter is known to occur in small numbers on the larger rivers of the Monteregian Hills region from 24 April (P.Q.S.P.B., 1954:10) to 1 May (P.Q.S.P.B., 1959:12) in spring. It is somewhat more numerous in fall, from 15 September (P.Q.S.P.B., 1956:12) to 13 December (P.Q.S.P.B., 1959:12), although it is never observed in large flocks or in concentrations of any sort.

FORMER STATUS

According to Wintle (1896:24-25), and Macoun and Macoun (1909:113) this species was formerly more numerous on the waters of the region. Its decline can undoubtedly be attributed to habitat destruction and water pollution. Indeed, hunters seldom shoot it as they consider its flesh too "fishy".

SPECIMENS EXAMINED

R 3705, m. adult, 18 October 1966, Verdun

R 3721, f. adult, 18 October 1966, Verdun

SUBSPECIES

The North American population has been assigned to Oidemia nigra americana Swainson (A.O.U., 1957:94), and the two specimens studied agree in size and coloration with the above statement.

Ruddy Duck Oxyura jamaicensis (Gmelin)

PRESENT STATUS

Uncommon transient. The Ruddy Duck was observed in small numbers in spring from 29 May to 6 June (P.Q.S.P.B., 1957:13). It is somewhat more numerous in fall from 14 September (P.Q.S.P.B., 1957:13) to 9 December (P.Q.S.P.B., 1959:19). The records (P.Q.S.P.B., 1948-1964) show that all the observations have been made on the St. Lawrence River and on Lake of Two Mountains. Although it has been recorded as nesting on Lake St. Peter (Godfrey 1966:81), the writer thinks that it is unlikely that it breeds in the Monteregian Hills area owing to a lack of habitat.

FORMER STATUS

The Ruddy Duck has undoubtedly become more numerous in the area since the turn of the present century, as Wintle (1896:26) considers it a "scarce transient visitant" which was not formerly known to breed in the province of Quebec (Macoun and Macoun, 1909:118).

Hooded Merganser Lophodytes cucullatus (Linnaeus)

PRESENT STATUS

Uncommon transient. Although the Hooded Merganser has not been officially reported as breeding in the Monteregian Hills region, the following data suggest that it may occasionally do so: Senneville

(Stonycroft Pond), a pair, 8-15 April 1951 (P.Q.S.P.B., 1951:22); Côte Ste. Catherine (2) 13 August 1963 (P.Q.S.P.B., 1963:22); Hudson (Pine Lake) (3) 19 August 1963 (P.Q.S.P.B., 1963:22). In spring, it was reported in small numbers on the St. Lawrence River, from 17 March (P.Q.S.P.B., 1957:13) to 31 May (P.Q.S.P.B., 1953:11); in fall it is somewhat more numerous on the waters of the region, and observations range from 5 September (P.Q.S.P.B., 1952:10) to 31 December (P.Q.S.P.B., 1953:11). It is ^{not} known to winter on the open waters of the area.

FORMER STATUS

It appears that the Hooded Merganser was always an uncommon migrant in the Montreal area (Hall, 1862:53; Wintle, 1882:117, 1896:12). Wintle (1896:12-13) quotes a report to the effect that it was observed nesting on Jone's Island on Lake of Two Mountains. Although, this record has been given to Wintle by another observer, there is no reason not to accept it, as the Hooded Merganser may have been more numerous at the time, particularly in summer.

SPECIMEN EXAMINED

R 470, m. adult, 18 November 1955, Lake of Two Mountains.

Common ~~M~~erganser

Mergus merganser (Linnaeus)

PRESENT STATUS

Rare summer resident. The Common Merganser probably breeds in greater numbers throughout the Monteregian Hills area than it is suggested by the records obtained so far: Senneville, one female and 6 young,

22 July and thereafter (P.Q.S.P.B., 1950:24). Indeed, although only one breeding record has been obtained in the region, it probably breeds in small numbers on the more secluded places adjacent to water.

Common transient. The Common Merganser can be observed in the region in greater numbers in the spring than in the fall. It was recorded from 16 March (P.Q.S.P.B., 1945:11), being more numerous in mid-April. In the fall, the first northern migrants arrive in early September (P.Q.S.P.B., 1948-1964) and flocks of 500 individuals and over were reported as late as 31 December (P.Q.S.P.B., 1957:19).

It is known to winter regularly in small numbers in the area (P.Q.S.P.B., 1960-1964; author's observations, 1964-1967).

FORMER STATUS

Previous writers (Hall, 1862:53; Wintle, 1882:117, 1896:11; Macoun and Macoun, 1909:73) considered this species a common migrant species in the area, except the Macoun's (1909:73) who state that it is a "common summer resident in Quebec" therefore implying that it breeds. There is no doubt that habitat destruction has greatly diminished the population of the Common Merganser, both on its breeding grounds and during its migrations. Over-shooting, particularly on rivers and lakes where sport fishes are in diminishing numbers, has almost eradicated it from certain areas. In the Monteregian Hills region it has decreased in numbers because its habitats have become destroyed or polluted. The token taken annually by hunters appears to be relatively small compared to other species because its flesh is not considered as very palatable.

Red-breasted Merganser Mergus serrator (Linnaeus)

PRESENT STATUS

Uncommon transient. The Red-breasted Merganser is considerably less numerous as a migrant throughout the Monteregian Hills region than Mergus merganser, and appears to have suffered a sharp decline over the last few years (P.Q.S.P.B., 1938-1964). It has been observed in spring and fall on the major waterways of the region, and was reported from 29 March (P.Q.S.P.B., 1950:15) to 10 June (P.Q.S.P.B., 1949:11), being more numerous in late April and early May. Autumn migrants were recorded from 4 September (P.Q.S.P.B., 1950:15) and to 31 December (P.Q.S.P.B., 1947:10). It is not known to winter in the region.

FORMER STATUS

The Red-breasted Merganser was formerly considered a common migrant (Hall, 1862:53; Wintle, 1882:117, 1896:12). Since the turn of the century it appears to have constantly become less numerous. Its extermination on lakes and rivers where it is claimed to destroy large quantities of sport fishes during the nesting season, along with habitat destruction, and water pollution on its migratory flyways and on its wintering grounds may accounts for its decline.

CATHARTIDAE

Turkey Vulture Cathartes aura (Linnaeus)

Rare straggler. Although the Turkey Vulture has been reported in small numbers fairly regularly in the southern part of Quebec over the last few years (P.Q.S.P.B., 1960-1964; Bull. ornith., 1960:1966), only two observations have been recorded in the Monteregian Hills area,

consisting of a single individual each time: Ile Perrot, 12 April 1964; St. Constant (Laprairie Co.), 3 May 1964 (P.Q.S.P.B., 1964:20).

ACCIPITRIDAE

Goshawk Accipiter gentilis atricapillus (Wilson)

PRESENT STATUS

Rare summer resident. The Goshawk is known to have bred on several occasions during the last 30 years in the Monteregian Hills region, although most of the records, have been obtained from the same area: Ile Jésus (no locality specified) one nest and 4 eggs, 29 April 1941; (P.Q.S.P.B., 1941:11); one nest and 3 eggs, 24 April 1947 (P.Q.S.P.B., 1947:15). Ste. Dorothee (Ile Jésus) two nests, 3 eggs in each, 26 and 27 April (P.Q.S.P.B., 1952:12); one nest and small young, 28 May 1958 (P.Q.S.P.B., 1958:23). Summer reports suggest possible nesting at Hudson (P.Q.S.P.B., 1946:18) and Iberville (Bull. ornith., 1956, 1 (4) :3). It is not known to breed elsewhere in the Monteregian Hills region, although it may do so where habitats are suitable, such as on St. Hilaire, Rouge, Yamaska and Shefford mountains.

Uncommon transient and winter resident. From the end of September until the middle of December there appears to be a marked increase in the number of observations of the Goshawk in the area (P.Q.S.P.B., 1935-1964; author's observations), suggesting a local migration, particularly when the rodents, grouse, and rabbits are scarce.

Goshawks in search of food are on these occasions attracted to city parks, and suburban areas, which explains its presence at the following places: Notre Dame de Grâce (P.Q.S.P.B., 1935-1936:4), Mount Royal (P.Q.S.P.B., 1935-1936:4; 1936-1937:5; 1938-1939:9); 1946:18;

1957:18), Côte St. Luc and Montreal West (P.Q.S.P.B., 1946:18), Montreal Harbour (P.Q.S.P.B., 1949:20; 1950:25), and Westmount (specimen found dead, 8 November 1965). There appears to be no northward migration in the spring, following the southward local migration.

FORMER STATUS

Although most of the earlier writers, except Hall (1862:50), considered the Goshawk only as a winter resident or a transient (Caulfield, 1890:145; Couper, 1881:18; Wintle, 1882:116, 1896:54-55), it was undoubtedly more abundant then as a resident species. Forests stands were both more extensive and more numerous, therefore making more habitats available, and the pressure from shooting was much less exhaustive than it is at the present. It appears that lack of field observation is responsible for the statements of these writers; this species is indeed fairly difficult to observe, particularly to an observer who relies almost entirely on his shotgun, as it was standard practice before the turn of the century.

The Goshawk appears to have become excessively scarce in the Monteregian Hills region during the last eight years, having been reported only a few times. The causes of its decline, and of other diurnal birds of prey, are quite obscure. Habitat destruction is certainly responsible to a great extent for the present status of the population, and possibly excessive shooting.

SPECIMEN EXAMINED

R 3711, f. immature, 8 November 1965, Westmount.

TAXONOMY

The specimen examined, which doubtless represents the population of

the area, has been referred to atricapillus.

Sharp-shinned Hawk Accipiter striatus velox (Wilson)

PRESENT STATUS

Common summer resident. The numbers of this hawk have declined greatly in the Monteregian Hills region during the last ten years. Previously, it was known to be an abundant breeder in the region, over 200 nests having been examined in the vicinity of Montreal over a period of several years (W.J. Brown, in Bent, 1938:98). No nesting records have been reported since 1952. The breeding data show that the species was fairly well distributed in the region, being particularly well established at certain places: Mont St. Hilaire, one nest and 4 eggs, 21 May 1916 (F.N. Smith Egg Collection 332 1/4). Chambly, one nest and 5 eggs, 1 June 1924 (F.N. Smith Egg Collection 332 2/5); "nine pairs have nested" (Terrill, 1931:169). Laprairie (Brosseau bog), one nest and 4 eggs, 13 June 1927 (F.N. Smith Egg Collection 332 3/4). Ste. Dorothée, two nests with 1 and 5 eggs respectively, 20 May 1951 (P.Q.S.P.B., 1951:22); one nest and 4 eggs, 24 May 1952 (P.Q.S.P.B., 1952:19). During two summers of field work in the Monteregian Hills region, the writer has observed this species only at Mont St. Hilaire (1) 16 and 21 June 1965.

Uncommon transient. Before its recent decline, the Sharp-shinned Hawk appeared to be fairly common during migrations, particularly in late April and early October, and of fairly general occurrence throughout the region (P.Q.S.P.B., 1939-1962). It has been known to winter irregularly in the area for many years (Caulfield, 1890:145;

P.Q.S.P.B., 1939-1962).

FORMER STATUS

Although Hall (1862:50) and Wintle (1882:117; 1896:53) consider the Sharp-shinned Hawk a common migrant, Wintle (1896:53) thought that the species could have been nesting in the Montreal area. In spite of these statements, the writer is convinced that the species was relatively common in the Monteregian Hills region before the turn of the present century and that it has maintained its population relatively stable, until the late 1950s coping with habitat destruction and extermination from shooting. However, habitat destruction has become more important during the last 10-12 years; thus the Sharp-shinned Hawk has certainly suffered from this situation, although its sharp decline, along that of other hawks, cannot be attributed entirely to that factor.

SPECIMEN EXAMINED

R 807, f. adult, 8 May 1952, Pointe Claire.

TAXONOMY

The specimen examined has been referred to velox.

Cooper's Hawk Accipiter cooperii (Bonaparte)

PRESENT STATUS

Uncommon summer resident and transient. The Cooper's Hawk is known to breed only in the Montreal area, although it occurs generally throughout the Monteregian Hills region. The definite breeding records are as follows: Ile Jésus (probably Ste. Dorothée), one nest and 4 eggs, 26 May 1941 (P.Q.S.P.B., 1941:11). Montreal area,

five nests during summer of 1940 (P.Q.S.P.B., 1939-1940:7); Montreal Island, woodlands facing Lake St. Louis (probably between Ste. Anne de Bellevue and La Salle) one nest and 3 eggs, 21 May 1908 (Brown, 1908:88). It appears that it is more numerous during migration. It is not known to winter in the region, although it has been observed in winter on several occasions: St. Lambert, 9 February 1947 (P.Q.S.P.B., 1947:15); Senneville, 26 December 1947 (P.Q.S.P.B., 1947:15); Montreal (Thornhill), 13 January 1963 (P.Q.S.P.B., 1963:22); Hudson, 18 December 1963 (P.Q.S.P.B., 1963:22). The writer observed it only once in the region, when a single individual was seen hovering at the edge of a field, on 15 May 1966, at Mont St. Hilaire. Like the other Accipiters, the present species has become progressively scarcer during the past ten years. Habitat destruction has certainly affected it to a certain extent but possible other reasons of its recent decline are unknown.

FORMER STATUS

Both Hall (1862:50) and Wintle (1896:54) consider it a rare migrant in the Montreal area; Wintle (1896:54) adds nevertheless that it "may breed in the district" but that he has "no record of their nests". This hawk had certainly been more numerous in the region before the turn of the century than it was until recent years, even if it was considered as rare. The small number of observers and the techniques of observations certainly account for the statements quoted above.

Red-tailed Hawk

Buteo jamaicensis (Gmelin)

PRESENT STATUS

Uncommon transient. Although this hawk has never been reported

as nesting in the Montereian Hills region, several summer reports suggest that it may do so in small numbers: Richelieu (1-3) 10-28 April 1950 (P.Q.S.P.B., 1950:25); Strathmore (1) 9 April 1955 (P.Q.S.P.B., 1955:18); Mont St. Hilaire (1) 14 May 1965, (1) 24 May 1965, (1) 18 May 1966, (2) 21 June 1966 (writer's observations). During migrations, it is frequently seen from the middle of March until the end of April (author's observations), and during September and October (P.Q.S.P.B., 1939-1961; author's observations). Although it has been reported once in winter, Les Cèdres (1) 12 January 1958 (P.Q.S.P.B., 1958:23), it is not known otherwise to winter in the region. Like the other hawks, Buteo jamaicensis has declined sharply during the last 10 years, and the reasons for this situation are on the whole unknown.

FORMER STATUS

Hall (1862:50) considered the present species a common migrant but Wintle (1882:116, 1896:55) thought that it was "scarce" or "rare" at his time. The species was undoubtedly then more numerous in the region than it is nowadays, and the writer believes that it could possibly have bred with some regularity in the area although it has been unrecorded.

Red-shouldered Hawk Buteo lineatus (Gmelin)

PRESENT STATUS

Uncommon summer resident. Like the other Accipiter hawks, the Red-shouldered Hawk has suffered a marked decline during the last ten years in the Montereian Hills region. It was previously considered as one of the most numerous hawks of the region. Definite nesting

data have recently been obtained as follows: Senneville, one nest and 3 eggs, 5 May 1951 (P.Q.S.P.B., 1951:22); evidence of nesting during summer 1953 (P.Q.S.P.B., 1953:18); one nest, 11 May 1957 (P.Q.S.P.B., 1957:20). Ste. Dorothée (Ile Jésus), a nest with young 20 May 1951 (P.Q.S.P.B., 1951:22). Chambly three pairs have nested, (Terrill, 1931:169). Como, one nest, female sitting, 26 May, 5 June; 2 downies, 19, 26 June, and 4 July 1965 (P.Q.S.P.B., Nest Record Card). Numerous summer observations in 1965 and 1966 suggest that it breeds elsewhere in the Monteregian Hills region: Mont St. Hilaire, Mont Yamaska and Mont Shefford (author's observations), and Iberville (Bull. ornith., 1956, 1 (4) :3).

Common transient. This hawk can be seen in good numbers during the spring migration from the end of March, particularly in early April. In the fall, it appears to be more numerous from the middle of September to the end of October (P.Q.S.P.B., 1945-1964; author's observations). It winters irregularly in the area: Hudson (1) 3 January 1956 (P.Q.S.P.B., 1956:18); Beaufaire (1) 23 and 24 February 1957 (P.Q.S.P.B., 1957:19); Candiac (1) 28 January 1962 (P.Q.S.P.B., 1962:22).

FORMER STATUS

Hall (1862:50) considered the Red-shouldered Hawk a rare migrant; however, Wintle (1882:116; 1896:55) states that it is a common summer resident; he also provides nesting records: Outremont, one nest and 3 eggs, 12 May 1890; he adds (1896:56) that 13 eggs have been collected in the forest near Lachine on 2 May 1891, and that the present species "is the most common hawk of the area". Other breeding records have been obtained around the turn of the century: Côte St. Luc (Montreal Island), one nest and 2 eggs, 14 May 1898 (F.N. Smith Egg Collection, 339 5/2), one nest and 3 eggs, 23 April 1898 (F.N.

Smith Egg Collection, 339 6/3), one nest and 1 egg, 1 May 1894 (F.N. Smith Egg Collection, 7/99a); Dixie (Montreal Island) one nest and 3 eggs, 6 May 1906 (F.N. Smith Egg Collection, 339/533). The Red-shouldered Hawk was certainly more numerous in the Monteregian Hills region before the turn of the century than it was before its recent decline. Habitat destruction is certainly responsible for its disappearance as a breeding bird from the Montreal area. The reasons of its decline elsewhere in the Monteregian Hills region are unknown to a great extent, although the present situation can be attributed partly to habitat destruction.

Broad-winged Hawk Buteo platypterus platypterus (Vieillot)

PRESENT STATUS

Uncommon summer resident. The present species is the most numerous of the Accipiter hawks in the Monteregian Hills region. It is found from mid-March until mid-October (P.Q.S.P.B., 1935-1964; author's observations). It appears to be more abundant during the middle of September; as many as 150 individuals have been counted in a day (P.Q.S.P.B., 1951:23). Several nesting records have been obtained in the area: Vaucluse, one nest and 1 egg, 14 May 1939 (P.Q.S.P.B., 1938-1939:10). Chambly, three pairs reported as nesting (Terrill, 1931:169); a female incubating, 5 May 1945 (P.Q.S.P.B., 1945:16); one bird flushed from nest, 20 May 1950 (P.Q.S.P.B., 1950:25); one pair near empty nest, 6 May 1951 (P.Q.S.P.B., 1951:23). Ile Jésus (perhaps Ste. Dorothée), one nest and 3 eggs, 24 May 1951 (P.Q.S.P.B., 1951:23); Ste. Dorothée (Ile Jésus), one nest and 1 egg, 30 April 1952 (P.Q.S.P.B., 1952:19). Mont St. Hilaire, one female sitting

on a nest, 11 June 1965; one pair displaying aggressive behaviour, 16 June 1965 (author's observations). Observations on Mont Yamaska and Mont Rouge suggest that the species is also breeding there although no nest has been found (author's observations, 1965 and 1966). It is not known to winter in the area.

FORMER STATUS

Hall (1862:50) considers it a common migratory species, although it was probably nesting in the area at the time he prepared his work. Wintle (1896:56-57) states that it is a "common summer resident" from 30 March to 19 October and mentions a pair that he found nesting on Mount Royal, on 4 June 1887. The Broad-winged Hawk appears to be the species that has been less affected during the last ten years. It can still be seen in small numbers in the wooded parts of the region. Its less rigorous ecological requirements may account for the situation. It appears indeed that the present species is less disturbed by the proximity of man than the other Accipiter hawks. Its numbers have nevertheless been reduced since the turn of the century through habitat destruction although no quantitative data are available to that effect. Many of the places where it formerly bred have been occupied recently by residential or industrial centers from which all the forest has been removed.

SPECIMENS EXAMINED

R 813 f. imm., 7 September 1919, Brosseau (Laprairie)

66 m. ad., 14 May 1965, Mont St. Hilaire

105 f. ad., 3 June 1965, Mont Yamaska

275 f., ad., 13 May 1966, Mont St. Hilaire

286 f. ad., 4 June 1966, Mont St. Hilaire

TAXONOMY

The specimens examined are referable to platypterus.

Swainson's Hawk Buteo swainsoni Bonaparte

Casual wanderer. Hall (1862:50,66-67) cites a dark-phased specimen probably taken at Terrebonne; no other data are provided. Wintle (1882:116; 1896:56) considers it a "rare" and "accidental visitant" on the basis that "a few" were collected in the Montreal area, and adds that he saw "a fine dark specimen in the spring of 1894", collected near Montreal. He provides no additional data. The record has been accepted by the Macoun's (1909:342) and Godfrey (1966:92). The writer examined the dark-phased specimen mentioned by Wintle, which is still in the Redpath Museum.

Rough-legged Hawk Buteo lagopus (Pontoppidan)

Uncommon but irregular transient and winter resident. This cyclic migrant occurs in the Monteregian Hills region from early October until late April (P.Q.S.P.B., 1935-1964; author's observations). It is particularly fond of open areas, and for this reason, most of the observations are made in open fields, on beaches, shores, and islands. Two were observed by the writer in the plain southeast of Mont St. Hilaire, on 7 May 1965. It appears to be more abundant in fall than spring, this situation can perhaps be explained by the high mortality rate suffered by cyclic migrants during winter. Its present status does not appear to have changed considerably since

the turn of the present century as Hall (1862:50), Wintle (1882:117; 1898:57), and Caulfield (1890:145) considered it in general a common migrant. It appears that the present species has not suffered as marked a decline as the other *Accipiter* hawks during the last ten years. This is probably due to the fact its breeding grounds are located far from any intensive human activity.

SPECIMENS EXAMINED

A few mounted (5) specimens in the Redpath Museum, assumed to have taken in the Monteregian Hills region, have been referred to s. johannis.

Golden Eagle Aquila chrysaetos (Linnaeus)

Hall (1862:50) and Wintle (1896:57) say that the Golden Eagle was a rare migrant in the Montreal area; Wintle (1896:57) adds that he saw one specimen on Bonsecours market in May 1891 that had undoubtedly been collected in the region of Montreal. The present species appears to be presently less numerous than it was formerly; two sightings records only have been obtained in the Monteregian Hills region since the turn of the present century; both are from Mont St. Hilaire: (1) 24 May 1938, 1939 (P.Q.S.P.B., 1937-1938:5; 1938-1939:6).

Bald Eagle Haliaeetus leucocephalus (Linnaeus)

PRESENT STATUS

Rare transient. The Bald Eagle has been observed fairly regularly in the Monteregian Hills region, particularly in areas adjacent

to important waterways such as the St. Lawrence and Richelieu rivers; a few observations have been made fairly regularly in spring and fall (P.Q.S.P.B., 1939-1963). Although it is not known to winter in the area, it has been observed as late as 10 December (P.Q.S.P.B., 1954:17) and as early in spring as 8 and 9 March (fide R. Ouellet, observations 1967).

FORMER STATUS

Earlier writers (Hall, 1862:50; Wintle, 1882:117; 1896:57-58) found the Bald Eagle either a scarce or a rare migrant in the area. It appears therefore that its status has not appreciably changed since the turn of the century. However, the writer thinks that the present species might have bred in the Monteregian Hills area in a not too distant past, i. e., before human activity along the Richelieu and St. Lawrence rivers became so intensive as to chase it away from its breeding grounds. This view can be supported by the fact that the Bald Eagle is known to nest close to large bodies of water and by the fact that it still breeds in the St. John River Valley of New Brunswick (author's observations, 1958-1962), which is at the same latitude as the Monteregian Hills region. Therefore, it appears that it may have bred near the Richelieu and St. Lawrence rivers, before human activity has changed the structure of the habitats.

Marsh Hawk

Circus cyaneus (Linnaeus)PRESENT STATUS

Uncommon summer resident. The Marsh Hawk has suffered greatly from habitat destruction in the Monteregian Hills region, particularly during the last twenty years, as most bogs and marshes have been claimed for industrial and residential purposes. Several breeding records have been obtained in the region: Chambly, one nest and 5 eggs, 3 June 1917 (F.N. Smith Egg Collection, 331 1/5; five pairs have nested (Terrill, 1931:169); one nest, 14 May 1944; one nest and 5 eggs, 26 May 1946 (P.Q.S.P.B., 1946:18). Delson (Laprairie Co.), young ones in a nest, 18 July 1946 (P.Q.S.P.B., 1946:18). St. Hyacinthe, one nest and 5 eggs, 19 May 1918 (F.N. Smith Egg Collection 331 2/5). Notre Dame des Victoires (Montreal Island), a nest with five young, 26 June 1939 (P.Q.S.P.B., 1938-1939:10). Verdun, one nest and 3 eggs, 12 May 1950 (P.Q.S.P.B., 1950:28). Observations by the writer in 1965 and 1966 suggest that the species may still breed, at least a pair, in the plain between Mont St. Hilaire and St. Jean Baptiste, although the nest has not been found. The species has been seen in the region as early as 9 March (a female at Laflèche by writer), and until 12 November (a female at Mont St. Hilaire by the writer).

FORMER STATUS

Although Hall (1862:50) considered the Marsh Hawk a "rare resident", it was undoubtedly common in suitable habitats as suggested by Wintle (1882:116; 1896:53), who mentions that a pair was nesting

for several years in a swamp near Longueuil. It appears therefore that it has been progressively reduced in numbers as bogs and marshes became more accessible by road, and later, as these were claimed for human activity. Although the Marsh Hawk appears to be able to survive in man's presence, it has become eradicated from all the areas where bogs and marshes have been managed particularly in the vicinity of all large centers of human activity.

PANDIONIDAE

Osprey Pandion haliaetus (Linnaeus)

PRESENT STATUS

Uncommon transient. The Osprey occurs at the present in the Monteregian Hills region only as a transient; it is never numerous, a few observations having been made in the spring and fall (P.Q.S.P.B., 1935-1964; author's observations, 1964-1966). Adults and young ones were seen regularly in summer about Heron Island in 1942 (P.Q.S.P.B., 1942:14); it is therefore suggested that a pair may have bred on this well wooded island, which was at the time well isolated from human disturbance. The writer has observed one individual on Lac Hertel (Mont St. Hilaire) from 3 May to 18 May 1965, which was not seen afterwards. The species was recorded from late March to late November (P.Q.S.P.B., 1935-1964).

FORMER STATUS

Although Hall (1862:50) and Wintle (1882:117; 1896:61) considered the Osprey a common migratory species through the Montreal area, it was undoubtedly breeding in remote places of the Monteregian Hills region. It appears therefore that it has suffered a marked

decline since the turn of the century being only occasionally seen in the area at the present.

FALCONIDAE

Gyr Falcon Falco rusticolus Linnaeus

Casual winter migrant. Wintle (1896:58) mentions the Gyr Falcon in his work but appears to have no definite record. The species has been identified a few times in the Montreal region in recent years: near St. Helen's Island (1) 30 November 1949 (P.Q.S.P.B., 1949:20); Mont Royal (Cemetery) (1) 16 March 1963 (P.Q.S.P.B., 1963:22); Pierrefonds (1) 7 April 1963 (P.Q.S.P.B., 1963:22; Bull. ornith., 1964, 8 (2) :3); Lachine Rapids (1) 7 March 1967 (fide R. Ouellet).

Peregrine Falcon Falco peregrinus anatum Bonaparte

PRESENT STATUS

Rare summer resident. Although the Peregrine Falcon appears to have vanished from the Monteregian Hills area as a breeding bird, it was known to breed at a few places until quite recently: Mont Johnson, one nest and 2 eggs, 24 May 1940 (P.Q.S.P.B., 1939-1940:8); Mont St. Hilaire, "two pairs nesting as usual" (P.Q.S.P.B., 1941:12), therefore implying that it had been nesting there regularly, and observations in June 1955 suggest breeding there (P.Q.S.P.B., 1955:18); Montreal (Sun Life Building), nested at least during eleven years (P.Q.S.P.B., 1935-1952; Hall, 1955); they appear to have abandoned the Sun Life Building as a nesting site after the breeding season of 1952; for more details about the "Sun Life Falcons", the reader is referred to G.H. Hall's booklet "Great Moments in Action"

(1955). Since 1953, the Peregrine Falcon has occasionally been seen in the area, but it appears to be very rare.

FORMER STATUS

Although Wintle (1882:116; 1896:58-60) claims that the Peregrine Falcon was either a "very rare visitant" or a "scarce summer resident", it was undoubtedly more abundant than it has been recorded in the region until its recent decline. According to Wintle (1896:58-60) it was known to breed on Mont Yamaska (western side), where two eggs were collected in April 1891; the Peregrine Falcon was said to have been breeding there for the last 40 years.

SPECIMENS EXAMINED

R 835, m. imm., 7 August 1950, Montreal.

A mounted male in Redpath Museum, collected at Abbotsford (Mont Yamaska), undoubtedly one of the pair shot on 7 May 1890 (Wintle, 1896:59) which belonged to the former Montreal Natural History Society, before the transfer of the collections to the Redpath Museum.

TAXONOMY

The specimens examined have been referred to anatum the breeding subspecies of Canada.

Pigeon Hawk

Falco columbarius Linnaeus

PRESENT STATUS

Uncommon transient. This species of the coniferous forest has been observed in small numbers through the Monteregian Hills region, both in spring and fall, although it appears to be slightly more

numerous during the fall migration. As many of the other diurnal birds of prey, it appears to have suffered serious decline during the last ten years (P.Q.S.P.B., 1941-1964). It has been reported on a few occasions in winter but it is not known to winter regularly in the area (P.Q.S.P.B., 1950:27; 1953:19).

FORMER STATUS

Hall (1862:50) and Wintle (1896:60) say that the Pigeon Hawk was a "scarce" migrant in the Montreal area. However, the writer believes that it was certainly more numerous than suggested by these writers, as it appears that they mostly relied on specimens for their observations, rather than on field observation.

Sparrow Hawk

Falco sparverius sparverius Linnaeus

PRESENT STATUS

Common summer resident. The Sparrow Hawk appears to be least affected by the recent decline noticed in nearly all the diurnal birds of prey. It is known to breed through the Monteregian Hills region as follows: Montreal (Mont Royal) two pairs with their nest (P.Q.S.P.B., 1939-1940:8); Montreal (near Loyola College), one pair and a nest, 14 June 1959 (P.Q.S.P.B., Nest Record Card); Montreal (Westmount Golf Club), one pair and a nest, 19 May 1964 (P.Q.S.P.B., Nest Record Card); Montreal (Mc Gill Campus), one pair, a nest and 2 eggs, 17 June 1966, under a chimney platform on roof of Redpath Museum (author's observations); Montreal West, one nesting female emmured by a sudden growth of fungus, 20 May 1950 (P.Q.S.P.B., 1950:27); Dorval Island, one young in a nest, late June 1961 (P.Q.S.P.B., 1961:21); Chambly, three pairs were known to have nested

(Terrill, 1931:169); Mont St. Hilaire, two pairs and 2 nests, 28 May, 6 June, and two adults and 3 young, 17 June 1965 (author's observations), and two pairs evidently nesting in 1966. Evidence of breeding, based on observation of pairs during May and June of 1965 and 1966, was obtained for the following places: Mont Yamaska, Mont Shefford and Mont Rouge (author's observations). Uncommon winter resident. The present species has been known for several years to winter fairly regularly in small numbers in the region (P.Q.S.P.B., 1939-1964; author's observations).

FORMER STATUS

According to Hall (1862:50) and Wintle (1882:116; 1896:60) the Sparrow Hawk was never numerous in the region before the turn of the century. Therefore it appears that the clearing of the land, giving rise to open fields and second growth vegetation has somewhat benefited this species, at least.

SPECIMENS EXAMINED

65 m. ad., 14 May 1965, Mont St. Hilaire

339 m. ad., 14 June 1966, Mont St. Hilaire

TAXONOMY

The form sparverius is the breeding subspecies in Canada (Godfrey, 1966:104).

TETRAONIDAE

Spruce Grouse Canachites canadensis (Linnaeus)

Hall (1862:52) mentions that the Spruce Grouse was a "common resident"; on the other hand, Wintle (1896:48) found it a "rare permanent resident" and adds (1896:49) that it was never found near Montreal

and that someone has reported to him that "it used to be plentiful on the island of Montreal, but has for a number of years past disappeared with the spruce off the island". The writer believes that these statements were based on information received from hunters or observers that could not easily distinguish between Canachites canadensis and Bonasa umbellus. It is very unlikely that the Spruce Grouse has ever occurred in the St. Lawrence Lowland or on the Monteregian Hills, because the forest composition appears to have never been of the type sought after by the present species. The statements quoted above probably refer to areas close to the Monteregian Hills region but outside the St. Lawrence Lowland, such as certain regions of the Appalachian or Laurentian mountains, where extensive coniferous forests are frequently found.

Ruffed Grouse Bonasa umbellus togata (Linnaeus)

PRESENT STATUS

Uncommon permanent resident. The Ruffed Grouse has nearly been extirpated from the Monteregian Hills region, although it can still be found in small numbers on the less disturbed of the Monteregian Hills, and in a few patches of forest that are left throughout the region. It was reported in recent years as breeding at the following places: St. Lambert (P.Q.S.P.B., 1941:13); Chambly (P.Q.S.P.B., 1943:15; 1946:19; 1951:24); Mont St. Bruno (P.Q.S.P.B., 1954:17); Mont Johnson (Bull. ornith., 1959, 4 (3) :5; 1960, 5 (3) :5); Mont St. Hilaire, Mont Rouge and Mont Yamaska (author's observations, 1965-1966); Senneville (P.Q.S.P.B., 1941:13; 1952:20; 1959:20; 1961:22);

Ste. Dorothée and Ile Jésus in general (P.Q.S.P.B., 1942:15; 1946:19; 1948:29; 1949:21; 1950:28); Vaucluse (P.Q.S.P.B., 1945:18); Hudson (P.Q.S.P.B., 1961:22). It appears that the main factors responsible for the sharp decline of the species, which is now found only in restricted places, are the destruction of habitats and over-hunting.

FORMER STATUS

According to earlier writers (D'Urban, 1857:144; Vennor, 1860:427; Hall, 1862:52; Wintle, 1881:5, 1882:117; Caulfield, 1890:145, and Wintle, 1896:49-50) the Ruffed Grouse was a common permanent resident in the Montreal region, particularly on Mount Royal. It was known to nest on Mount Royal (including Westmount Mountain), where a nest with 12 fresh eggs was collected on 6 May 1898 (F.N. Smith Egg Collection, 300a 1/2-12). There is no doubt that the Ruffed Grouse has gradually diminished in numbers throughout the area, both under excessive hunting and habitat destruction. Second-growth and mature deciduous stands have been claimed for agricultural or other purposes, leaving very little wooded areas. The few remaining birds on Mount Royal have undoubtedly disappeared as greater numbers of people visit it, particularly during the breeding season which coincides with the first nice days of spring and summer.

SPECIMENS EXAMINED

152, f. adult, 2 July 1965, Mont Yamaska

285, f. downy, 4 June 1966, Mont St. Hilaire

TAXONOMY

Specimens (152), along with a few others from adjacent areas in the Redpath Museum and in the National Museum of Canada) have been referred to togata on the basis of their general coloration when compared with specimens from southern Ontario, southern Quebec, and the Maritime Provinces.

Willow Ptarmigan Lagopus lagopus (Linnaeus)

Ptarmigans have been reported at least once in the area: two flocks (about 20 and 30 birds), 12 December 1889, Longueuil (Wintle, 1896: 50-51). It appears safe enough to assign the present record to Lagopus lagopus although no specimen has been collected, since Lagopus mutus has never been recorded as far south as the Monteregian Hills region. Hall (1862:52) says that the present species is "a rare resident"; there is no doubt that this statement is erroneous; according to Vennor (1860:428) a specimen of Lagopus lagopus was bought by him on the Montreal market, which was "said to have been shot near Sorel"; there is no way in this case to pin down the locality, or even to be sure if the specimen was actually taken in the Sorel area.

PHASIANIDAE

Bobwhite Colinus virginianus (Linnaeus)

One attempt at least has been made to introduce this species in the area when two pairs were liberated in early June of 1943 on Westmount Mountain: earlier three individuals had been released on Mount Royal (P.Q.S.P.B., 1943:6). The attempt proved to be unsuccessful as none of the birds was ever seen afterwards.

Ring-necked Pheasant Phasianus colchicus Linnaeus

Uncommon permanent resident. The Ring-necked Pheasant appears to have been introduced for the first time in the Montreal region in 1941 when seventy birds were liberated on Westmount Mountain (Mount Royal) (P.Q.S.P.B., 1941:13). They were fed during the winter and appeared to have increased in numbers, over 150 being observed on 26 November 1949 (P.Q.S.P.B., 1949:21). Later, their numbers have diminished slowly, 15 only being seen during the Christmas Bird Count of 1954 (P.Q.S.P.B., 1954:17). In 1966, 55 were seen on 26 December, thus showing a slight increase. The species has also been observed elsewhere in the area but it is not known if the birds observed come from the original stock or from birds that have escaped from farms or have dispersed from adjacent regions; observations were also made at Côte St. Luc and Caughnawaga (P.Q.S.P.B., 1942:15); Longueuil, Heron Island and Repentigny (P.Q.S.P.B., 1943:16); Hudson area (P.Q.S.P.B., 1944:15; 1958:24); Ste. Madeleine (P.Q.S.P.B., 1958:24); Lachine (P.Q.S.P.B., 1964:21). A bird found on Ile Bizard in 1956, had previously been banded in New-York State (P.Q.S.P.B., 1956:18-19). On 28 June 1956, the writer, seeing this species in the wild for the first time, recorded two adult males at Mont St. Hilaire; none were seen in 1965 and 1966. According to Terrill (1917:132) one individual was shot on 8 October 1916 at Ormstown, and apparently this bird had escaped from a farm. During three years of field work in the Monteregian Hills area, (1964-1967), the writer has never seen it outside the Island of Montreal.

Gray Partridge

Perdix perdix perdix (Linnaeus)

Uncommon permanent resident. The Gray Partridge was observed for the first time in the province of Quebec during the winter 1942-1943; Caughnawaga, Valleyfield, Côteau, Rougemont and Ste. Martine (P.Q.S.P.B., 1942:15; 1943:16). Apparently, it has been introduced in Quebec only near Sutton (Brome Co.) in 1932 (op. cit.). Since 1944, it has been reported regularly throughout the St. Lawrence Lowland, particularly throughout the area covered by this study, and appears to be increasing slightly in numbers. It was observed at the following places: Ste. Marthe, Chambly, Côte Ste. Catherine, Ile Perrot, Laprairie, Choisy, Lacadie, Hudson, St. Sébastien, Pointe Claire, Mont St. Grégoire, Vaudreuil, Farnham, Beloeil, St. Bruno (P.Q.S.P.B., 1943-1964; author's observations). As suggested by Rand (1945:26), it seems that the Gray Partridge has spread in Quebec from the adjacent parts of Ontario, since the few individuals introduced at Sutton were apparently not successful in establishing themselves in the area. The spread of the species was undoubtedly favored by the extensive clearing of the land for agricultural purposes, although the snowfall is heavy in the region, and by a lack of competition from other species occupying a similar semi-open or open habitat. The Richelieu River appears to have been an inefficient barrier in preventing the species from spreading eastward.

SPECIMEN EXAMINED

R 3501, f. imm., 23 January 1961, Lacadie.

King Rail

Rallus elegans Audubon

Accidental wanderer. One individual was shot in October 1899 at Sabrevoix (Iberville Co.) (Godfrey, 1966:122), according to a label in the National Museum, from the J.H. Fleming Collection (National Museum of Canada files). Wintle's (1882:117) statement that Rallus elegans is a "summer resident" which "nests beginning of June" ~~was~~ certainly erroneous.

Virginia Rail

Rallus limicola Vieillot

PRESENT STATUS

Rare summer resident. Since most marshes of the Monteregian Hills region have been claimed and filled for human activity during the last twenty years, the Virginia Rail has diminished to the point that it has been nearly extirpated as a breeding bird from the area. It appears that the present species was rather common in suitable habitats before intensive human activity; several breeding records have been obtained and show that the breeding population was very localized: Ahuntsic (Montreal Island), one nest and 3 eggs, 29 May 1947 (P.Q.S.P.B., 1947:16). Abord-à-Plouffe (Ile Jésus), one nest and 8 eggs, 17 June 1947 (P.Q.S.P.B., 1947:16). Senneville, two nests with 3 and 6 eggs each, 28 June 1947 (P.Q.S.P.B., 1947:16); one nest and 9 eggs, 6 June 1948 (P.Q.S.P.B., 1948:29); several nests, 21 May 1947 (P.Q.S.P.B., 1949:22); one nest and 6 eggs, 12 June 1950 (P.Q.S.P.B., 1950:28). Côte St. Paul (Montreal Island, one nest and 5 fresh eggs, 8 June 1908 (F.N. Smith Egg Collection, 212 2/5-769). St. Lambert, one nest and 9 fresh eggs, 7 June 1924 (F.N. Smith Egg Collection, 212 1/9); one downy chick of 2-3 days old, 4 July 1932 (R 975). The secretive habits of the Virginia Rail make it

extremely difficult to observe during the nesting season, and particularly during migrations, for this reason, little information is available on its migration in the Monteregian Hills region. It is however known to arrive in the area in early May (P.Q.S.P.B., 1945-1964) and exceptionally as early as 22 April (P.Q.S.P.B., 1957:13); in the fall it was recorded last on 29 September (P.Q.S.P.B., 1956:12).

FORMER STATUS

According to Wintle (1882:117; 1896:33) the Virginia Rail was a "common summer resident" throughout the Montreal area; he undoubtedly meant that it was found in suitable habitats. He adds (1896:33) that thirty-two individuals were shot in the spring of 1890 during a one-day hunt on an island near Verchères; this shows therefore that the Virginia Rail was numerous in suitable habitats. Although Hall (1862:53) mentions that the species was common only during migrations, it was certainly nesting at the time. Caulfield (1880:415) cites a specimen collected in mid-summer of 1888 on Nun's Island, which suggest that it was breeding there. The writer believes that the Virginia Rail was certainly an abundant species before the turn of the century that has been overlooked by many observers due to its secretive habits and to the difficulties of reaching its habitat unless a special effort is made to do so. There is no doubt that it has been greatly reduced in numbers through overshooting, as described by Wintle (1896:33), because its flesh is considered a great delicacy. It has certainly been prevented to become rarer when the Bird Act Convention of 1916 insured it with full protection

at all times of the year. Since then it appears to have increased slightly in numbers, but excessive habitat destruction during the last years certainly endanger its future again as a breeding bird in the Monterey Hills region, and as a migrant in the rest of its range at other times of the year.

Sora Porzana carolina (Linnaeus)

PRESENT STATUS

Rare summer resident. Like the Virginia Rail, the Sora has been greatly reduced in numbers as a breeding bird in the Monterey Hills region, although it appears to be less selective in the choice of its habitat. Indeed, it has been found to nest at the edges of ponds and in wet fields where marshes are not available (author's observations, 1962-1966). Relatively few nests have been found in the area; their distribution appears therefore to be localized to the following places: Ahuntsic (Montreal Island, one nest and 9 eggs, 29 May 1947 (P.Q.S.P.B., 1947:16). Abord-à-Plouffe (Ile Jésus), two nests with 14 and 16 eggs each, 17 June 1947 (P.Q.S.P.B., 1947:16); one egg in a nest of Agelaius phoeniceus (Gollop, 1949:42), Ste. Dorothée (Ile Jésus), one nest and 14 eggs, 7 June 1959; one nest and 14 eggs, 1 June 1959 (P.Q.S.P.B., Nest Record Cards). Senneville, several nests from 1947-1960 (P.Q.S.P.B., 1947-1960). Côte St. Luc, one nest and 4 eggs, 20 May 1949:22 (P.Q.S.P.B., 1949:22). Montreal West, one nest and 7 eggs, 28 May 1943 (F.N. Smith Egg Collection, 214 2/7). La Salle, one nest and 3 eggs,

21 May 1950 (P.Q.S.P.B., 1950:28). Ste. Anne de Bellevue, one nest and 2 eggs, 10 May 1952 (P.Q.S.P.B., 1952:20). Caughnawaga, one nest and 6 eggs, 27 May 1906. (F.N. Smith Egg Collection, 214 1/6-559). Uncommon transient. The Sora appears to be less secretive during migration and has therefore been observed more frequently in spring and fall than the other rails. It is known to arrive in the area as early as 25 April (P.Q.S.P.B., 1959:12) and stay in the region until at least 28 October (P.Q.S.P.B., 1951:13).

FORMER STATUS

The Sora was apparently a common summer resident before the turn of the present century, according to Wintle (1882:117; 1896:33), who says that it "breeds in most of our marshes and swamps". He gives the following breeding records: Longueuil, two nests with 3 and 12 eggs each, 8 June 1889 (Wintle, 1890:33-34). Hall's statement (1862:53) saying that the Sora is a "common migratory" species appears to be erroneous to a certain extent as it was certainly nesting in the region at the time. Habitat destruction and overhunting appear to be responsible for the general decline of the Sora, although habitat destruction alone appears to have reduced it considerably as a breeding bird in the Montreal region, particularly in recent years.

SPECIMEN EXAMINED

R 978, f. imm., 14 September 1919, Longueuil.

Yellow Rail

Coturnicops noveboracensis (Gmelin)

Although the Yellow Rail probably occurs in the Monteregian Hills region as a transient, and perhaps as a nesting species, it does not

appear to have been recorded in recent years. Hall (1862:53) lists it as a "common migratory" species, and Wintle (1896:34) considers it a "rare transient visitant" but adds that a few "may breed" in the Montreal area. This would not be unlikely owing to the most secretive habits of this rail, which, no doubt, accounts for the lack of recent records in the region.

Common Gallinule Gallinula chloropus (Linnaeus)

Uncommon summer resident and transient. According to Wintle (1896:34), the Common Gallinule was a "common summer resident, more plentiful in autumn". Although he gives no account of its breeding, it appears that it was well established as a nesting species in the Montreal area, at least. More recently, it appears that the same situation was prevailing although few nesting data have been recorded; it appears therefore that the present species is known to breed in small numbers only in the Montreal area, although it has certainly occurred, at least in the past, elsewhere in the Monteregian Hills region. The following breeding records have been obtained: Laprairie, one nest and 11 eggs, 5 June 1950 (P.Q.S.P.B., 1950:28); Verdun, one adult and six young, 2 September 1957 (P.Q.S.P.B., 1957:21); Nun's Island, three nests with 9, 5 and 3 eggs respectively, 18 June 1965 (P.Q.S.P.B., Nest Record Card); Lake St. Francis, several broods of young accompanied by adults, 23 June-29 August 1961 (Bull. ornith., 6 (4) :4). The present species appears to be somewhat more numerous during migrations. It is known to arrive in the area as early as 14 April (P.Q.S.P.B., 1958:14)

and to stay until 3 December (P.Q.S.P.B., 1950:28). There are no winter records. Habitat destruction has certainly reduced considerably the numbers of the Common Gallinule although no quantitative data are available to that effect. Shooting, in this case, does not appear to be an important factor, as the flesh of this species is not praised by hunters, who nevertheless kill a few being angry at this bird that swims so readily to the decoys.

American Coot

Fulica americana Gmelin

PRESENT STATUS

Uncommon summer resident. The American Coot appears to be very locally distributed in the Monteregian Hills region, the majority of the breeding records having been reported from the vicinity of Montreal: St. François (Ile Jésus) two adults and 3 young on several occasions between 1 July and 24 August 1949 (P.Q.S.P.B., 1949:22); St. Lambert, one adult and 1 immature, 30 August 1952 (P.Q.S.P.B., 1952:20); Lake St. Louis, one pair and 6 young, 11 August 1956 (P.Q.S.P.B., 1956:19); Lake St. Francis, a brood of 4 young, 4 July 1961 (Bull. ornith., 1961,6 (4)). During migrations, the American Coot appears to be somewhat more numerous, particularly in fall, and more regularly dispersed on the waters of the region (author's observations, 1964-1966). It was recorded in the region from 27 April (P.Q.S.P.B., 1963:13) to 13 December (P.Q.S.P.B., 1961:13). Although it was observed in January (P.Q.S.P.B., 1949:22; 1954:18), it is not known to winter in the area.

FORMER STATUS

Hall (1862:53), probably having little information about the present

species, considered it a "scarce" migrant. According to Wintle (1882:117; 1896:35) it was a "scarce summer resident" which breeds "at the beginning of June", and the Macoun's (1909:156) list it as breeding in the area. Apparently the status of the American Coot has changed very little in the area since the turn of the century, although it was certainly more numerous than it is at the present.

CHARADRIIDAE

Lapwing Vanellus vanellus (Linnaeus)

Hypothetical. Although the Lapwing has been reported in the Monterey Hills region, one, 29 October 1961 on St. Helen's Island (P.Q.S.P.B., 1961:23), and by Hall (1862:52) as a "rare" migrant in "April and November", the records are not substantiated enough to be considered as valid.

Semipalmated Plover Charadrius semipalmatus Bonaparte

PRESENT STATUS

Uncommon transient. This plover occurs in small numbers in the Monterey Hills region during its migrations. It is more numerous in fall although the largest flocks appear to never exceed 100 individuals (Terrill, 1951:89). In spring, it occurs in the area from 6 May (P.Q.S.P.B., 1960:11) to 16 June (P.Q.S.P.B., 1951:13); the fall migration is known to last from 19 July (P.Q.S.P.B., 1962:15) to 12 December (P.Q.S.P.B., 1953:11). The Semipalmated Plover appears to have become scarcer in the region during the last years, probably on account of extensive habitat destruction.

FORMER STATUS

According to Hall (1862:52), the Semipalmated Plover was a "scarce" migrant, but Wintle (1896:47-48) lists it as a "common transient" which is "scarce in spring". It appears that this plover may have become slightly less numerous in the region as a result of extensive habitat destruction, particularly in the Montreal area.

SPECIMENS EXAMINED

R 1040, f. imm., 14 September 1919, Laprairie

R 1041, m. imm., 23 September 1915, Brosseau (Laprairie Co.)

Piping Plover Charadrius melodus Ord

Casual wanderer. Although the Piping Plover is listed by Wintle (1882:117) as a spring and autumn migrant, the only valid record of the Monteregian Hills region appear to be that provided by Terrill (1951:88), who claims to have identified a specimen in a taxidermy shop collected near Nicolet on 17 September 1916. Therefore, it seems best to consider Wintle's statement as erroneous.

Snowy Plover Charadrius alexandrinus Linnaeus

Hypothetical. Wintle's statement (1882:117) that this plover is a rare visitant in the Montreal area, should be considered as invalid being unsubstantiated by any specimen; this species of the West coast is not known to have ever occurred in the province of Quebec.

Wilson's Plover Charadrius wilsonia Ord

Hypothetical. This species is listed by Wintle (1882:117) as a "casual visitant" in the Montreal area. This record should be considered invalid as this southern species has been recorded in Canada, only in Nova Scotia (Godfrey, 1966:133).

Killdeer Charadrius vociferus Linnaeus

PRESENT STATUS

Abundant summer resident. The Killdeer is regularly dispersed throughout the Monteregian Hills region, even at proximity of densely populated centers. Its distribution in the region appears to be primarily controlled by the availability of nesting sites which consist of open or semi-open areas, either grassy or barren. This appears to be the reason why the Killdeer is so successful in this region. It arrives in the area as early as 10 March (P.Q.S.P.B., 1955:10) and stays as late as 25 November (P.Q.S.P.B., 1961:13).

FORMER STATUS

According to previous writers (Hall, 1862:52; Wintle, 1882:117, 1896:47; Macoun and Macoun, 1909:205) the Killdeer was generally a scarce or a rare bird in the province of Quebec. Wintle (1896:47) was apparently the only one to consider it as a "common summer resident". It appears that the numbers of this plover have increased considerably since the turn of the present century. Habitat modification, i. e. forest clearing, and the abandonment of several farms, along with the protection that it has benefited since 1916, certainly account for the general increase of the species in the Monteregian Hills region.

SPECIMENS EXAMINED

231, f. adult (nesting), 24 May 1966, Mont St. Hilaire

272, m. adult (nesting), 2 June 1966, Mont St. Hilaire

304, m. adult (nesting), 7 June 1966, Mont St. Hilaire

American Golden Plover Pluvialis dominica (Müller)

PRESENT STATUS

Rare fall migrant. This plover is observed in small numbers fairly regularly every fall in the Monteregian Hills region, from 20 July (Terrill, 1951:89) to 11 November (Terrill, 1951:89).

There are no spring records available for the area. The migratory population of this species appears to be fairly stable in the region, as this bird is primarily a coastal migrant.

FORMER STATUS

Earlier writers (Hall, 1862:52; Wintle, 1882:117; 1896:46-47; Macoun and Macoun, 1909:203) agree to consider this plover a common fall migrant. Hall (1862:52) lists it as a May-migrant, although his information on the subject ~~was~~ perhaps erroneous. It appears that the American Golden Plover has become considerably less numerous as a migrant in the area since the turn of the century. This general situation has been observed for the rest of Eastern Canada, and there appears to be no valid explanation, although it has been suggested that a shift in the migration routes has recently occurred (Godfrey, 1966:135).

Black-bellied Plover Squatarola squatarola (Linnaeus)

PRESENT STATUS

Uncommon transient. The Black-bellied Plover is not numerous in spring, and was observed from 11 May (P.Q.S.P.B., 1962:15) to 16 June (Terrill, 1951:89); in the fall it is much ^{more} numerous although large flocks have apparently seldom been recorded; it is known to arrive as early as 3 August (Terrill, 1951:89) and to leave as late as 21 November (P.Q.S.P.B., 1960:11). Although it certainly occurs throughout the area in migration, most of the observations have been recorded from the Laprairie area and from several islands in the Montreal region. The status of this species does not appear to have changed considerably during the last few years, although it appears to have been sighted less frequently since about 1958 (P.Q.S.P.B., 1935-1964) particularly in the immediate vicinity of Montreal, probably as a result of extensive habitat destruction.

FORMER STATUS

Wintle (1896:46) lists it as a "common transient visitant" but adds that it is "very rare in spring". The Black-bellied Plover appears therefore to be considerably less numerous at the present than it was before the turn of the century; this situation may partly be explained by the extraordinary large numbers of these birds that were taken during its migrations prior to the Bird Act Convention of 1916. It appears also that habitat destruction has somewhat displaced its migration routes or at least, it does not appear to land for resting and feeding at the same places as it used to since these have either disappeared or been modified thouroughly.

Ruddy Turnstone

Arenaria interpres (Linnaeus)PRESENT STATUS

Uncommon transient. The Ruddy Turnstone was observed only a few times during the spring migration from 27 May (P.Q.S.P.B., 1964:12) to 8 June (P.Q.S.P.B., 1951:26). In fall, it is more numerous, although it was never observed in flocks exceeding ten individuals, and was recorded from 31 July (P.Q.S.P.B., 1955:20; 1962:16) to 12 November (P.Q.S.P.B., 1963:13). This species has apparently been little disturbed by the habitat modifications that occurred in the area, as it is primarily a coastal migrant.

FORMER STATUS

Earlier writers (Hall, 1862:52; Wintle, 1896:48) considered this plover a "scarce" transient in the Montreal area. According to the Macoun's (1909:212) it was less numerous in the interior of Quebec during migrations than along the coast. It therefore appears that the status of this species has changed little since the turn of the century. It is perhaps more numerous in the area, during both the spring and the fall migration than it was formerly.

SCOLOPACIDAE

American Woodcock

Philohela minor (Gmelin)PRESENT STATUS

Uncommon summer resident. Although the Woodcock has been recorded regularly throughout the Monteregian Hills region in suitable habitats for many years, it appears to have recently diminished considerably in numbers (P.Q.S.P.B., 1955-1964; Terrill, 1951:90; author's observations 1964-1966). Evidence of nesting has been obtained from many places in the area, particularly from the

following localities: Ile Jésus (P.Q.S.P.B., 1950:29, 1951:27, 1952:21, 1954:18; Brown, 1923:161-163); St. Lambert, one nest and 2 eggs, 23 April 1927 (F.N. Smith Egg Collection, 228 2/4); Caughnawaga (Brown, 1923:161-163); Chambly, downy young, 1-2 days old (R 1221), one nest and 4 eggs, 18 May 1924 (F.N. Smith Egg Collection, 228 3/4); Mont St. Hilaire and Mont Shefford (author's notes, 1965-1966). It was recorded in the region from 17 March (Terrill, 1951:90) to 28 November (Terrill, 1951:90), and exceptionally on 16 December (Wintle, 1896:37).

FORMER STATUS

The American Woodcock was considered by earlier authors as a rare summer resident.(Wintle, 1882:117; 1896:36) or even only as a "common" migrant (Hall, 1862:52). Wintle (1896:36) adds that it was known to breed at Chambly, St. Hubert, L'Acadie (=Lacadie), Jones Island (Lake of Two Mountains) and on the Island of Montreal. As early as the time he prepared his book (late 1890's) Wintle remarked that the Woodcock was diminishing considerably as a breeding bird in the Montreal area on account of intensive habitat destruction. The same is true and can be applied at the present, so that the Woodcock is presently only an uncommon species in the region.

SPECIMEN EXAMINED

R 1221, downy young (1-2 days), 11 May 1924, Chambly.

European Woodcock Scolopax rusticola Linnaeus

A specimen of this European species has been collected at Chambly on 11 November 1882 (Couper, 1882:189; Wintle, 1896:36; Godfrey, 1966:142). The specimen appears to have been lost since. This

constitutes the only record of the species for the province of Quebec.

Common Snipe Capella gallinago delicata (Ord).

PRESENT STATUS

Rare summer resident. Habitat destruction is certainly the important factor responsible for the recent decline of this species, whose status of abundance was never too well known in the Monteregian Hills area. Nesting data have been obtained as follows, and appear to be concentrated to the Montreal area: Ahuntsic (Montreal Island), recently hatched young, 20 May 1950 (P.Q.S.P.B., 1950:29); two nests with 4 eggs each, 28 April 1951 (P.Q.S.P.B., 1951:26); one nest and 4 eggs, 7 May 1956 (P.Q.S.P.B., 1956:19); Lachine, one nest and 4 young, 10 May 1931; one brood each year until 1934 (Mousley, 1935:408-411); Cartierville (Montreal Island), one nest and 3 eggs, 12 April 1963 (P.Q.S.P.B., Nest Record Card); Pointe Claire (Montreal Island), one bird on a nest, beginning of June 1964 (P.Q.S.P.B., 1964:22-23); Ville Emard, two nests with 4 eggs each, 16 and 25 May 1926 (F.N. Smith Egg Collection, 230 2/4, 230 3/4); Ile Jésus, two nests, one with 4 broken eggs, the other with 2 eggs, 27 April 1952 (P.Q.S.P.B., 1952:21).

Common transient. The Common Snipe is more or less numerous in the region during migration depending on the general abundance of the species. It is considerably more numerous in fall than in spring. It was observed in the region from 27 March (Terrill, 1951:90) to 1 December (P.Q.S.P.B., 1962:16).

FORMER STATUS

Earlier writers (Hall, 1862:52; Wintle, 1882:117, 1896:38) considered the Common Snipe a common migrant in the area. It appears that only Wintle (1896:38) suspected its breeding in the region. This species which was apparently overlooked, was certainly a common summer resident before the turn of the century, and probably until intensive habitat destruction had taken place in its habitats.

SPECIMEN EXAMINED

R 1199, f. adult, 2 October 1920, Longueuil.

TAXONOMY

The subspecies delicata occurs in North America (A.O.U. Check-list, 1957:179).

Long-billed Curlew Numenius americanus Bechstein

Accidental transient. Hall (1862:52) and Wintle (1896:45) list this curlew as a rare migrant in the Montreal area. Terrill (1951:91) has pointed out rightly that Wintle's statement is based on birds seen on the Montreal market, and that some, if not the majority of these birds were shipped from Western regions. However, Wintle (1896:45) states clearly that a few individuals had been shot in the Montreal area, in August and September of 1893. There appears to be no other published records for this western species in the Montegian Hills region.

Whimbrel Numenius phaeopus (Linnaeus)

Rare transient. According to Terrill (1951:91), the Whimbrel is a "scarce fall transient" which was not known to occur in spring in

the region. He lists several localities in the region ⁴where specimens or sight records have been obtained: Nun's Island, Laprairie, and Hudson. An unusual spring record of 14 birds flying over Westmount Mountain (Mount Royal), on 22 May 1963 (P.Q.S.P.B., 1963:24) suggests that the species may occur at least occasionally, in spring in the area. Hall (1862:52) and Wintle (1896:45) list it as a "scarce" migrant. Wintle (1896:45) adds that a few were killed in August and September of 1893 in the Montreal area. Apparently this species was always rare in the Monteregian Hills region; therefore the important habitat modifications that have occurred since the turn of the century, do not appear to have had a marked influence on its status in the region.

Esquimo Curlew Numenius borealis (Forster)

Extinct. Hall (1862:52) and Wintle (1896:45-46) list this extinct species as a "scarce" migrant throughout the Montreal area. No other data are available on the distribution of this curlew in the Monteregian Hills region.

Upland Plover Bartramia longicauda (Bechstein)

PRESENT STATUS

Rare summer resident. The Upland Plover is irregularly scattered in small numbers throughout the Monteregian Hills region, although it appears to have become more numerous during the last thirty years (P.Q.S.P.B., 1935-1964). Definite nesting data were recorded as follows: Côte St. Luc (Montreal Island), one or two pairs noted

for a number of years and where a brood of young was observed on 10 July 1942 (Terrill, 1951:91, fide Brown); St. Mathias, two adults and 2 downy young, 9 June 1966 (author's observations, 1966). Other summer records suggest further breeding as follows: Hudson (P.Q.S.P.B., 1950:30), Iberville (P.Q.S.P.B., 1956:20), Vaudreuil County and Ile Jésus (P.Q.S.P.B., 1960:21), Farnham (Bull. ornith., 1958, 3 (4) :5), and St. Bruno (author's observations, 1966). The present species has undoubtedly benefited from human activity during the last sixty years; increased clearing of the land, abandonment of several farms, and crop rotation are among the important factors responsible for the establishment and the slow increase of this bird in the lowlands of the Monteregian Hills region.

Uncommon transient. During migration the Upland Plover appears to be slightly more numerous in the region than during the breeding season, although it is never seen in large numbers. It was noted in the area from 19 April (P.Q.S.P.B., 1963:13) to 24 October (P.Q.S.P.B., 1959:13).

FORMER STATUS

The Upland Plover was apparently unknown to Hall as a bird of the Montreal area. Wintle (1896:44) lists it however as a "scarce" migrant in the area, having observed it at St. Luc (=Côte St. Luc) and reporting specimens shot near St. Johns.

Although it appears that the Upland Plover became established in the Monteregian Hills region only recently, it is the author's opinion that it has been overlooked by previous workers on account

of the extremely small population that could be found throughout the region. It is suggested here that the Upland Plover became established in the area as a nesting bird towards the end of the last century; Wintle (1896:44) mentions that it was known to occur around St. Johns probably after 1890, and that he himself saw it at St. Luc (=Côte St. Luc) in 1889. Open fields, either wet or medium dry, constitute the habitat of this species and since there has been intensive farming in the St. Lawrence Lowland since the middle of the 18th century (Kalm, 1771), there is no doubt that the establishment of this species was facilitated and promoted by such a situation.

SPECIMENS COLLECTED

320, f. adult, 9 June 1966, St. Mathias

321, m. adult, 9 June 1966, St. Mathias

322, downy young (3-4 days), 9 June 1966, St. Mathias

Spotted Sandpiper Actitis macularis (Linnaeus)

PRESENT STATUS

Common summer resident. Habitat destruction is certainly responsible for the recent slight decrease in the numbers of this sandpiper as a nesting bird in the Monteregian Hills region. It is known to nest throughout the study area, even within the city limits of Montreal (P.Q.S.P.B., 1935-1964). The writer has found it nesting on Mont St. Hilaire and Mont Rouge, (author's notes 1965-1966). It is apparently an abundant breeder on the undisturbed small islands of the St. Lawrence River in the vicinity of Montreal; some fifty pairs have been found

nesting on two such small islands (Terrill, 1951:92) in 1950.

Abundant transient. Although the Spotted Sandpiper is seldom seen in flocks like the other of its kind, it is an abundant transient in the Monteregian Hills area. It was noted from 20 April (Terrill, 1951:92; P.Q.S.P.B., 1963:13) to 15 October (Terrill, 1951:92; P.Q.S.P.B., 1955:10).

FORMER STATUS

Hall (1862:53), probably after incorrect information, lists the Spotted Sandpiper as a "common migratory" species; it appears that he ignored that the species was nesting in the Montreal area. On the other hand, Wintle (1882:117; 1896:44-45) mentions it as an "abundant summer resident", and gives a good account of the numbers of individuals seen in the Montreal area. Terrill (1911:57; 1951:92) gives quantitative information on some islands of the Montreal district: on Ile Ronde, he found 13 nests on 26 May 1896, and 25 on 31 May 1898; he has estimated the breeding population of that island to over 100 pairs in 1898. This species has undoubtedly been reduced in numbers since the turn of the century as most of the localities mentioned by Wintle and Terrill have been modified and reclaimed for human use, such as Ile Ronde which has recently been transformed for Expo 67. This species has however remained fairly stable as a breeding bird in the Monteregian Hills region because it appears that it can readily adapt to a great variety of situations, such as river banks (shores of St. Lawrence and Richelieu rivers), sand and gravel pits (throughout the area), wet fields and streams (throughout the area), ditches along railway tracks, and shores of lakes and ponds

(Mont St. Hilaire, Mont Rouge, Mont St. Bruno; perhaps Mont Yamaska and Mont Shefford).

SPECIMEN EXAMINED

377, f. adult, 18 June 1966, Mont St. Hilaire

Solitary Sandpiper Tringa solitaria solitaria Wilson

PRESENT STATUS

Uncommon transient. The Solitary Sandpiper is listed by Terrill (1951:92) as a "transient, fairly common in some years, rather scarce in others." It appears that, during the last 15 years, this species has become regularly an uncommon migrant, both in spring and fall (P.Q.S.P.B., 1952-1964; author's observations, 1964-1966), although it may have been reported more frequently, undoubtedly owing to the greater number of observers. In spring it was observed from 30 April (P.Q.S.P.B., 1963:13) to 28 May (P.Q.S.P.B., 1956:12); the fall migration appears to start exceptionnally early some years, 4 July (P.Q.S.P.B., 1953:11) and to last as late as 23 October (Terrill, 1951:92).

FORMER STATUS

Hall (1862:52) lists the present species as "common" during migrations; his information, as in many cases, appears to be poorly substantiated. Wintle, (1896:43-44) lists it as a "scarce transient visitant". It appears therefore that the status of the Solitary Sandpiper has changed little in the area since the turn of the present century.

SPECIMEN EXAMINED

R 1274, f. adult, 15 August 1920, Brosseau Junction.

Willet

Catoptrophorus semipalmatus (Gmelin)

Rare transient. Well-substantiated records obtained in the Montreal area during the last 10 years establish the presence of this species in the Monteregian Hills region: St. Helens Island, one, 31 May 1958 (P.Q.S.P.B., 1958:25) and, one, 31 July 1960 (P.Q.S.P.B., 1960:21); Ile Perrot, two, 18 August 1962 (P.Q.S.P.B., 1962:25); Laprairie, one, 7 May 1961 (P.Q.S.P.B., 1961:24; Bull. ornith., 1961, 6 (3) :7).

Greater Yellowlegs

Totanus melanoleucus (Gmelin)PRESENT STATUS

Uncommon transient. The Greater Yellowlegs is never seen in the Monteregian Hills region in great numbers. Small flocks, or more frequently single birds or pairs, can be observed along the muddy shores of streams and in flooded fields in spring and fall; the spring records are however much less numerous than the fall. In the spring, it was recorded from 19 April (P.Q.S.P.B., 1958:14) to 17 June (Terrill, 1951:93); the fall migration is known to last from 25 July (Terrill, 1951:93) to 20 November (Terrill, 1951:93). The migratory population of this Yellowlegs has apparently remained stable in the Monteregian Hills region during recent years (P.Q.S.P.B., 1935-1964; author's observations 1964-1966).

FORMER STATUS

Hall (1862:53) lists it as a "common" migrant. Wintle (1882:117) remarks that it is "rare in spring", and that the "young" are "common in autumn"; later, (1896:43) he lists it as a "common transient visitant", giving no idea of the actual numbers observed

in the area. Apparently, the status of this migrant has changed only slightly in the Monterey Hills region since the turn of the century.

SPECIMEN EXAMINED

R 1119, f. adult, 14 October 1917, St. Antoine (=St. Antoine-sur-Richelieu).

Lesser Yellowlegs Totanus flavipes (Gmelin)

PRESENT STATUS

Common transient. The Lesser Yellowlegs has become less numerous in the Monterey Hills region during the last 20 years, probably because most of its favorite habitats have been destroyed. This Yellowlegs is primarily a fall migrant, since it has been reported only on a few occasions in spring from 1 May (P.Q.S.P.B., 1960:12) to 3 June (Terrill, 1951:93); in the fall it is known to occur in the area from 8 July (P.Q.S.P.B., 1950:15) to 4 November (P.Q.S.P.B., 1961:13).

FORMER STATUS

Hall (1862:53) lists this species, as he does for several other shorebirds, as "common migratory" in the Montreal area. Wintle (1862:117) mentions that it is a spring and autumn migrant; later, he (1896:43) considers it as a "scarce transient visitant". Although Terrill (1951:93) has pointed out "what a remarkable change since his time", commenting on Wintle's statement, the writer thinks that the Lesser Yellowlegs was probably overlooked by earlier writers

that relied almost entirely on specimens for their studies on birds. Intensive field observation at that time would certainly have revealed a different situation. Therefore, the author believes that the status of the Lesser Yellowlegs has changed only slightly since the turn of the century.

SPECIMEN EXAMINED

R 1059, m. adult, 1 September 1920, Longueuil.

Knot Calidris canutus (Linnaeus)

PRESENT STATUS

Rare transient. Few observations of this species have been recorded in spring: Terrill (1951:93) lists only two spring records. Since, only an additional one has been obtained (P.Q.S.P.B., 1951:27). These spring observations were made between 24 May (Terrill, 1951:93) and 2 June (P.Q.S.P.B., 1951:93). In the fall, the Knot is more numerous in the Montereian Hills region, although it has never been observed in flocks exceeding five individuals. Then it occurs in the area from 15 August to 21 October (Terrill, 1951:93).

FORMER STATUS

Hall (1862:52), probably misinformed, lists the Knot as a "common migratory species". On the other hand, Wintle (1896:39) states that it is a "scarce and irregular transient visitant", which is rare in spring. It appears therefore that the status of the Knot has changed little in the Montereian Hills region, although it is certainly slightly less numerous at the present than it was

formerly, owing to intensive habitat destruction.

Purple Sandpiper Erolia maritima (Brunnich)

Rare transient. This Atlantic coast migrant has recently been reported in the area on a few occasions, both in spring and fall; Heron Island, two, 1 November 1952 (P.Q.S.P.B., 1952:22); St. Helen's Island, three, 18 October 1953 (P.Q.S.P.B., 1953:20); Laprairie, one, 7 May 1961 (P.Q.S.P.B., 1961:24). Terrill (1951:94) mentions two specimens shot at Cartierville, 9 October 1921, and Wintle (1896:39) considers it a "scarce transient visitant", adding however that some specimens had been collected in the area, particularly on Nun's Island.

Pectoral Sandpiper Erolia melanotos (Vieillot)

PRESENT STATUS

Common fall migrant, rare spring migrant. The Pectoral Sandpiper was recorded in small numbers in spring from 18 May (Terrill, 1951:94) to 7 June (P.Q.S.P.B., 1951:14). It appears to have diminished in numbers as a fall migrant during the last few years (P.Q.S.P.B., 1950-1964), although it has been regularly reported from various localities in the Montreal area. During the fall migration it was observed from 18 July (Terrill, 1951:94) to 15 November (P.Q.S.P.B., 1951:14). Its recent decline is probably the result of intensive habitat destruction, as no general decline has been reported for this species.

FORMER STATUS

Although Hall (1862:52) lists the Pectoral Sandpiper as a "scarce"

migrant in the Montreal area, Wintle (1896:40) considers it a "common transient visitant"; he adds that it "is plentiful here during the autumn till about the middle of October". He mentions that it does "not appear here in the spring of the year". There is no doubt that this Sandpiper is less numerous as a migrant throughout the Monteregian Hills region than it formerly was. Habitat destruction, and particularly over-hunting, at least until 1916, account for this situation.

SPECIMEN EXAMINED

R 1095, m. adult, 1 September 1920, Longueuil.

White-rumped Sandpiper Erolia fuscicollis (Vieillot)

PRESENT STATUS

Uncommon fall migrant; rare spring migrant. A few spring observations were recorded in the Montreal area, from 7 May (P.Q.S.P.B., 1961:24) to 5 June (Terrill, 1951:94). In the fall, it is considerably more numerous, and sometimes common; then it can be observed from 11 August (P.Q.S.P.B., 1950:15; Terrill, 1951:94) to 22 November (Terrill, 1951:94). This sandpiper appears to have become considerably less numerous in the area during the last twenty-five years, although no such decline is known to have occurred generally in this species. Habitat destruction undoubtedly accounts for this situation.

FORMER STATUS

Wintle (1896:40) lists the present species as a "common transient visitant". There is no doubt that the White-rumped Sandpiper was considerably more numerous before the turn of the century as a migrant in the Montreal area. Its decline appears to have been

gradual as only a few individuals are recorded in the fall at the present.

Baird's Sandpiper Erolia bairdii (Coues)

Rare fall migrant. This western species has always been a rare transient in the Montreal area, a few being observed however almost every fall. Wintle (1896:41) lists it as a "rare transient visitant". It was recorded from 15 August (Terrill, 1951:94) to 10 November (P.Q.S.P.B., 1950:30; Terrill, 1951:94). There is a single published spring record of a bird seen on St. Helen's Island, on 27 May 1959 (P.Q.S.P.B., 1959:21).

Least Sandpiper Erolia minutilla (Vieillot)

PRESENT STATUS

Abundant transient. Although this sandpiper can be observed commonly in the Monteregian Hills region during the fall migration, it is considerably less numerous in spring. It was observed from 3 May (P.Q.S.P.B., 1963:14) to 10 June (P.Q.S.P.B., 1950:15); an individual, observed at Laprairie on 30 June 1953 (P.Q.S.P.B., 1953:20), was probably injured or sterile. The fall migrants were recorded from 4 July (P.Q.S.P.B., 1951:14; 1952:10) to 5 November (Terrill, 1951:95). Although this sandpiper is somewhat less numerous than it was some years ago, it has remained fairly stable as an abundant migrant in both spring and fall; the slight decline may be attributed to habitat destruction.

FORMER STATUS

Wintle (1882:117; 1896:41) list the Least Sandpiper as a "common transient visitant" and states that it is "plentiful along our river shores during the months of September and October in flocks, but it is scarce in the spring of the year". Although the present species is still fairly numerous as a migrant in the Monterey Hills region, it was undoubtedly much more numerous in the past; habitat destruction and over-hunting certainly account for this decrease in the area.

Dunlin

Erolia alpina pacifica (Coues)PRESENT STATUS

Uncommon transient. The Dunlin is never numerous in the Monterey Hills region, particularly in spring when it is observed in very small numbers. In the fall, some large flocks of 75-100 birds, sometimes up to 200, have been recorded (P.Q.S.P.B., 1950-1964; Terrill, 1951:95-96). The spring movement was recorded from 7 May (P.Q.S.P.B., 1961:13) to 15 June (P.Q.S.P.B., 1950:15; Terrill, 1951:95). In the fall, the species was observed from 29 July (Terrill, 1951:95) to 30 November (P.Q.S.P.B., 1963:14). Although this sandpiper is an irregular fall migrant in the area, its numbers do not appear to have diminished in recent years.

FORMER STATUS

Apparently the Dunlin was formerly a common fall migrant and rare in spring (Wintle, 1896:41-42; Hall, 1862:52). It therefore appears

that the numbers of this bird have diminished slightly since the turn of the century.

SPECIMENS EXAMINED

R 1182, m. adult, 28 October 1917, St. Antoine (=St. Antoine sur Richelieu)

R 1183, m. adult, 22 October 1933, St. Lambert

Short-billed Dowitcher Limnodromus griseus (Gmelin)

PRESENT STATUS

Rare transient. Spring records were obtained in recent years from 14 May (P.Q.S.P.B., 1963:14) to 27 June (P.Q.S.P.B., 1961:13), although the species is quite scarce at that time of the year; Terrill (1951:96) was not aware of any spring record for the Montreal area. In the fall, from 6 August (P.Q.S.P.B., 1963:14) to 27 October (P.Q.S.P.B., 1958:12), the species is slightly more numerous, although it has never been recorded in flocks exceeding ten birds (Terrill, 1951:96; P.Q.S.P.B., 1950-1964).

FORMER STATUS

The Short-billed Dowitcher was apparently never numerous in the Montreal area, according to Hall (1862:52) and Wintle (1882:117; 1896:39), although it was seemingly more frequent on the Richelieu River than on the St. Lawrence River. The author does not know of any recent observation outside the Hochelaga Archipelago and vicinity, and Hudson (P.Q.S.P.B., 1962:25).

Long-billed Dowitcher Limnodromus scolopaceus (Say)

Hypothetical. This species was apparently observed at Laprairie

when one individual was seen on 12 September 1958 (P.Q.S.P.B., 1958:29). In view of the difficulty of identifying this western species in the field, the writer does not accept the record quoted above.

Stilt Sandpiper Micropalama himantopus (Bonaparte)

Casual transient. This western species was observed in the Monterey Hills region on a few occasions in recent years: St. Helen's Island (2) 8 September, (1) 12 September 1953 (P.Q.S.P.B., 1953:20); Laprairie (up to 6) from 25 August to 16 September 1958 (P.Q.S.P.B., 1958:27); Oka (1) 12 September 1964 (P.Q.S.P.B., 1964:23).

Semipalmated Sandpiper Ereunetes pusillus (Linnaeus)

PRESENT STATUS

Abundant fall migrant; uncommon spring migrant. The Semipalmated Sandpiper is the most numerous migrating shore bird of the Monterey Hills region in fall; its numbers appear to have considerably decreased if one compares its numbers in recent years (P.Q.S.P.B., 1950-1964; author's observations) with that given by Terrill (1951:96). Habitat destruction is undoubtedly responsible for this situation to a large extent, as there appears that no general decline has occurred in this species during the last thirty years. It was recorded in fall from 2 July (P.Q.S.P.B., 1961:13) to 3 November (P.Q.S.P.B., 1962:16). In spring, this sandpiper is seen only in small numbers from 6 May (P.Q.S.P.B., 1963:14)

to 15 June (Terrill, 1951:96); however a flock of about 200 individuals was reported from Nun's Island on 7 and 8 June 1951 (P.Q.S.P.B., 1951:28).

FORMER STATUS

Although Hall (1862:52) and Wintle (1896:42) list the Semipalmated Sandpiper as a "common" transient species, it was undoubtedly more numerous at that time than it is at the present as the statements quoted above were mostly made after the number of specimens shot, rather than after the number of individuals observed. This species has certainly diminished in numbers since the turn of the century through habitat destruction and over-shooting (i.e. until 1916).

SPECIMENS EXAMINED

R 1157, f. adult, 14 September 1919, Laprairie
R 1159, f. adult, 7 September 1919, Longueuil.

Western Sandpiper Ereunetes mauri Cabanis

Hypothetical. Although this species was apparently observed in the Montreal area: Laprairie, one, 23 August 1958 (P.Q.S.P.B., 1958:27), and Lachine, one, 18 September 1964 (P.Q.S.P.B., 1964:23), the writer does not accept these records, due to the fact that the present species is extremely difficult to identify in the field, and that no specimen has so far been collected in the province of Quebec.

Buff-breasted Sandpiper Tryngites subruficollis (Vieillot)

Hypothetical. This species is listed by Hall (1862:52) and Wintle (1896:44) as a rare migrant in the Montreal area. It does not appear to have been recorded otherwise in the Monteregian Hills region, although it has been observed and collected at Lake St. Peter (Quebec Provincial Museum Collection).

Marbled Godwit Limosa fedoa (Linnaeus)

Casual transient. Hall (1862:52) and Wintle (1896:42) consider this species a "rare" migrant in the Montreal area. Wintle (op. cit.) provides a record of a specimen shot at Lake St. Peter. The species has been observed as follows in recent years: Laprairie, one, 15 May 1932; and, Chambly, one, 24 July 1949 (Terrill, 1951:97); no other records are apparently available for the Monteregian Hills region.

Hudsonian Godwit Limosa haemastica (Linnaeus)

Casual transient. According to Hall (1862:52) and Wintle (1896:42) this species was a "rare" migrant in the Montreal area. Wintle (1896:43) lists a specimen shot at Laprairie, 2 September 1890. Terrill (1951:97) gives a few additional records: Montreal (1) 4 November 1917; Laprairie (7) 8 October 1933, (2) 8 October 1943, (1) 1 October 1949; Nun's Island (1) 29 August 1943, (1) 27 August 1944; Ile Perrot (1) 15 September 1964 (Bull. ornith., 1965, 10 (1):5).

SPECIMEN EXAMINED

R 1327, f. juvenile, 4 November 1917, near Montreal.

Sanderling Crocethia alba (Pallas)

PRESENT STATUS

Uncommon fall migrant; rare spring migrant. Small numbers of Sanderlings are reported every fall from 1 August (P.Q.S.P.B., 1960:14) to 18 November (P.Q.S.P.B., 1950:15; Terrill, 1951:97), in the Monteregian Hills area. Only a few individuals were recorded in spring from 1 May (P.Q.S.P.B., 1960:14) to 4 June (P.Q.S.P.B., 1961:13).

FORMER STATUS

According to Hall (1862:52) and Wintle (1896:42) the Sanderling was a "common" migrant in the Montreal area; Wintle (1896:42) mentions that he has observed it in the spring at Laprairie. This species has apparently diminished considerably in numbers since the turn of the century, although it is difficult to evaluate the statements of Hall and Wintle.

SPECIMENS EXAMINED

R 1093, m. adult, 28 October 1917, St. Antoine (=St. Antoine sur Richelieu)

R 1329, m. adult, 28 October 1933, St. Lambert

PHALAROPODIDAE

Red Phalarope Phalaropus fulicarius (Linnaeus)

Casual transient. Wintle (1896:35) lists this species as a "rare transient visitant", and Terrill (1951:97) gives five fall records, which constitute the only known cases of occurrence of the species in the Montereian Hills region: Longue Pointe, one specimen, 7 October 1916; Valleyfield, one specimen, 23 September 1917; Lake St. Francis, one specimen, 7 October 1917; Brosseau, one specimen, 2 December 1917. There appears to be no other recent records. There was apparently an inland movement of these east coast migrants in 1917 although only three specimens have been reported for the region; a specimen has also been taken at Disraeli in 1917 (Taverner, 1927:221).

SPECIMEN EXAMINED

R 1342, m. immature, 2 December 1917, Brosseau.

Wilson's Phalarope Steganopus tricolor Vieillot

Casual transient. This western phalarope was recently recorded in spring and fall on a few occasions in the Montereian Hills region: Laprairie, up to 3, between 1 and 7 September 1958 (P.Q.S.P.B., 1958:27); one female, 23 May 1959 (P.Q.S.P.B., 1959:22); Bull. ornith., 1959, 4 (3):7 two, 22 May 1962 (P.Q.S.P.B., 1962:25). St. Helen's Island, two, 30 September 1961 (P.Q.S.P.B., 1961:24). Montreal, one 23, and 28 September, 1 October 1961 (Bull. ornith., 1961, 6 (1):6); two, 30 September 1961 (Bull. ornith., 1962, 7 (1):3). Although no specimen has been collected yet in the region, there is no reason not to accept these records. The author has

examined a specimen, in the Quebec Provincial Museum, which was collected at Lake St. Peter on 19 August 1952.

Northern Phalarope Lobipes lobatus (Linnaeus)

Uncommon fall migrant. This phalarope was reported on several occasions in small numbers in the Monteregian Hills region from the following places: Hay Island (Lake of Two Mountains), Verdun, St. Helen's Island, Longueuil, Laprairie, Oka and Montreal (P.Q.S.P.B., 1935-1964; Terrill, 1951:98; Bull. Ornith., 1960-1966). It was observed from 6 August to 27 October (Terrill, 1951:98). This species was seen on two occasions in the spring of 1961: St. Helen's Island (1) 25 May (P.Q.S.P.B., 1961:24; Bull. ornith., 1961, 6 (3):8); Lake of Two Mountains (4) 27 May 1961 (P.Q.S.P.B., 1961:24). The migratory population of this species appears to have remained relatively stable since the turn of the century. At that time, this phalarope did not appear to be more numerous than it is at the present, according to Wintle (1896:35) who lists it as a "rare transient visitant".

STERCORARIIDAE

Pomarine Jaeger Stercorarius pomarinus (Temminck)

Casual transient. An immature of this northern species was found dead at St. Lambert on 26 October 1930 (Terrill, 1931:142); this constitutes the only record of the species in the Monteregian Hills region.

Parasitic Jaeger

Stercorarius parasiticus (Linnaeus)

Hypothetical. An immature of this species was apparently observed at Côte Ste. Catherine on 16 September 1963 (P.Q.S.P.B., 1963:25). Owing to the difficulty of identifying immature jaegers in the field, the present record is considered here as hypothetical.

LARIDAE

Glaucous Gull

Larus hyperboreus Gunnerus

Rare irregular winter resident. According to Hall (1862:53), ~~who~~ was certainly mistaken, the present species was a "common" migrant. In Caulfield's list (1890:14), it is mentioned as "visiting the Lachine Rapids in winter". Wintle (1896:5) lists it as a "scarce transient visitant". In recent years, the Glaucous Gull was recorded in small numbers from 24 October (P.Q.S.P.B., 1952:23) to 2 May (P.Q.S.P.B., 1943:19) almost every winter. The observations were reported from the following localities: Côte Ste. Catherine, Montreal, St. Helen's Island, Nun's Island, Verdun, Dorval (P.Q.S.P.B., 1935-1964; author's observations 1964-1967).

Iceland Gull

Larus glaucoides Meyer

Rare irregular winter resident. The Iceland Gull has not been mentioned by Hall nor Wintle, and was apparently unknown to them as occurring in the Montreal area. In recent years it was observed from 5 October to 5 April (P.Q.S.P.B., 1958:28) at irregular intervals, and in smaller numbers than Larus hyperboreus.

Great Black-backed Gull Larus marinus LinnaeusPRESENT STATUS

Uncommon permanent resident. Until the late 1930's this gull was considered a rare transient in the Montreal area (only few records have been obtained outside the St. Lawrence River) according to Terrill (1916:15) and various observers (P.Q.S.P.B., 1935-1942). From about 1940 it has progressively become more numerous in the area as a transient, a winter resident, and occasionally a summer resident (P.Q.S.P.B., 1940-1964; author's observations 1964-1967). However, it is by no means numerous in summer and winter, when only a few individuals can be seen. In spring and particularly in fall, groups of 300-400 are not unusual (author's observations, fall 1964, 1965, 1966). A few have been seen by the writer on the Richelieu River in late summer and early fall (1964, 1965, 1966). There is no apparent explanation for the sudden increase of the species in this section of the St. Lawrence River. The writer thinks that the general increase of this species in recent years (various authors, and personal observations) on the Atlantic coast and in the Gulf of St. Lawrence undoubtedly accounts for the present situation.

FORMER STATUS

Hall (1862) did not list the present species; however he designates a species of gull under Larus fuscus (=Silvery Gull) (Hall, 1862:53) which is considered a "scarce" migrant, Larus marinus in this instance is probably referred to as Larus fuscus. Wintle (1882:117;

1896:5) mentions it in both of his works as a "rare" transient. Caulfield (1890:144) states that it is found around the Lachine Rapids in winter. Therefore, there appears to be a marked increase in the numbers of this species as a non-breeding bird since the turn of the century, and particularly since the early 1940's.

SPECIMEN EXAMINED

R 3700, m. adult, 16 November 1966, Verdun.

Herring Gull

Larus argentatus

Pontoppidan

PRESENT STATUS

Abundant transient. During the spring and fall migrations the Herring Gull is an abundant bird throughout the Monteregian Hills region for a short period; the dates vary each year and the writer has been unable to determine exactly when this annual event takes place; apparently, in spring it occurs in mid-April, and in late September or early October in the fall (P.Q.S.P.B., 1935-1964; author's observations 1964-1967).

Rare summer and winter resident. Small numbers of Herring Gulls have been reported fairly regularly (P.Q.S.P.B., 1935-1964; author's observations 1964-1966) in summer on the St. Lawrence and Richelieu rivers, but only one nesting record was reported to this date in the region: Moffat Island, one nest, 15 June 1961 (P.Q.S.P.B., 1961:24). Some fall migrants linger quite late in winter, particularly when freeze-up is late, and only a few spend the rest of the winter on the open waters of the area, although, the species has not been reported to do so regularly (P.Q.S.P.B., 1935-1964; author's observations, 1964-1967; Terrill, 1913:43).

FORMER STATUS

According to Hall (1862:53) the Herring Gull was a "scarce" migrant in the Montreal area at his time. Wintle (1882:117) mentions that the "young" occur in spring. In his later work (1896:5), he lists it as a "common transient visitant" and adds that a few may breed here. He mentions Oka (Lake of Two Mountains) and Lake St. Louis as possible breeding places. From the former account, it appears that the status of the Herring Gull has changed little in the area, except perhaps as a breeding bird, and that it may have been more numerous before the turn of the century as a breeding bird and that habitat destruction may be responsible for the present situation.

Ring-billed Gull Larus delawarensis Ord.

PRESENT STATUS

Abundant local summer resident and transient. The Ring-billed Gull was recorded in the Monteregian Hills region from 14 March (P.Q.S.P.B., 1951:14) to 29 December (P.Q.S.P.B., 1952:11). Although it is at the present an abundant breeder on the islets of the Lachine Rapids (Target Island, 150 nests, 12 June 1965; Cable Island, 500 nests, June 1965, fide C.D. Snow, P.Q.S.P.B., Nest Record Cards) and until the management of Moffat Island for Expo 1967 (several thousands nesting, P.Q.S.P.B., 1953-1963) this species was not considered as a breeding bird in the area until 1953 (P.Q.S.P.B., 1953:21) when the colony on Moffat Island was discovered. The presence of this species as a nesting bird has undoubtedly escaped the attention of the observers due to the

difficulty of observations and of reaching the colony. The writer believes that the species has probably been nesting in the area for many years, perhaps since the early 1900's. It is remarkable indeed to see how this species, after the destruction of its colony on Moffat Island in 1963 has moved to the other small islands of the Lachine Rapids and has used them for nesting. It was not known to do so previously. This indicates how a species can adapt and use a marginal habitat when under pressure. The numbers of breeding birds have slightly been reduced since, owing to the fact that the breeding grounds are limited. About 1250 birds have been counted by the writer on the islets of the Lachine Rapids on 2 April and 14 May 1967. It was observed regularly by the writer in small numbers on Lac Hertel (Mont St. Hilaire) during the summer of 1965 and 1966. The Ring-billed Gull has been recorded many times in winter (P.Q.S.P.B., 1950:32; author's observations 1964-1967) but is not known to winter regularly in the area.

FORMER STATUS

This gull is not found on Hall's (1862) list; Caulfield (1890:15) mentions that a few visit the Lachine Rapids in winter. Wintle (1896:5-6) lists it as a "scarce" migrant, and, as he points out, most observations were made on the basis of collected specimens, which would not give a true estimate of the population. However, it appears that this gull has become more numerous since the turn of the century. It is suspected that it may have been breeding in smaller numbers then and that it has been unrecorded because the islands on which it breeds in the Lachine Rapids are difficult of

access, and that little field observation was made outside the spring and fall migrations.

Mew Gull Larus canus Linnaeus

Hypothetical. This species is listed in Hall (1862:53) as a "common" migrant. Hall is certainly mistaken, and Larus fuscus of his work probably refers to Larus delawarensis which does not appear on his list.

Laughing Gull Larus atricilla Linnaeus

Casual transient. Caulfield (1890:144) lists a specimen collected at Lachine on 22 October 1885. Wintle (1896:6) mentions that it is a "rare transient visitant"; he states that an immature specimen was collected on Lake St. Louis on 24 October 1888. These appear to be the only records of the species obtained in the Monteregean Hills region until very recently. Single individuals were reported as follows on St. Helen's Island: 24 June 1950 (P.Q.S.P.B., 1950:32); 17 June 1952 (P.Q.S.P.B., 1952:23); 25 August 1963 (P.Q.S.P.B., 1963:25); there is no reason not to accept these sight records.

Bonaparte's Gull Larus philadelphia (Ord)

PRESENT STATUS

Uncommon transient. Small flocks of Bonaparte's Gulls have been recorded fairly regularly in spring and fall on the St. Lawrence River (P.Q.S.P.B., 1935-1964); This gull is not known to occur

elsewhere in the Monteregian Hills region. Spring observations were recorded from 30 April to 7 June (P.Q.S.P.B., 1958:28), and the fall, from 8 July to 12 November (P.Q.S.P.B., 1950:33). Terrill (1916:15) mentions a specimen seen in a taxidermist shop, taken near Montreal 28 October 1915. The largest flocks recorded in the region grouped not more than 30 birds (P.Q.S.P.B., 1954:19; author's observations).

FORMER STATUS

The Bonaparte's Gull was apparently a "common" migrant around the turn of the century, according to Wintle (1896:6). It is not mentioned in Hall's list (1862). Habitat destruction is undoubtedly responsible for the slight decrease of this species in the area during migrations.

Black-legged Kittawake Rissa tridactyla (Linnaeus)

Casual transient. Hall (1862:53), probably mistaken, lists this gull as a "common" migrant in the Montreal area. Caulfield (1890:144) believes that it occurs at the Lachine Rapids in winter, and Wintle (1896:4) states that it is a "scarce transient visitant"; he reports on a specimen shot at Lake St. Peter in October 1891. There appears to be no recent records for this species in the Monteregian Hills region.

Common Tern

Sterna hirundo LinnaeusPRESENT STATUS

Common local summer resident. The Common Tern has been known for many years to breed on many difficult of access islands in the St. Lawrence River. Nesting was reported from Laprairie (P.Q.S.P.B., 1936-1937:5); Ile Perrot, Ile Plate (P.Q.S.P.B., 1937-1938:6); Verdun (P.Q.S.P.B., 1934-1940:9); Moffat Island (P.Q.S.P.B., 1960:22; 1961:25); Target Island (fide C.D. Snow). Apparently, these various colonies count between 25 and 40 pairs of breeding birds.

Abundant migrant. During migrations, it is more numerous and can be observed regularly in small flocks (author's observations) from 20 April (P.Q.S.P.B., 1951:14) to 14 October (P.Q.S.P.B., 1961:14). It is slightly less numerous in the Montreal area since the destruction of Moffat Island as a nesting site in 1963; many birds have however been observed nesting on some islands where they were unknown to do so previously, such as Target Island (fide C.D. Snow).

FORMER STATUS

According to Hall (1862:53) the Common Tern was a "common" migrant in the Montreal area. Wintle (1896:7) lists it as a "scarce summer resident" on the basis that it breeds at Lake St. Peter. It was not known to breed on the islands of St. Lawrence River in the vicinity of Montreal although it was undoubtedly doing so before the turn of the century, and probably in greater numbers than at

the present. Its population has, according to the writer, diminished considerably in recent years as a result of habitat destruction.

Arctic Tern Sterna paradisaea Pontoppidan

Hypothetical. Although the Arctic Tern has been recorded by Hall (1862:53) as a "common" migrant in the Montreal area, it has apparently never been observed since. However, a few individuals may casually appear in the region during migrations, but owing to the difficulty of identification in the field these may have been recorded as Sterna hirundo. According to Wintle (1896:7-8) it is a "scarce" migrant; he mentions that some eggs, which were thought to be of this species, had been found on Nun's Island; this statement is undoubtedly incorrect as the eggs were probably those of Sterna hirundo.

Caspian Tern Hydroprogne caspia (Pallas)

Casual transient. This tern was recorded on a few occasions in the Montreal area in recent years: Lake of Two Mountains, off Oka (1) 2 June 1938 (P.Q.S.P.B., 1937-1938); Caughnawaga, (1) 3 May 1952, St. Helen's Island (2) 17 June 1952, Laprairie (1) 17 July 1952 (P.Q.S.P.B., 1952:24). Wintle (1896:7) lists it as a "rare" migrant, and mentions specimens taken at St. Lambert in 1890 and Contrecoeur in July 1891.

Black Tern

Chlidonias niger (Linnaeus)PRESENT STATUS

Uncommon local summer resident. The Black Tern was recorded in the Monteregian Hills region from 28 April (P.Q.S.P.B., 1962:16) to 7 September (P.Q.S.P.B., 1953:11), and its breeding has been established where suitable habitats are available: Lake St. Louis and Chateauguay, small colonies (P.Q.S.P.B., 1935-1936:4; 1936-1937:5); Ile Plate (near Beauharnois) small numbers nesting, 21 June 1938 (P.Q.S.P.B., 1937-1938:6); Nun's Island, 100-200 pairs nesting, 24 June and 6 July 1961 (P.Q.S.P.B., 1961:25), about 100 nesting birds, 5 and 8 June 1963 (P.Q.S.P.B., 1963:26), 5 nests, 18 June 1965 (P.Q.S.P.B., Nest Record Cards); Laprairie, small breeding colony, 31 May 1964 (Bull. ornith., 1964, 9 (4):3); Target Island (Lachine Rapids), 25-30 nests, summer of 1966 (fide C.D. Snow); Granby, 8-10 individuals, June and July 1965, 1966 (author's observations). Habitat destruction has certainly reduced considerably the numbers of this tern in the area in recent years, although little data are available on the real abundance of this species in the area since the turn of the century.

FORMER STATUS

According to Hall (1862:53) and Wintle (1896:8) the Black Tern was a "scarce" migrant in the Montreal area. Wintle (op. cit.) remarks it "may breed on the boggy marshes of our lakes", which it was undoubtedly doing, and probably in much greater numbers than it does at the present, although earlier writers had apparently

no indication to this effect. The author believes that it was then formerly more numerous than at the present and that its numbers have been gradually reduced as a result of habitat destruction.

ALCIDAE

Razorbill Alca torda Linnaeus

Casual transient. Wintle (1896:134) mentions four individuals, of which one was collected, seen off St. Lambert on 10 November 1893. Two other specimens taken on Lake St. Louis, 2 October 1955 and 11 November 1960, apparently constitute the only records obtained in recent years.

SPECIMENS EXAMINED

R 1148, f. immature, 2 October 1955, Lake St. Louis

R 1149, immature, 11 November 1960, Lake St. Louis (Dowker's Island)

Thick-billed Murre Uria lomvia (Linnaeus)

Rare transient. This species sometimes occurs in numbers in the fall on the St. Lawrence River in the Montreal area, and such occurrences are very irregular; Lake St. Louis (1) 13 November 1938 (P.Q.S.P.B., 1937-1938:6); Montreal area (hundreds over a wide area) from 10 to 31 December 1932, (85) 22 December 1943 (P.Q.S.P.B., 1943:20), (75) 5 December 1950 (P.Q.S.P.B., 1950:33), (1) 22 November 1951 (P.Q.S.P.B., 1951:29); St. Helen's Island (6) 18 December 1949 (P.Q.S.P.B., 1949:26), (75 alive, 10 dead) 29 November (P.Q.S.P.B., 1950:33), (15) 30 November 1952, (75)

10 December 1952, (over 200) 11 December 1952, and a few thereafter (P.Q.S.P.B., 1952:24); Rivière-des-Prairie and Chambly Basin (Richelieu River), a few sight records (P.Q.S.P.B., 1950:33). Wintle (1896:133-134) mentions it as a "scarce accidental visitant", and lists specimens from St. Johns collected in December 1892.

SPECIMENS EXAMINED

- R 1472, f. immature, 29 November 1950, Town of Mount Royal
- R 1473, m. adult, 28 November 1951, Montreal
- R 1476, adult, 18 December 1932, Montreal
- R 1477, m. immature, 27 November 1950, Verdun.

Dovekie Plautus alle (Linnaeus)

Casual wanderer. Wintle (1896:4) lists a specimen collected at Chambly Basin in winter, in the late 1880's. Two individuals were reported from St. Helen's Island, 29 November 1950, and some from Lake of Two Mountains in the fall on 1950 (P.Q.S.P.B., 1950:33). These apparently constitute the only records of the species in the Monteregian Hills region.

Black Guillemot Cepphus grylle (Linnaeus)

Casual straggler. Wintle (1896:133) mentions an immature specimen seen on the Montreal market, which was apparently shot at Lake St. Peter on 29 October 1892. There appears to be no other record of this species in the Monteregian Hills region.

Ancient Murrelet Synthliboramphus antiquus (Gmelin)

Accidental straggler. A specimen was collected at Montreal on 13 April 1913 (Dionne, 1913:145; Lewis, 1923:118-119), and became part of the ornithological collection of Laval University.

COLUMBIDAE

Rock Dove Columba livia Gmelin

Abundant permanent resident. This introduced species is numerous in the cities, towns, villages and about farmlands throughout the Monteregian Hills region. It is particularly abundant in the City of Montreal. These feral birds derive from birds that have escaped farms throughout the region.

Mourning Dove Zenaidura macroura carolinensis (Linnaeus)

PRESENT STATUS

Common summer resident. The Mourning Dove is apparently a species recently established as a breeding bird in the southern part of the province of Quebec. One fledgling collected by L. McI. Terrill, on 6 August 1922 at Lanoraie (a little outside the Monteregian Hills region) apparently constitutes the first breeding record of the species in Quebec (P.Q.S.P.B., 1941:15), although a pair, which was thought to be of Ectopistes migratorius, might have bred at Oka in 1913 (Dionne, 1914:1-2). Many summer observations suggest that it has become numerous since, particularly since the early 1940's (P.Q.S.P.B., 1935-1945) and that it occurs throughout the whole region at the present. Nesting evidence was obtained from

the following localities: St. Eustache (Deux Montagnes) (P.Q.S.P.B., 1941:15); Hudson (P.Q.S.P.B., 1942:18; 1949:27; 1959:29); Ste. Dorothee (Ile Jésus) (P.Q.S.P.B., 1951:29); Senneville (P.Q.S.P.B., 1944:20; 1952:24); Baie D'Urfé (P.Q.S.P.B., 1946:24); Mont St. Bruno (P.Q.S.P.B., 1956:21; 1958:29); Mont St. Hilaire, Mont Rouge, Mont Yamaska, Mont Shefford (author's observations 1965-1966); in suitable habitats in the St. Lawrence Lowlands to the foothill of the Sutton Mountains (author's observations, 1965 and 1966). Although a few individuals have been recorded in winter, this species is not known to winter ~~regularly~~ regularly (P.Q.S.P.B., 1935-1964). It has been observed in the area from 15 March (P.Q.S.P.B., 1955:10; 1957:13; 1962:16) to 18 November (P.Q.S.P.B., 1946:11).

FORMER STATUS

Hall (1862:52) lists the Mourning Dove as a "rare" migrant and mentions a specimen shot on Ile Jésus in 1831. According to Wintle (1896:52) this species is a "rare transient visitant" in the Montreal area, although he adds that "this dove is a casual visitant here", knowing only of the specimen mentioned by Hall, and of another shot on Ile Ronde in November 1890. This species has increased in numbers at a very high rate, considering its present numbers. Although its increase apparently coincides with the disappearance of the Passenger Pigeon, the writer thinks that the reason for the success of the Mourning Dove is of a different nature. Indeed, the vegetation pattern of the whole of Eastern North America has changed considerably at about the same time, and the Mourning Dove has apparently benefited from forest clearing and from the more abundant

second growth and open vegetation.

SPECIMENS EXAMINED

R 1523, juvenile, 6 August 1922, Lanoraie

299, m. adult, 7 June 1966, Mont St. Hilaire

TAXONOMY

The specimen examined has been assigned to carolinensis on the basis of its coloration and measurements.

Passenger Pigeon Ectopistes migratorius (Linnaeus)

Extinct. According to Hall (1862:52) the Passenger Pigeon was a "common" migrant in the Montreal area in the mid-1850's. In an editorial note, William Couper (1881:21) remarks that the "forest clearing along the base of the Laurentian mountains may partially cause the non-appearance of the Passenger Pigeon in large numbers of late years..... A locality near prolific beech trees is generally selected by the birds as a nesting-place". Wintle (1882:117) states that it is "not common" in spring and autumn. According to LeMoine (1883:231) there was apparently a "roost" near Chateaugay and "only a few were seen at Quebec in 1883". The existence of the Chateaugay breeding area is confirmed by Rintoul (1883:242-243) who adds that it persisted until 1868 and that 100 miles south of Chateaugay (i.e. in New York State) he knew of a place where this species was occupying a ten-square mile area; the same author mentions that the Passenger Pigeon was "plentiful at Terrebonne after hatching". Wintle (1896:51-52) lists it as a "scarce transient visitant", and adds that a few were seen in the area until 1891;

lastly he saw an individual on 4 June 1891 on Mount Royal. Although the information is sketchy there is no reason not to assume that the Passenger Pigeon was formerly an abundant summer resident in the Montereian Hills region, and that its early disappearance from the area may be related to forest destruction, along with the other factors which are responsible for the extinction of the species. Indeed, it appears that the Passenger Pigeon has disappeared from the Montereian Hills region as a breeding bird around the late 1860's, probably under intensive forest destruction, and that it was afterwards known only as an abundant transient which has vanished completely in less than 35 years over all its former range.

CUCULIDAE

Yellow-billed Cuckoo Coccyzus americanus (Linnaeus)

Rare summer resident. This cuckoo was apparently never numerous in the Montereian Hills region. Hall (1862:51) lists it as a "scarce" migrant and Wintle (1882:110) states that it is "very rare, only one specimen" having been collected. Later Wintle (1896:67) considers it as a "rare accidental visitant" on the basis that a few specimens were collected on the Island of Montreal. The Yellow-billed Cuckoo appears to have increased slightly in numbers since the turn of the century, and was recorded as nesting, at least once in the Montereian Hills region: Beaurepaire, one nest and 3 young, 20 June 1948 (P.Q.S.P.B., 1948:31). Early summer reports suggest nesting at the following places: Côte St. Michel (P.Q.S.P.B.,

1949:27); St. Lambert (P.Q.S.P.B., 1962:25); Côte St. Luc (P.Q.S.P.B., 1963:26). This species has apparently decreased considerably in numbers in the last few years as shown by the number of observations reported (P.Q.S.P.B., 1960-1964); during two summers (1965-1966) of field work the writer has not observed the species once in the region.

SPECIMEN EXAMINED

R 3356, adult, 26 September 1959, Baie d'Urfé

Black-billed Cuckoo Coccyzus erythrophthalmus (Wilson)

PRESENT STATUS

Uncommon summer resident. Although few nests have been reported, the Black-billed Cuckoo has been observed in many localities in the Monteregian Hills region, except during the last few years when only a few have been recorded. Nesting records were obtained as follows: Chambly, one nest and 2 eggs, 25 May 1946 (P.Q.S.P.B., 1946:24); Senneville, one nest, 2 young and 1 egg, 13 June 1948 (P.Q.S.P.B., 1948:21); Ste. Dorothée (Ile Jésus), one nest, 2 eggs and 2 young, 7 June 1950 (P.Q.S.P.B., 1950:34); Westmount, one nest and 3 young, 19 June 1950 (P.Q.S.P.B., 1950:34). Summer reports suggest breeding at the following places: Sabrevois, Oka, Rigaud, St. Armand and St. Hubert (P.Q.S.P.B., 1939-1964). The Black-billed Cuckoo was reported in the region from 8 May (P.Q.S.P.B., 1949:12) to 6 October (P.Q.S.P.B., 1949:27). During two summers of field work (1965-1966) the writer has not seen a single bird of this

species in the Monteregian Hills region, in spite of an intensive search for it.

FORMER STATUS

According to Hall (1862:51) this species was a "scarce" migrant in the Montreal area, although Wintle (1881:5; 1882:110; 1896:68-69) who is generally very dependable considers it a "common summer resident". In his latter work, Wintle (1896:68) states that this species bred commonly on Mount Royal, nests with eggs having been found from 4 June to 22 July, and the species having been observed from 21 May to 5 September. The Black-billed Cuckoo has undoubtedly become less numerous in the area since the turn of the century mostly from habitat destruction, and perhaps, as an after effect of pesticides, although no data are available to support the latter hypothesis.

SPECIMEN EXAMINED

R 1547, adult, July 1960, Beaconsfield.

TYTONIDAE

Barn Owl Tyto alba (Scopoli)

Rare permanent resident. The status of this species in the Monteregian Hills region is poorly known. A specimen was taken at l'Assomption in mid-November 1926 (Cayouette, 1947:631), and a pair was seen frequently at St. Hubert during the summer of 1961 (P.Q.S.P.B., 1961:26). It is likely that this secretive owl may be more numerous than it appears in the region. It is known to have bred at Berthierville in 1931 (Cayouette, 1947:631) which is about 50 miles northeast of the area.

STRIGIDAE

Screech Owl

Otus asio naevius (Gmelin)PRESENT STATUS

Uncommon permanent resident. This small owl is found in small numbers in the wooded parts of the Monteregian Hills region, and nesting records were obtained as follows: Montreal (Mount Royal), one adult and 4 young, 17 June 1951 (P.Q.S.P.B., 1951:29), and evidence of nesting for several other years (P.Q.S.P.B., 1954-1964); St. Lambert, adults and young, 25 June 1910 (Terrill, 1911:58); Chambly, two nests with 4 and 5 eggs each, 28 May and 3 June (year not given but probably 1927) (Terrill, 1931:169-174); Hudson Heights, one nest and 3 young, 17 June 1965 (P.Q.S.P.B., Nest Record Card). Summer observations suggest nesting at the following localities: Senneville, Pointe Claire (P.Q.S.P.B., 1950-1964), Mont St. Hilaire and Mont Yamaska (author's observations, 1965-1966). Recent forest destruction in the region may have reduced considerably the population of this species, which apparently was never numerous.

FORMER STATUS

Hall (1862:58) lists this species as a scarce resident. Wintle (1896:64), probably on the basis specimens collected in winter states that the Screech Owl is a "scarce winter resident". Although Wintle provides no detailed information on the status of this owl in the Montreal area, it was undoubtedly more numerous than it is at the present, its decline being caused primarily by forest clearing. The population of this species apparently remains fairly stable in spite of habitat destruction as it can adapt to live in city parks

and small woodlots in the vicinity of human activity.

SPECIMENS EXAMINED

R 572, f. adult, 1924, Chambly

R 3710, m. adult, March 1961, Mont St. Hilaire

TAXONOMY

The two specimens studied agree well in coloration and size with the descriptions of naevius, and have assigned to that sub-species.

Great Horned Owl Bubo virginianus virginianus (Gmelin)

PRESENT STATUS

Rare permanent resident. Habitat destruction is responsible almost entirely for the gradual but marked decline of this species throughout the Monteregian Hills region. Few breeding records were recorded in recent years: Chambly, one nest and 2 young, April 1936 (P.Q.S.P.B., 1935-1936:5), two nests (no other data provided) (Terrill, 1931:169-174); Côte St. Luc (Montreal Island, one nest with 2 large young, 14 April 1944 (P.Q.S.P.B., 1944:18); La Salle (Montreal Island, two adults and one young, 21 May 1950 (P.Q.S.P.B., 1950:34); Ste. Dorothée (Ile Jésus), one nest and 2 young, 27 April 1952 (P.Q.S.P.B., 1952:25); Mont St. Hilaire, one empty nest, two adults and 2 well fledged young, 21 April 1965 (author's observation). Early summer observations by the author in 1965 and 1966 suggest that it may also nest at St. Jean Baptiste, on Mont Yamaska and on Mont Rouge, where one or two individuals were recorded, on several occasions between 14 April and 17 June. This species is apparently more numerous in fall and winter when many observations are reported: this can be

explained by the fact that the food being less accessible, these birds have to hunt over greater distances or even "migrate" on short distances to find their prey. This also may explain why one or two individuals winter irregularly on Mount Royal (P.Q.S.P.B., 1935-1964), where it is not known to breed at the present.

FORMER STATUS

Hall (1862:50) lists the Great Horned Owl as a common resident. His statement is probably correct, considering that he wrote his paper in the late 1830's. Vennor (1860:429) mentions that it was common in the Montreal area in winter, around 1860. Thirty years later, Caulfield (1890:146) found it "not common around Montreal", but Wintle (1896:64-66) considered it a "common permanent resident" in 1896. This owl has apparently diminished considerably in numbers since the turn of the century; indiscriminate shooting and habitat destruction undoubtedly account for such a decline.

TAXONOMY

Although no specimens from the Monteregian Hills region have been examined, the population is assigned to virginianus on the basis of many specimens from surrounding areas, which belong to virginianus.

Snowy Owl Nyctea scandiaca (Linnaeus)

Irregular transient and winter resident. This cyclic species is sometimes found in good numbers in the St. Lawrence Lowland, where open spaces are dominant, but only very rarely on the Monteregian Hills which are more or less wooded. The species was observed

in the area from mid-October to mid-April (P.Q.S.P.B., 1935-1964; author's observations, 1964-1967). Its numbers are apparently stable in the region in peak years. D'Urban (1857:140), Hall (1862:50), Caulfield (1890:146) and Wintle (1896:66-67) list it as "common some years". This winter migrant has undoubtedly benefited from forest clearing in the region, and although large numbers are killed every "peak" year, their numbers appear to be stable from one migration to the next.

SPECIMENS EXAMINED

R 544, m. adult, 23 November 1934, Montreal (Notre-Dame-de-Grâce)
18, m. adult, 2 December 1964, Ste. Angèle

Hawk Owl Surnia ulula caparoch (Muller)

Rare transient and winter resident. The Hawk Owl was recorded on a few occasions only in the Monteregian Hills region: Montreal (Mount Royal) (1) 1 January 1940 (P.Q.S.P.B., 1939-1940:10), (1) 23 December 1945 (P.Q.S.P.B., 1945:20), (1) 6 and 7 November 1962 (P.Q.S.P.B., 1962:27); Dorval (1) 26 November 1945 (P.Q.S.P.B., 1945:20); Ile Bizard (1) in October 1956 (P.Q.S.P.B., 1956:21); Ile Perrot (1) 30 October, 4 November, 2 and 16 December 1962 (P.Q.S.P.B., 1962:27); Pointe Claire (1) 27 December 1962 (op. cit.).

The species has been observed on a few occasions since during the winter of 1964, 1965 and 1966 in the Montreal area, by several observers including the writer. According to previous writers (D'Urban, 1857:139; Vennor, 1860:428; Hall, 1862:50; Caulfield, 1890:146; Wintle, 1896:67) the Hawk Owl is generally "scarce" in the Montreal area, although it is "rather common some winters"

(Caulfield, 1890:146). The status of this species has apparently changed little since the turn of the century, although excessive shooting might have reduced slightly the numbers of this bird both in the Monteregian Hills region and over its breeding range.

SPECIMENS EXAMINED

R 573, adult, 29 October 1893, Green Island, Lake of Two Mountains

R 3709, m. adult, 27 December 1962, Pointe Claire

TAXONOMY

The specimens examined has been referred to caparoch, the North American subspecies (A.O.U. Check-list, 1957:280).

Barred Owl Strix varia varia Barton

Rare permanent resident, uncommon winter migrant. Spring and early summer records suggest nesting at the following places although direct evidence of breeding has not been recorded in the Monteregian Hills region; Oka (1) 2 May 1954 (P.Q.S.P.B., 1954:20), (1) 23 June 1963 (P.Q.S.P.B., 1963:27); Hudson (1) 25 May 1963 (P.Q.S.P.B., 1963:27); Mont St. Hilaire (1) 13 and 24 May 1961 (P.Q.S.P.B., 1961:28), (2) 16 May, (1) 29 May, (2) 3 June, (1) 7 June 1965, (1) 27 May, (1) 13 June 1966 (author's observations). In the fall and winter, this owl is recorded more often as many move into the few wood stands left in the vicinity of Montreal, probably in search of food; it has been reported from Montreal, Hampstead, St. Helen's Island, Nun's Island, La Salle and Pointe Claire throughout winter in recent years (P.Q.S.P.B., 1935-1964; author's observations

1964-1967). The Barred Owl was apparently more numerous in the area, and forest destruction has doubtless reduced its population to a large extent since the turn of the century. D'Urban (1857:141), Vennor (1860:428) and Caulfield (1890:145) list it in their works, but Hall (1862:50) and Wintle (1896:62-63) mention that it was a "common permanent resident". Wintle (1896:62) states that he saw one on 29 July 1890 in the woods of Mont St. Hilaire, which suggests nesting there at that time.

SPECIMEN EXAMINED

R 1549, adult, 21 March 1896, Verdun

TAXONOMY

The northeastern subspecies is varia (A.O.U. Check-list, 1957:284).

Great Gray Owl Strix nebulosa nebulosa Forster

Rare winter migrant. Earlier writers (Wintle, 1896:63; Caulfield, 1890:145), except Hall (1862:50), considered this owl a "scarce winter visitant", on the basis of a few specimens shot in the Montreal region. There appears that an unusually large number of these birds were shot during the winter 1889-1890 in the Montreal area; specimens also came from Valleyfield during that winter (Caulfield, 1890:145). In recent years, a few individuals have been irregularly observed in winter in the Monteregian Hills region, particularly on the Island of Montreal (P.Q.S.P.B., 1937-1964; author's observations 1964-1967).

SPECIMENS EXAMINED

Two specimens in the Redpath Museum are labelled as having been

collected on the Island of Montreal, the former in 1889, the latter in 1890. They were undoubtedly collected during the "invasion" referred to by Caulfield (1890:145).

TAXONOMY

The subspecies for North America is nebulosa, to which the specimens examined have been referred.

Long-eared Owl Asio otus wilsonianus (Lesson)

PRESENT STATUS

Uncommon permanent resident. Several nesting records from Ile Jésus (Ste. Dorothée) (P.Q.S.P.B., 1947:19; 1950:35; 1951:30) and Chambly (Terrill, 1931:169-174) establish the breeding status of the species in the Monteregian Hills region. Although the species has not been reported elsewhere, owing to its secretive habits, it is undoubtedly more numerous as a nesting bird than suspected. In fall and winter, it has been reported more often particularly in the Montreal area (P.Q.S.P.B., 1947-1964), although in small numbers.

FORMER STATUS

Hall (1862:50) lists the present species as a "common" migrant, while all the other authors (Vennor, 1860:428; Caulfield, 1890:145 and Wintle, 1896:61-62) consider it as a "scarce" migrant. Wintle (1896:61), who lists the species as a "scarce transient visitant", reports on a nest found at Hochelaga (=Montreal), which contained

four eggs. This is apparently the first breeding record of the species for the area. Although it appears that the species has become more numerous since the turn of the century, it is probable that earlier observers have overlooked this most secretive owl in summer in the Montreal region. All their records, except the nesting record provided by Wintle, show that the species was observed almost exclusively in fall when the northern populations move south.

SPECIMENS EXAMINED

Several mounted specimens in the Redpath Museum are labelled as having been taken in the Montreal region.

TAXONOMY

The specimens examined have been referred to wilsonianus on the basis of their dark coloration.

Short-eared Owl Asio flammeus flammeus (Pontoppidan)

PRESENT STATUS

Rare permanent resident. Although the present species has been reported only a few times in summer its breeding was established at St. Lambert (P.Q.S.P.B., 1935-1936:5; 1938-1939:12) and Chambly (P.Q.S.P.B., 1945:21); it is apparently not known to nest elsewhere in the Monteregian Hills region. In fall, winter, and early spring it is well distributed in the open habitats of the area, and sometimes flocks, as many as 12 individuals having been observed in a flock at St. Barthélemy, 10 October 1959 (P.Q.S.P.B., 1959:24). This owl appears to have decreased sensibly throughout

the region at all times of the year in recent years (P.Q.S.P.B., 1935-1964).

FORMER STATUS

Vennor (1860:420) and Caulfield (1890:145) list a few specimens taken in early winter in the Montreal area. Hall (1862:50) and Wintle (1896:62) consider it "common". Wintle (1896:62) says that it is a "transient visitant" which may nest in the Montreal area, although he has no record to this effect, and Hall (1862:50) states that it is a "resident"., given no other information about its status.

SPECIMENS EXAMINED

A few specimens, taken in the Montreal area, have been studied in the mounted collection of the Redpath Museum.

TAXONOMY

The specimens examined have been referred to flammeus, the northern subspecies (A.O.U. Check-list, 1957:287).

Boreal Owl Aegolius funereus richardsoni (Bonaparte)

Casual winter resident and transient. This small owl of the coniferous forest was recorded only a few times in the Monteregian Hills region: Notre Dame de Grâce (Montreal Island) one found dead, 9 April 1950 (P.Q.S.P.B., 1950:35); Lacadie, one collected, 21 November 1915 (Terrill, 1916:16). Older reports show that the present species has been found only occasionally in the area in

extremely small numbers (Hall, 1862:50; Couper, 1883:197; Caulfield, 1890:146; Wintle, 1896:63).

SPECIMEN EXAMINED

R 581, m. adult, 21 November 1915, Lacadie.

TAXONOMY

The specimen examined has been referred to richardsoni, the subspecies of Eastern North America (A.O.U. Check-list, 1957:288).

Saw-whet Owl Aegolius acadicus acadicus (Gmelin)

Rare permanent resident. Breeding evidence of this species in the Monteregian Hills region is based on two records: Chambly, one nest, 22 May 1927 (Terrill, 1931:169-174), Senneville (Morgan Arboretum), two birds one of which sitting on the nest, 10 May 1952 (P.Q.S.P.B., 1952:25). Fall and winter observations are considerably more numerous and scattered throughout the wooded parts of the area, several of which have been made on Mount Royal in recent years (P.Q.S.P.B., 1935-1964). Earlier writers (Vennor, 1860:428; Hall, 1862:50; Caulfield, 1890:146) list this species as "rare", but its status appeared to be very uncertain, then being considered as a resident only by Caulfield. In Wintle's (1896:63), it is listed as a "common permanent resident", and specimens collected in late spring indicate that the species may have nested at Hochelaga (Montreal Island) and on Mount Royal, although Wintle does not imply that it did. Apparently this little owl has diminished considerably in numbers since the turn of the century. Forest

clearing is doubtless responsible for this situation, although shooting may well account to a certain extent for the marked reduction of the species. In over two years of field work throughout the region, the writer has not seen a single bird of the present species.

SPECIMENS EXAMINED

R 3647, m. adult, 19 January 1967, Montreal (Westmount)
 , adult, 9 April 1962, Montreal (McGill Campus)

TAXONOMY

The specimens examined have been assigned to acadicus the subspecies of the continental part of its range in Canada (A.O.U. Check-list, 1957:289).

CAPRIMULGIDAE

Whip-poor-will Caprimulgus vociferus vociferus Wilson

Rare summer resident. This species has apparently been recorded as nesting at two localities only in the Monteregian Hills region; Vacluse, one nest and 2 eggs, 28 May 1944 (P.Q.S.P.B., 1944:18), and at Caughnawaga, where it is said to be common (Terrill, 1911:58-59). It was recorded only in migrations elsewhere in the region from 28 April (P.Q.S.P.B., 1962:16) to 1 October (P.Q.S.P.B., 1947:11). Although little is known about the status of this species in the past, it was considered either a "scarce" migrant by earlier writers or absent from the area (Wintle, 1882:110; 1896:75-76; Hall, 1862:51).

SPECIMEN EXAMINED

R 1557, m. adult, 5 April 1920, St. Martin (Ile Jésus)

TAXONOMY

The specimen examined has been assigned to vociferus the subspecies of Eastern North America (A.O.U. Check-list, 1957:291).

Common Nighthawk Chordeiles minor minor (Forster)

PRESENT STATUS

Uncommon summer resident. Small numbers of this bird were recorded in most of the cities, towns and villages of the Monteregian Hills region from 8 May (Wintle, 1896:76) to 27 September (P.Q.S.P.B., 1945:11). This bird has taken up the habit of nesting on the flat gravel roofs of buildings and has doubtless benefited from man's modification of habitats throughout its range, although its numbers appear to have diminished considerably since the turn of the century. During the fall migration, end of August to early September, it can sometimes be observed in large flocks (up to about 200 birds) feeding above the open water of the area (P.Q.S.P.B., 1935-1964). The writer has observed four individuals flying over Lac Hertel (Mont St. Hilaire) on 11 and 13 June 1966.

FORMER STATUS

Wintle (1882:110; 1896:76-77) lists it as a "common summer resident" which arrives on 15 May and "nests at the end of May on the gravelled roof of houses in the city", and Hall (1862:51), probably misinformed, consider it a "scarce" migrant.

TAXONOMY

The population of Eastern Canada has been assigned to minor by

various authors; although the writer has not examined specimens from the Monteregian Hills region, the population is assigned to minor on the basis of many specimens examined from Quebec City, Ottawa and the Eastern Townships in the National Museum of Canada and in the Quebec Provincial Museum.

APODIDAE

Chimney Swift Chaetura pelagica (Linnaeus)

PRESENT STATUS

Common summer resident. Small numbers were reported throughout the Monteregian Hills region from 21 April (P.Q.S.P.B., 1952:11) to 5 October (P.Q.S.P.B., 1947:11); although it is regularly seen, few nesting records have been obtained: St. Hubert, 25 pairs nesting (P.Q.S.P.B., 1961:26); Mont St. Hilaire, two colonies of 35-40 pairs (author's observations, 1965-1966); Mont Yamaska, small groups of 4-6 birds, seen on five occasions in June of 1965 and 1966 (author's observations); Mont Shefford, 4 individuals observed on two occasions in June 1965 and 1966 (author's observations). It apparently nests in Montreal as it has been regularly observed over the city by the writer and several other observers diving in many chimneys.

FORMER STATUS

Hall (1862:51) lists this species as a "common" migrant. According to Wintle (1882:110; 1896:77-78), the Chimney Swift was an "abundant summer resident". It appears that this species has somewhat diminished in numbers since the turn of the century, although there are more chimneys available than at that time or ever before. Reductions in the numbers of insects on which

these birds are feeding by the use of insecticides, may well account for the present situation.

TRICHLIDAE

Ruby-throated Hummingbird Archilochus colubris (Linnaeus)

PRESENT STATUS

Common summer resident. The Ruby-throated Hummingbird is regularly observed throughout the Monteregian Hills region from 5 May (P.Q.S.P.B., 1950:16) to the end of September (P.Q.S.P.B., 1942-1964), and exceptionally as late as 16 October (P.Q.S.P.B., 1961:14,26). Direct evidence of nesting has been obtained only from St. Lambert, where a nest, on which the female was sitting, was found on 24 June 1942 (P.Q.S.P.B., 1942:19), and from Ste. Dorothee where a nest was discovered in the summer of 1952 (P.Q.S.P.B., 1952:25). Early summer observations by the writer suggest nesting at the following localities: Mont St. Hilaire, Mont Rouge, Mont Yamaska, Mont Shefford, Mont Johnson, Mont St. Bruno, Granby, St. Hyacinthe, Ste. Madeleine and St. Mathias.

FORMER STATUS

According to Hall (1862:52) the Ruby-throated Hummingbird was only a "common" migrant in the area. On the other hand, Wintle (1882:110; 1896:78-79) lists it as a "common summer resident" which "breeds in the city in gardens, and in Mount Royal Park". This species is apparently as numerous at the present as it was in the past, its habitats having been disturbed only slightly through human activity.

SPECIMENS EXAMINED

R 1569, m. immature, 15 September 1951, Montreal (McGill Campus)

72, m. adult, 21 May 1965, Mont St. Hilaire

73, m. adult, 21 May 1965, Mont St. Hilaire

74, f. adult, 21 May 1965, Mont St. Hilaire

ALCEDINIDAE

Belted Kingfisher Megaceryle alcyon alcyon (Linnaeus)

PRESENT STATUS

Uncommon summer resident. Although the Belted Kingfisher was regularly recorded in the Monteregian Hills region from 28 March (P.Q.S.P.B., 1945:11) to 26 October (P.Q.S.P.B., 1951:14), only a few nests appear to have been found: Hudson, one pair nested in April 1953 but the nest was destroyed (P.Q.S.P.B., 1953:23) Sault au Récollet (Montreal Island), one nest and 6 eggs, June 1892 (F.N. Smith Egg Collection, 390 3/6); near Montreal - no specific locality given - a nest found 25 May 1938 (Mousley, 1938:1-12). Many summer observations at Mont St. Hilaire in May and June of 1965 and 1966 suggest nesting there; it has also been observed by the writer in early summer at Lac Brome and on Mont Yamaska. The numerous abandoned gravel and sand pits found throughout the region in recent years have doubtless favored this species, although water pollution in streams and lakes has undoubtedly limited the size of the local population in reducing dangerously the food supply.

FORMER STATUS

Hall (1862:52) and Wintle (1882:110; 1896:69) list it as a "common summer resident" which "breeds in suitable places on the island of Montreal"; the latter mentions that two eggs were taken from a nest at Hochelaga (Montreal Island) on 24 May 1882. The population of this bird has undoubtedly been reduced considerably in the area since the turn of the century. Increased water pollution appears to be responsible to a large extent for the present situation in limiting the available food supply; on the other hand, the management of stream banks has certainly contributed to reduce the numbers of breeding birds, although abandoned gravel and sand pits are available in greater numbers than formerly. Indeed, no nests appear to have been found in these throughout the area, even if the species is known to use them extensively elsewhere in Canada (author's observations in Quebec, New Brunswick and Ontario).

SPECIMEN EXAMINED

R 3731, f. adult, 30 April 1966, Ile aux Hérons.

PICIDAE

Yellow-shafted Flicker Colaptes auratus luteus Bangs

PRESENT STATUS

Common summer resident, rare winter resident. The Yellow-shafted Flicker occurs in good numbers in all the wooded parts of the Monteregian Hills region, from 25 March (P.Q.S.P.B., 1948:21) to 29 November (P.Q.S.P.B., 1947:11). Nesting records were obtained from every corner of the area and from all the Monteregian Hills, including Mount Royal in recent years (P.Q.S.P.B., 1935-1964;

author's observations 1965-1966). It has been known to winter irregularly in small numbers for many years (Williams, 1900:174-175; (P.Q.S.P.B., 1935-1964). During the summer of 1965 and 1966 the author found it regularly in good numbers both on the Montegregian Hills and in the wood stands of the St. Lawrence Lowland; many nests have been discovered during that period.

FORMER STATUS

According to earlier writers this woodpecker was a common "summer resident" in the Montreal area (Hall, 1862:52; Wintle, 1882:110; 1896:75). Wintle (1896:75) gives breeding records from Hochelaga (=Montreal) and Mount Royal. In the F.N. Smith Egg Collection, clutches of eggs from Mount Royal and Outremont are preserved. This woodpecker has undoubtedly diminished slightly in numbers since the turn of the century owing to extensive habitat destruction, although it adapts readily to the vicinity of man. It is known to nest in parks and in very small woodlots close to human habitations provided it is unmolested.

SPECIMENS EXAMINED

Several specimens from southern Quebec, in the Redpath Museum or collected by the writer, have been studied.

TAXONOMY

Five adult specimens collected by the writer at Mont St. Hilaire have been assigned to luteus on the basis of their measurements.

Pileated Woodpecker Dryocopus pileatus abieticola (Bangs)

PRESENT STATUS

Rare permanent resident. Although this woodpecker is positively known to breed only at Senneville (Morgan Arboretum) where a pair was observed feeding young in June 1964 (P.Q.S.P.B., 1964:27), its presence during the nesting season indicates that it may also breed at the following places throughout the Montegian Hills region: Hudson (P.Q.S.P.B., various years, 1939-1964); Vaucluse (P.Q.S.P.B., 1939-1940:10); Laprairie (P.Q.S.P.B., 1941:16); Mont St. Bruno (P.Q.S.P.B., 1952:26); Mont St. Hilaire (P.Q.S.P.B., 1935-1936:5; author's observations 1965-1966); Mont Rouge and Mont Yamaska (author's observations, 1965-1966). The Pileated Woodpecker, though not numerous, is to be found in greater numbers than realized as it is extremely difficult to observe, particularly in spring and summer, unless one is well acquainted with its habits and call notes. Lack of habitat is certainly the limiting factor to the numbers of this retiring bird, which however appears to be somewhat more numerous than it was several years ago. The population of Mont St. Hilaire, from 1964 to 1966, has been estimated to four pairs by the writer.

FORMER STATUS

Earlier writers (Vennor, 1860:426; Hall, 1862:52; Wintle, 1882:110; 1896:72) are unanimous to consider this bird as "rare" in the Montreal area. Wintle (1896:72) lists one individual observed on Mount Royal on 1 May 1892. The status of this woodpecker has

apparently changed little since the turn of the century. Habitat destruction has perhaps reduced it slightly in numbers.

SPECIMEN EXAMINED

R 1653, m. adult, 16 November 1895, Mount Royal.

TAXONOMY

The specimen examined has been referred to abieticola on the basis of its large measurements and its light coloration when compared with specimens from western North America.

Red-bellied Woodpecker Centurus carolinus (Linnaeus)

Accidental straggler. Although Wintle (1896:74-75) lists this species as occurring in the Eastern Townships, there is apparently only one valid record for the Province of Quebec: a single bird observed on 5 and 12 November 1944 on Mount Royal by several persons (P.Q.S.P.B., 1944:19).

Red-headed Woodpecker Melanerpes erythrocephalus (Linnaeus)

PRESENT STATUS

Rare summer resident. This easily recognized species was recorded in recent years as nesting in the Monteregian Hills region as follows: Mount Royal 1936, 1937, 1939, 1942, 1962, 1964 (P.Q.S.P.B., 1935-1936:5; 1936-1937:8; 1938-1939:12; 1942:19; 1962:27; 1964:27); Belle Plage (near Vaudreuil) (P.Q.S.P.B., 1948:32; Oummaney, 1950:239-240). This species appears irregularly in the area and has never been recorded in any numbers in recent

years. The writer observed a male near St. Mathias on 17 June 1966, and another was recorded near Richelieu on 12 June 1966 (fide J. Normandin).

FORMER STATUS

The Red-headed Woodpecker was apparently more numerous in the Montreal area before the turn of the century according to earlier writers (Hall, 1862:52; Wintle, 1882:110; 1896:74). Wintle (1896:74) mentions two nesting records for the Montreal area: Lachine, a nest with eggs; Longue Pointe (Montreal Island), a nest 24 May 1889; he also lists several specimens collected in the area. Habitat destruction and over-shooting may account to a certain extent for the decline of this species, although the increasing numbers of Starlings (Sturnus vulgaris) are certainly responsible for the present situation. These birds are indeed well known to chase this woodpecker away from its nesting holes and to occupy them (several author's; writer's observations in southern Ontario).

Yellow-bellied Sapsucker Sphyrapicus varius varius (Linnaeus)

PRESENT STATUS

Abundant summer resident. This migratory woodpecker was recorded in the Monteregian Hills region from 5 April (P.Q.S.P.B., 1953:12) to 3 November (P.Q.S.P.B., 1962:16), and exceptionnally on 2 January 1953 on Mount Royal (P.Q.S.P.B., 1953:23). Nesting records have been obtained for all the Monteregian Hills (author's observations 1965-1966), including Mount Royal (P.Q.S.P.B., 1952:26),

St. Madeleine, St. Mathias, Granby, Como, and for numerous other localities in the St. Lawrence Lowland where woodlots are available. On Mont St. Hilaire, seven nests were discovered by the writer in 1965, and nine in 1966. It was considerably less numerous on the other mountains during the same years.

FORMER STATUS

Although this woodpecker is listed by earlier authors (Hall, 1862:52; Wintle, 1882:110; 1896:72) as a "common summer resident", it was doubtless more abundant than it is at the present. Wintle (1896:72) mentions that it nested "sparsely on the Island of Montreal", and reports a nest found on Mont St. Bruno on 21 June 1887.

SPECIMENS EXAMINED

Several specimens collected by the writer at Mont St. Hilaire or in the Redpath Museum have been studied.

TAXONOMY

The specimens examined have been referred to the subspecies of Eastern Canada, varius, on the basis of their coloration.

Hairy Woodpecker Dendrocopos villosus ssp.

PRESENT STATUS

Uncommon permanent resident. The Hairy Woodpecker has been reported in almost every forest stand of the Monteregian Hills region at all times of the year. It was recorded as breeding at the following localities: Mount Royal, one nest with young, 26 May

and 7 June 1963 (P.Q.S.P.B., Nest Record Card). Chambly, one nest with young, 20 May 1950 (P.Q.S.P.B., 1950:36). Mont St, Hilaire, one nest with young, 24 May 1940 (P.Q.S.P.B., 1939-1940:5); one nest with young, 24 May 1961 (P.Q.S.P.B., Nest Record Card); 9 nests in 1965, 4 nests in 1966 (author's observations). Mont Yamaska, Mont Rouge and Mont Shefford, one nest on each in 1966 (author's observations). Although this woodpecker appears to be more numerous in fall and winter, this situation can not be explained by the fact that this species is migratory. Indeed, in a forthcoming paper the author will demonstrate that the Hairy Woodpecker is not migratory in this part of its range, and that it forages over greater distances to obtain its food in fall and winter. This explains therefore the larger numbers of individuals observed at that time of the year.

FORMER STATUS

Hall (1862:52) list this species as "common resident"; all the other authors (Vennor, 1860:426; Caulfield, 1890:146-147; Wintle, 1882:110; 1896:70) consider it as a migrant and a winter resident, and appear to ignore everything about its status in summer. However, owing to the difficulty of observing this bird during the breeding season, the writer thinks that it was doubtless more numerous in the woodlands of the region than at the present, and that forest destruction played an important rôle in the reduction of its numbers since the turn of the century.

SPECIMENS EXAMINED

Pending the completion of a study on the taxonomy of Dendrocopos villosus all over its range, the many specimens collected in the Montereian Hills region by the writer have been left undetermined subspecifically for the purposes of ^{the} present work.

Downy Woodpecker Dendrocopos pubescens ssp.

PRESENT STATUS

Common permanent resident. This woodpecker has been observed in numbers in woodstands throughout the Montereian Hills region and is not migratory (author's observations). Many nests have been found by the writer in 1965 and 1966 on all the Montereian Hills, except Mount Royal. In winter and fall when food is not as abundant as in other seasons, the Downy Woodpecker forages over greater distances and has been recorded even in the city of Montreal (author's observations, 1964-1967). It was numerous at Mont St. Hilaire in 1965 and 1966, over 15 pairs having been studied during the nesting season. Eleven nests were found on Mont St. Hilaire by the writer in 1965. It is undoubtedly less numerous than it was formerly, many of its habitats having been destroyed to a great extent.

FORMER STATUS

Earlier writers are unanimous to consider the Downy Woodpecker a "common permanent resident" (D'Urban, 1857:144; Vennor, 1860:426; Hall, 1862:52; Caulfield, 1890:147; Wintle, 1882:110, 1896:71). Wintle (1896:71) reports that it was then breeding on Mount Royal.

It doubtless still do so in small numbers although no nest has been reported in recent years. This woodpecker was apparently more numerous before the turn of the century than it is at the present. Habitat destruction is certainly responsible for the slight decline of the species throughout the area.

SPECIMENS EXAMINED AND TAXONOMY

Several specimens collected by the writer throughout the Montereian Hills region have been left undetermined subspecifically pending the completion of a comprehensive study on the taxonomy of the species now in progress.

Black-backed Three-toed Woodpecker Picoïdes arcticus (Swainson)

Rare wanderer. This woodpecker of the coniferous forest was recorded on several occasions in the Montereian Hills region from 11 September (P.Q.S.P.B., 1949:12) to 22 May (P.Q.S.P.B., 1950:16), at the following places: Mount Royal, Senneville, Rosemere, Varennes, Chambly, Como, Hudson, Westmount, and Oka. The writer observed a male for several minutes at Mont St. Hilaire on 10 November 1964. Apparently, this woodpecker was never more numerous in the area than it is at the present; Wintle (1882:110; 1896:71) lists it as a rare "transient visitant", reporting two specimens taken at Laprairie and on Ile Jésus.

Northern Three-toed Woodpecker Picoïdes tridactylus bacatus Bangs

Casual wanderer. This woodpecker of the northern coniferous forest was recorded only a few times in the Montereian Hills region:

Hudson (1) 28 December 1941 (P.Q.S.P.B., 1941:16), and on a few occasions in 1964 (P.Q.S.P.B., 1964:27); Chambly (1) 4 January 1948 (P.Q.S.P.B., 1948:33); St. Helen's Island (1) 26 and 30 November 1949 (P.Q.S.P.B., 1949:27); Mount Royal (1) 13 January 1952 (P.Q.S.P.B., 1952:26); Nun's Island (2) 27 December 1953 (P.Q.S.P.B., 1953:23); Oka (1) 27 October 1956 (P.Q.S.P.B., 1956:22). Caulfield (1890:147) reports a few seen in November, and Wintle (1896:71-72) lists it as a rare transient visitant in October and November.

SPECIMENS EXAMINED

- R 1615, f. adult, 1 June 1919, St. Bruno
 R 1617, m. adult, 29 January 1922, Ste. Thérèse
 R 1616 f. adult, 29 January 1922, Ste. Thérèse

TAXONOMY

The specimens examined have been referred to bacatus on the basis of the narrow barring of the dorsal region.

TYRANNIDAE

Eastern Kingbird Tyrannus tyrannus (Linnaeus)

PRESENT STATUS

Common summer resident. The Eastern Kingbird is well distributed throughout the Monteregian Hills region particularly in open areas scattered with bushes, isolated trees, orchards and shrubbery. It can be observed in good numbers throughout the summer months, from 21 April (P.Q.S.P.B., 1960:12) to 27 September (P.Q.S.P.B., 1957:13). Nests were found as follows: Senneville, 3 June 1951; Brosseau, 4 August 1951 (P.Q.S.P.B., 1951:31); Paton's Island (Rivière-des-Prairie) summer 1953 (P.Q.S.P.B., 1953:23); Hudson

Heights, 20 June 1965 (P.Q.S.P.B., Nest Record Card); Montreal West, 8 June 1965 (P.Q.S.P.B., Nest Record Card); Lachine, 2 nests, 28 June 1963 (P.Q.S.P.B., Nest Record Card); Mont St. Hilaire, 2 nests June 1965, 1966 (author's observations). In two summers of field work in the region the Kingbird was regularly observed by the writer in the St. Lawrence Lowland and on all the Monteregian Hills, except Mount Royal, 4 to 6 individuals being recorded daily from mid-May to mid-July 1965 and 1966.

FORMER STATUS

According to earlier writers (Hall, 1862:50; Wintle, 1882:110, 1896:79) the Kingbird was a "common summer resident" in the Montreal area. Wintle (1896:79) reports its breeding in the city of Montreal, and a nest on Mount Royal on 30 June 1880. Although the species has been reduced considerably on the Island of Montreal, it has undoubtedly benefited to a certain extent from forest destruction throughout the region, since this species is primarily found in open or semi-open habitats.

SPECIMENS EXAMINED

Seven specimens collected by the author from 10 May to 6 July 1965 and 1966, on Mont St. Hilaire, Mont Shefford and Mont Yamaska, are all in breeding condition.

Great Crested Flycatcher Myiarchus crinitus boreus Bangs

PRESENT STATUS

Common summer resident. The Crested Flycatcher is found in good numbers in suitable habitats throughout the Monteregian Hills region

from 24 April to 21 September (P.Q.S.P.B., 1954:11). It was recorded as nesting at the following places: Summerlea (Montreal Island), 15 pairs in June 1949, two nests discovered (P.Q.S.P.B., 1949:28); Westmount, 6 birds seen throughout June 1955 (P.Q.S.P.B., 1955:23); Ste. Dorothée, one nest, 7 June 1950 (P.Q.S.P.B., 1950:36) ; Ile Bizard, one nest, 1 July 1924 (F.N. Smith Egg Collection, 452 2/5); Hudson, one nest in a bird box in 1950 (P.Q.S.P.B., 1952:26); Senneville, one pair nesting in a bird box in 1953 (P.Q.S.P.B., 1953:12); St. Bruno, 2 nesting pairs in 1955 (P.Q.S.P.B., 1955:23); Mont St. Hilaire, 4 nests in 1965, 1966 (author's observations); Mont Johnson, Mont Yamaska, Mont Shefford, Mont Brome, Mont Rouge, one nest on each in 1965 or 1966 (author's observations). On Mont St. Hilaire, 2 to 8 individuals were recorded daily by the writer from 8 May to 29 July 1965, and from 15 May to 21 June 1966.

FORMER STATUS

According to previous writers (Hall, 1862:50; Wintle, 1882:110, 1896:80) the Crested Flycatcher was a common summer resident. Wintle (1896:80) mentions that it nested on Mount Royal. This species, although still found in good numbers in the wooded parts of the region, is undoubtedly less numerous than it was formerly owing to intensive forest destruction, as this bird usually nests in cavities of trees in forest stands.

SPECIMENS EXAMINED

Five specimens were collected by the writer on Mont St. Hilaire and Mont Yamaska between 10 May and 20 July 1965 and 1966; three of these were in breeding condition, the other two were

fledglings just out of the nest (Mont St. Hilaire).

TAXONOMY

The population of Eastern North America has been assigned to crinitus by several authors.

Eastern Phoebe Sayornis phoebe (Latham)

PRESENT STATUS

Common summer resident. The Phoebe was recorded throughout the Monteregian Hills region from 16 March (P.Q.S.P.B., 1951:15) to 18 October (P.Q.S.P.B., 1950:16). Nesting records were obtained as follows: near Chambly, five nests, 3 June 1922 (P.Q.S.P.B., 1946:26); Vaucuse, two nests, 28 May 1950 (P.Q.S.P.B., 1950:37); Como, two nests, 31 May and 27 June 1965 (P.Q.S.P.B., Nest Record Cards); Senneville, three nests, 3 June 1956 (Terrill, 1961:3); Oka, one nest under construction, 9 April 1967 (author's observation); Mont St. Hilaire, one nest with 5 eggs, 24 May 1916 (F.N. Smith Egg Collection, 456 1/5), nine nests, May and June 1965 and 1966 (author's observations). The Phoebe appears to have suffered a marked decline in the late 1950's but it has now recovered completely and is presently as numerous as previously throughout its former range.

FORMER STATUS

According to earlier writers (Hall, 1862:50; Wintle, 1882:110, 1896:80) this flycatcher was common in the Montreal area before the turn of the century. This species has doubtless benefited greatly from human activity throughout the region as more nesting

sites became available.

SPECIMENS EXAMINED

R 1787, f. adult, 27 September 1925, St. Bruno

47, m. adult, 7 May 1965, Mont St. Hilaire

176, m. adult, 13 May 1966, Mont St. Hilaire

216, m. adult, 21 May 1966, Mont St. Hilaire

354, m. adult, 15 June 1966, Mont Shefford

382, m. adult, 20 June 1966, Mont St. Hilaire

Yellow-bellied Flycatcher Empidonax flaviventris (Baird and Baird)

PRESENT STATUS

Rare transient. This flycatcher of the coniferous forest is known in the St. Lawrence Lowland and the Monteregian Hills only as a transient, although it has been recorded as breeding south of the area, at Hatley in the Sutton Mountains (Mousley, 1921:126-127). In the spring it was recorded from 7 May to 7 June (P.Q.S.P.B., 1950:16) and in the fall from 18 August (P.Q.S.P.B., 1952:11) to 26 September (P.Q.S.P.B., 1956:22). Observations have been obtained in small numbers and at irregular intervals from Mount Royal, Mont St. Hilaire, St. Bruno, Chambly, St. Helen's Island, Senneville, Hudson and Ste. Thérèse (P.Q.S.P.B., 1935-1964; author's observations 1964-1966).

FORMER STATUS

Hall (1862) does not list this species in his paper, but Wintle (1896:91-82) mentions that it is a "scarce summer resident" on

the basis that he has collected specimens in the area on 31 May 1892 and on 2 June 1888. These are not accepted by the writer as breeding records. Therefore it appears that this flycatcher has always been a rare migrant in the area.

Traill's Flycatcher Empidonax traillii traillii (Audubon)

PRESENT STATUS

Uncommon summer resident. This flycatcher is found in small numbers throughout the Monteregean Hills region from 9 May (P.Q.S.P.B., 1959:13) to 8 September (P.Q.S.P.B., 1946:12). The writer observed it regularly in small numbers (3-4) in the St. Lawrence Lowland near Mont St. Hilaire, Mont Rouge and Mont Shefford from 28 May to 21 June 1966; it was not recorded in 1965. This species has apparently diminished in numbers during the last few years, probably as a result of increased habitat destruction. Terrill (1911:59) found it the most common flycatcher in the area in the early 1900's, 2 or 3 pairs nesting close to nes another.

FORMER STATUS

Wintle (1896:82) alone mentions this flycatcher which he considers a "scarce summer resident". He certainly has overlooked this species as Terrill (1911:59), only shortly after, found it common in the Montreal area. It appears that the present species was quite numerous in the region until a few years ago and that is has been considerably reduced in numbers in recent years, at least in the Monteregean Hills region as shown by the writer's observations.

SPECIMENS EXAMINED

262, m. adult, 30 May 1966, Mont St. Hilaire

268, m. adult, 31 May 1966, Mont St. Hilaire

315, m. adult, 9 June 1966, Mont St. Hilaire

TAXONOMY

The population of eastern North America has been referred to traillii by several authors.

Least Flycatcher Empidonax minimus (Baird and Baird)

PRESENT STATUS

Common summer resident. This small flycatcher was recorded as common (2 to 10 observed daily in nesting season) on all the Monteregian Hills, except Mount Royal, by the writer in 1965 and 1966. It was somewhat less numerous in the St. Lawrence Lowland. Several nests have been found by the writer on Mont St. Hilaire, Mont Rouge and Mont Yamaska in 1965 and 1966. It was recorded in the region from 23 April to 7 October (P.Q.S.P.B., 1951:12).

FORMER STATUS

Hall (1862:50), who designates the present species as "Small Pewee", considers it a "scarce" summer resident. Wintle (1896:82) shares the same opinion and adds it breeds on the Island of Montreal. The writer thinks that this small flycatcher has been overlooked by these two authors and that it was more numerous in the area than at the present as a result of more extensive habitats being available.

SPECIMENS EXAMINED

Ten specimens were collected by the writer on Mont St. Hilaire, Mont Yamaska and Mont Shefford in 1965 and 1966. A specimen (R 1789) in the Redpath Museum was collected at Brosseau Junction on 27 August 1922.

Eastern Wood Pewee Contopus virens (Linnaeus)

PRESENT STATUS

Common summer resident. The Wood Pewee has been recorded in good numbers during the nesting season of 1965 and 1966 by the writer on all the Monteregian Hills, except Mount Royal. It has been observed at a few places only in the St. Lawrence Lowland; Ste Madeleine, St. Mathias, Granby, Beloeil and St. Lambert. At Mont St. Hilaire, 4 to 6 individuals were observed regularly from 21 May to 28 July in 1965, and from 21 May to 21 June in 1966. The species has been reported in the region from 4 May (P.Q.S.P.B., 1947:21) to 7 October (P.Q.S.P.B., 1963:14). One nest containing three eggs was found at Dorval on 18 June 1918 (F.N. Smith Egg Collection, 461 1/3). Recent forest clearing throughout the area has doubtless reduced to a certain extent the breeding population of this flycatcher.

FORMER STATUS

According to Hall (1862:50) and Wintle (1882:110; 1896:81) the Wood Pewee was a "common" summer resident, which was nesting on Mount Royal, "where a nest containing three eggs was discovered on June 26, 1885" (Wintle 1896:81). Undoubtedly, this woodland species has suffered greatly from forest destruction since the turn of the century,

although it is still found in good numbers in suitable habitats.

SPECIMENS EXAMINED

Eleven specimens have been examined, ten of which were collected by the writer on Mont St. Hilaire, Mont Yamaska and Mont Rouge from 24 May to 28 June 1965 and 1966, and another, in the Redpath Museum (R 3733), taken at Beaconsfield on 15 June 1963.

Olive-sided Flycatcher Nuttallornis borealis (Swainson)

PRESENT STATUS

Uncommon transient; probably rare summer resident. This flycatcher was recorded in small numbers in the Monteregian Hills region from 9 May (P.Q.S.P.B., 1964:13) to 19 September (P.Q.S.P.B., 1954:12). A single individual was observed and collected by the writer on 25 May 1966 at Mont St. Hilaire. A summer record, one individual heard calling at Chambly on 7 June 1951 (P.Q.S.P.B., 1951:31), indicates that the species may have nested there.

FORMER STATUS

Wintle (1882:110; 1896:80) lists it as a "scarce summer resident" which bred on Mount Royal. Apparently this flycatcher has disappeared from the region as a nesting bird as a result of prolonged and intensive forest destruction.

SPECIMEN EXAMINED

236, f. adult, 25 May 1966, Mont St. Hilaire.

ALAUDIDAE

Horned Lark Eremophila alpestris praticola (Henshaw)

PRESENT STATUS

Common summer resident (praticola); uncommon transient (alpestris). The Horned Lark occurs in good numbers throughout the St. Lawrence Lowland of the Monteregian Hills region. Nesting records are numerous and have been obtained in every part of the region (P.Q.S.P.B., 1935-1964; F.N. Smith Egg Collection; author's observations 1965, 1966). This species has benefited to a great extent from forest destruction since the turn of the century. It winters in the area in small numbers (author's observations, 1964-1967). The subspecies praticola is known to winter in small numbers (P.Q.S.P.B., 1935-1964; author's observations).

FORMER STATUS

Wintle (1896:84) lists the subspecies (praticola) as a "common summer resident" which has been recorded as nesting on the "highlands above Hochelaga". This species is doubtless more numerous in the region as a result of increased forest destruction.

SPECIMENS EXAMINED

Twelve specimens, collected by the writer or in the Redpath Museum have been studied by the writer.

TAXONOMY

The nesting population has been referred to praticola on the basis of five specimens taken in 1965 and 1966 in the St. Lawrence Lowland near Mont St. Hilaire and Mont Rouge. The subspecies alpestris has been identified from specimens in the Redpath Museum taken in April, October and November; it is therefore transient.

HIRUNDINIDAE

Tree Swallow Iridoprocne bicolor (Vieillot)

PRESENT STATUS

Abundant summer resident. The Tree Swallow occurs in large numbers throughout the Monteregian Hills region from 18 March (P.Q.S.P.B., 1945:12) to the middle of October (P.Q.S.P.B., 1944-1964) exceptionally as late as 6 November (P.Q.S.P.B., 1955:11). Five to twenty birds were regularly observed by the writer at Mont St. Hilaire, during the nesting season of 1965 and 1966; many nests were recorded in bird boxes throughout the region during the same period. During the fall migration the swallow is more numerous near open water and large flocks have been occasionally recorded: 2,000 off Côte Ste Catherine, 27 September 1955 (P.Q.S.P.B., 1955:24).

FORMER STATUS

According to Hall (1862:51) the Tree Swallow was a "common" summer resident. Wintle (1882:109; 1896:107) list it as an "abundant summer resident" which "breeds in the city and in Mount Royal Park". Caulfield (1889:422) mentions that this swallow was common in the city of Montreal before the advent of Passer domesticus. This species has apparently increased in numbers before the turn of the century as shown by the statements of Hall (1862:51) and Wintle (1882:109; 1896:107), and since the turn of the century (P.Q.S.P.B., 1935-1964, author's observations) as a result of the increasing number of suburban residential parks and of the greater number of bird boxes placed throughout the region. Although this species probably still uses natural cavities in trees, hollow trees or abandoned woodpecker holes for nesting to a certain extent in the Monteregian Hills region,

the majority of breeding birds raise their brood in bird boxes.

Bank Swallow Riparia riparia riparia (Linnaeus)

PRESENT STATUS

Uncommon summer resident locally. The Bank Swallow is known to nest in colonies throughout the Monteregian Hills region, which were recorded for several localities: Laprairie (P.Q.S.P.B., 1942-1964); St. Lambert and Côte St. Paul (P.Q.S.P.B., 1949:28); Aqueduct (Montreal Island) (P.Q.S.P.B., 1951:31); Mount Royal (P.Q.S.P.B., 1953:24); Saraguay (on Rivière-des-Prairie) (P.Q.S.P.B., 1960:25; 1961:28). During the field season of 1965 and 1966 the author recorded the following breeding colonies: Mont St. Hilaire, 130-150 nesting holes in a sand pit; Mont Yamaska, about 75 nesting holes in a gravel pit; Mont Shefford, about 145-150 nesting holes in a gravel pit; Mont Brome, 35-40 nesting holes in a sand pit; Montreal West, 40-45 nesting holes in sandy bank, 26 May 1965. Terrill (1911:16) reports that it was breeding in the city where nesting sites were available. It is interesting to note that this swallow has taken up the habit of building its nest in drainage holes of concrete walls (P.Q.S.P.B., 1949:28), probably when sand banks are not available. This swallow has doubtless suffered greatly in recent years as a result of the utilization of river banks for human purposes. Although several sand and gravel pits are left unused for short periods and are utilized extensively by the swallows for nesting, large numbers have their eggs destroyed when gravel and sand removal activities are started during the nesting period.

To sum up, it appears that this swallow is less numerous in the region owing to greater use of sand banks along streams, etc..., for human activity. The Bank Swallow was recorded in the region from 20 April (P.Q.S.P.B., 1963:16) to 28 September (P.Q.S.P.B., 1964:13).

FORMER STATUS

According to Wintle (1882:109; 1896:107-108) the Bank Swallow was a common summer resident in the Montreal area; he records a small colony on Mount Royal which persisted until 1885, and a large one in sand pits at Hochelaga (Montreal Island). This swallow was doubtless more numerous in the Monteregian Hills region before the turn of the century than at the present as banks of streams were not used as extensively as they are nowadays. Roads in sandy hills also provided ideal nesting sites as steep sandy banks were often exposed; modern methods in road construction tend to eliminate these or to cover them with sand-binding vegetation, which therefore eliminates breeding Bank Swallows.

SPECIMENS EXAMINED

Six specimens collected during the nesting season of 1965 and 1966 at Mont St. Hilaire by the writer have been referred to the North American population riparia.

Rough-winged Swallow Stelgidopteryx ruficollis (Vieillot)

Rare summer resident. This species has been recorded for the first time in the Monteregian Hills region in the spring of 1948 when

a single individual was seen on St. Helen's Island. In 1950, single individuals were observed on several occasions at Richelieu and Verdun (P.Q.S.P.B., 1950:38). It was regularly recorded since in the region (P.Q.S.P.B., 1951-1964; author's observations 1965, 1966) from 19 April (P.Q.S.P.B., 1963:14) to 29 August (P.Q.S.P.B., 1964:13). Nesting records have been obtained from Rigaud in 1959 (Bull. ornith., 1959, 4 (4):8), Hudson (P.Q.S.P.B., 1957:27; 1964:28), and Lachine (P.Q.S.P.B., 1958:31). The author has observed it in the region as follows: along the Richelieu River, St. Hilaire (3) 28 April, (1) 7 June, (7) 14 June 1965; Beloeil (4) 4 June, (6) 11 June 1966; Mont St. Hilaire (Lac Hertel) (2) 19 June 1966; these observations suggest that the species was nesting at those places.

Barn Swallow

Hirundo rustica erythrogaster Boddaert

PRESENT STATUS

Common summer resident. The Barn Swallow was recorded in good numbers in the Monteregian Hills region from 8 April (P.Q.S.P.B., 1956:12) to 24 September (P.Q.S.P.B., 1950:17), particularly in rural area. Nesting data have been obtained throughout the region, including Mount Royal (P.Q.S.P.B., 1954:21). The author recorded it as nesting on all the Monteregian Hills (except Mount Royal) and in the adjacent areas of the St. Lawrence Lowland in 1965 and 1966.

FORMER STATUS

According to Hall (1862:51) and Wintle (1882:109; 1896:106-107) the Barn Swallow was a common summer resident in the Montreal area.

Wintle (1896:106-107) has reported its nesting on the Island of Montreal. Although it appears that the status of this swallow has not changed since the turn of the century, it is the author's opinion that it is more numerous than formerly as a result of the greater number of buildings available as nesting sites, of the more considerable amount of open habitats available, and of the increased protection given to this species.

SPECIMENS EXAMINED

129, m. adult, 18 June 1965, Mont St. Hilaire

343, f. adult, 15 June 1966, Mont Shefford

TAXONOMY

The North American population has been assigned to erythrogaster by several writers.

Cliff Swallow

Petrochelidon pyrrhonota pyrrhonota (Vieillot)

PRESENT STATUS

Uncommon summer resident. Although this swallow is a regular nesting bird at many localities throughout the Monteregian Hills region, it has not been recorded in any numbers in recent years (P.Q.S.P.B., 1935-1964; author's observations 1965, 1966). It is known to breed at Ste. Anne de Bellevue (P.Q.S.P.B., 1956:23), on Mont Shefford where the writer found five nests and twelve adult birds on 15 June 1966, and near Mont St. Hilaire (eastern foothill) where two nests were recorded by the writer in June and July of 1965 and 1966. Mousley (1932:172) reported five nests from Lachine on 12 June 1931. This

swallow was recorded in the region from 19 April (P.Q.S.P.B., 1963:14) to 24 September (P.Q.S.P.B., 1950:17).

FORMER STATUS

Hall (1862:51) and Wintle (1882:109; 1882:106) list this species as a "common summer resident"; Wintle (1896:106) adds that it "breeds on the Island of Montreal". The Cliff Swallow is considerably less numerous at the present than it was formerly in the Monteregian Hills region; an identical situation has been observed elsewhere in the northeastern part of its range (various authors). It appears that the gradual but regular decline of the species is related to the disappearance of covered bridges and to the increase of the House Sparrow (Passer domesticus) which is well known to chase these swallows from their mud nests (numerous authors; writer's observations over several years). Indeed, Caulfield (1889:422) remarks that a large colony at Côte St. Luc was chased away by Passer domesticus shortly after the establishment of the species in the Montreal region, in the late 1880's.

SPECIMEN EXAMINED

344, m. adult, 15 June 1966, Mont Shefford

TAXONOMY

The specimen collected by the writer, along with others from southern Quebec in the Redpath Museum, has been referred to pyrrhonota on the basis of their coloration and small size.

Purple Martin

Progne subis (Linnaeus)PRESENT STATUS

Uncommon summer resident. This swallow, which was observed in the Monteregian Hills region from 4 April (P.Q.S.P.B., 1962:16) to 23 September (P.Q.S.P.B., 1954:12), is known to nest in bird boxes at the following places: Pointe Claire, Verdun, Cartierville, Dorval, Senneville, Montreal, Hudson, L'Abord-à-Plouffe, Chambly, St. Lambert, Mont St. Bruno, Iberville, Farnham, Waterloo, and Granby (P.Q.S.P.B., 1942-1964; Bull. ornith., 1956, 1 (4):7; 1957, 2 (4):8; author's observations 1965, 1966). During the fall migration it can be seen in larger numbers (flocks of 30-65 birds) over open water (P.Q.S.P.B., 1942-1964; author's observations).

FORMER STATUS

Hall (1862:51) and Wintle (1882:109; 1896:106) list this swallow as a "common summer resident". Wintle (1896:106) remarks that it "breeds in the city in bird houses". Although no quantitative data are available, it appears that the species is considerably less numerous in the area than it was formerly. The present breeding colonies are well scattered through the area and are not known to group over seventy individuals (P.Q.S.P.B., 1935-1964; author's observations). In the early 1900's, Terrill (1911:60-61) considered it the third most numerous bird of the city of Montreal, particularly along "the Lachine Canal and along the river front". The situation has changed considerably since. It is indeed known to nest at the present only in small numbers at Verdun, Lachine and Dorval.

CORVIDAE

Gray Jay Perisoreus canadensis (Linnaeus)

Sporadic wanderer. This species of the coniferous biome and arctic ecotone (Ouellet, 1966:177-186) occurs irregularly in the Monteregian Hills region. In recent years it has been reported throughout the region in small numbers during fall, winter and early spring (P.Q.S.P.B., 1935-1964). Hall (1862:52) lists it as a "common resident" which winters; his remarks probably apply to a region north of the Montreal area. The other authors (Caulfield, 1882:110; Wintle, 1882:110; 1896:86) consider it a "scarce transient visitant".

Blue Jay Cyanocitta cristata bromia Oberholser

PRESENT STATUS

Common permanent resident. The Blue Jay has been reported at all times of the year in good numbers in the wooded parts of the Monteregian Hills region. Nests were recorded as follows: Senneville, two nests, 5 and 12 May, 1951 (P.Q.S.P.B., 1951:32-33); one nest, 18 May 1952 (P.Q.S.P.B., 1952:27); one nest, 24 May 1953 (P.Q.S.P.B., 1953:25). Hudson, four fledglings, 4 June 1954 (P.Q.S.P.B., 1954:22). In 1965 and 1966, the writer has observed it regularly throughout the nesting season on all the Monteregian Hills, except Mount Royal, and in the wooded parts of the St. Lawrence Lowland adjacent to the Hills. In fall and early winter this bird appears to be more numerous. The writer believes that this situation can be explained firstly by the fact that these birds are extremely noisy at that time of the year, and secondly that some individuals withdraw southwards from the northernmost parts of the summer range. In winter it has often been reported on Mount Royal (P.Q.S.P.B.,

1936-1964).

FORMER STATUS

Hall (1862:52) lists it as a "common" summer resident, while Wintle (1882:110; 1896:85-86) considers it a "common transient visitant", and adds (1896:85-86) that he is not "aware of any breeding here". This is undoubtedly the result of the most secretive habit of this bird during the nesting season. The Blue Jay has undoubtedly suffered greatly from continuous intensive forest destruction since the establishment of the white man in the region.

SPECIMENS EXAMINED

R 1892, 12 October 1919, Lacadie
 14, m. immature, 27 October 1964, Mont Yamaska
 17, m. adult, 10 November 1964, Mont St. Hilaire
 191, f. adult, 17 May 1966, Mont St. Hilaire

TAXONOMY

The population of northern Canada has been referred to bromia (A.O.U. check-list, 1957:369).

Black-billed Magpie Pica pica (Linnaeus)

Hypothetical. This species was recorded three times in the area: Chambly Canton, one shot about 1883; Laprairie, one sight record about 1883 (Wintle, 1896:84-85); Notre-Dame-de-Grâce (Montreal Island) two seen on several occasions from late August until mid-November 1944 (P.Q.S.P.B., 1944:20). Wintle (1896:84-85) suggests that the records mentioned by him result from birds that have

escaped from captivity. In the ~~second~~ instance, it was discovered afterwards that the two birds observed had been brought from Manitoba and liberated in the area (P.Q.S.P.B., 1944:20).

Common Raven Corvus corax Linnaeus

PRESENT STATUS

Casual wanderer. The Raven was apparently recorded in the Monteregean Hills region only once in recent years: Mount Royal (1) 23 December 1948 (P.Q.S.P.B., 1948:33).

FORMER STATUS

Hall (1862:52) lists it as a "rare resident" probably on the basis that a few isolated pairs were still nesting on the exposed cliffs of the region, likely on the Monteregean Hills. Later writers, such as Caulfield, (1890:148) and Wintle (1896:86) consider it a "rare winter visitant". It appears therefore that habitat destruction and possibly over-shooting have caused the disappearance of this bird from the region before the middle of the 19th century, and that it has vanished from the area as a rare winter resident at the same rate as its breeding grounds were being pushed away from civilization.

Common Crow Corvus brachyrhynchos brachyrhynchos Brehm

PRESENT STATUS

Abundant summer resident; uncommon winter resident. The Common Crow is found nesting in good numbers throughout the Monteregean Hills

region, even in the parks and ornamental trees in the city of Montreal. During the nesting season of 1965 and 1966 the writer observed regularly 2 to 20 individuals on all the Monteregian Hills, except on Mount Royal, and in the adjacent parts of the St. Lawrence Lowland. In winter it was recorded regularly for many years (P.Q.S.P.B., 1935-1964; author's observations 1964-1967). This species may have increased in numbers since the turn of the century, being favored greatly by the clearing of the land (isolated trees are often used in this region as nesting sites), in spite of the intense hunting it has to cope with at all times of the year. During migrations this species is most abundant for short periods, and flocks of several hundred birds are not unusual (P.Q.S.P.B., 1935-1964, author's observations 1964-1967).

FORMER STATUS

Earlier authors are unanimous to state that the Common Crow was a common summer resident in the Montreal area (Hall, 1862:52; Wintle, 1882:110, 1896:86-87); at what time it was known to winter fairly regularly in the area (Hall, 1862:52; Wintle, 1882:110, 1896:86-87; D'Urban, 1857:143; Caulfield, 1890:148). It appears that this species was very numerous in the region before the turn of the century, and it may have slightly increased in numbers since then being favored by forest destruction.

SPECIMEN EXAMINED

375, f. adult with brood patch, 17 June 1966, Mont Yamaska.

PARIDAE

Black-capped Chickadee Parus atricapillus atricapillus Linnaeus

PRESENT STATUS

Uncommon summer resident. Terrill (1911:63) states that he found this species breeding "on several occasions on the Island (=Montreal) and in the immediate vicinity". Nests have apparently not been found in the area in recent years although the species has been reported in small numbers from many localities (P.Q.S.P.B., 1935-1964). During the spring and summer of 1965 and 1966 the writer observed regularly this chickadee in small numbers (2-6) on each of his visits to the following places: Mont Rouge, Mont St. Bruno, Mont Shefford, Mont Yamaska, Mont Brome, and the adjacent wooded parts of the plain. At Mont St. Hilaire, four to eight individuals were regularly observed during the same period. The fall and winter populations appear to be more considerable in the region. This can be explained by the fact that these birds are more active and noisy at that time of the year and that there may be a slight migratory movement southward of the northernmost populations. This latter fact probably accounts for the observations made in the city of Montreal and on Mount Royal.

FORMER STATUS

Hall (1862:51) lists it as a "common resident" but Wintle (1882:109) mentions that it is "not very common and that it breeds on the Island" of Montreal; this decline is undoubtedly a result of intensive forest destruction throughout the region. In winter, as presently, it appears that it was sometimes quite numerous (D'Urban, 1857:141;

Vennor, 1860:426; Wintle, 1896:124), forest destruction is doubtless responsible for the decline suffered by this species since the middle of the last century.

SPECIMENS EXAMINED

R 3403, m. adult, 6 December 1959, Mont St. Hilaire

1, f. immature, 21 October 1964, Mont St. Hilaire

370, m. adult, 17 June 1966, Mont Yamaska

766, adult, 9 May 1966, Mont St. Hilaire

TAXONOMY

The specimens examined have been referred to atricapillus on the basis of their coloration.

Boreal Chickadee Parus hudsonicus littoralis Bryant

Casual fall and winter wanderer. This chickadee of the coniferous forest occurs only as a wanderer in the Monteregian Hills region, although it has been recorded as nesting further south in the province (Sutton Mountains) and in the highlands of New England (author's observations; A.O.U. Check-list, 1957:389). In recent years it was reported irregularly in small numbers at Hudson, Senneville, Mount Royal, Côte St. Luc, St. Helen's Island, Westmount, La Salle, and Chambly (P.Q.S.P.B., 1941:17; 1942:21; 1943:22; 1945:22; 1946:29; 1947:19, 1951:33). According to Caulfield (1890:150) and Wintle (1896:125), it was formerly a rare winter resident. Although few data concerning the former distribution of this species in the region, are available, it was doubtless formerly more numerous and possibly more regularly found in the region than at the present,

The present situation being the result of excessive forest clearing.

SPECIMENS EXAMINED

R 1935, f. adult, 24 November 1918, St. Hilaire

R 1936, m. adult, 22 October 1916, Chambly Canton

TAXONOMY

The two specimens examined have been referred to littoralis on the basis of their measurements and coloration.

Tufted Titmouse Parus bicolor Linnaeus

Accidental wanderer. It was recorded once in the Monteregian Hills region by several observers: St. Hilaire, one individual occasionally at a feeding station from mid-November to end of December 1961 (P.Q.S.P.B., 1961:28; Aud. Field Notes, 16 :315).

SITTIDAE

White-breasted Nuthatch Sitta carolinensis cookei Oberholser

PRESENT STATUS

Common permanent resident. This nuthatch is found in good numbers at all times of the year in the wooded areas of the Monteregian Hills region, although it appears to be almost absent in spring and early summer as a result of its most secretive habits during the nesting season. Nesting data were recorded as follows: Mount Royal, one pair displaying nesting activity, 6 May 1945 (P.Q.S.P.B., 1945:22); Hudson, one pair nested in bird box during summer 1945 (P.Q.S.P.B., 1945:22), one nest, 11 May 1958 (P.Q.S.P.B., 1958:32). During the field season of 1965 and 1966 the writer observed it

regularly (4-6) on all the Montereyan Hills, except Mount Royal, and adjacent wooded areas.

FORMER STATUS

Earlier writers (Hall, 1862:52; Wintle, 1882:109, 1896:123) list it as a permanent resident, but it is considered by Hall and Wintle as "scarce in summer" for reasons given above. Wintle (1896:123) mentions a nest at Outremont, and Caulfield (1890:150) believes that it may breed on Mount Royal. It appears that it was more numerous in winter but the published information pertains only to its abundance on Nun's Island in winter (D'Urban, 1857:144; Vennor, 1860:426). Although this species appears to have increased in numbers since the turn of the century in spite of forest destruction, the writer believes that it was formerly more numerous in the region than at the present and that it has been overlooked by earlier writers particularly in spring and summer.

SPECIMENS EXAMINED

3, m. immature, 21 October 1964, Mont St. Hilaire
 4, m. immature, 21 October 1964, Mont St. Hilaire
 13, m. adult, 27 October 1964, Mont Yamaska
 139, m. adult, 28 June 1965, Mont St. Hilaire
 201, m. adult, 11 May 1966, Mont St. Hilaire

TAXONOMY

The specimens examined have been referred to cookei on the basis of the coloration of the upper parts and of the measurements of the bill.

Red-breasted Nuthatch Sitta canadensis Linnaeus

PRESENT STATUS

Rare summer resident, uncommon winter resident. This nuthatch is never numerous in the Monteregian Hills region, particularly in summer, although it has been recorded in good numbers in spring and fall as the northern populations migrate south through the region. A few nesting records were obtained as follows: Vaucluse, a pair excavating a nest, 20 May 1945 (P.Q.S.P.B., 1945:22); Ile Perrot, five individuals, probably a family group, 12 July 1951 (P.Q.S.P.B., 1951:33); Mont Rouge, two adults and two young being fed by the adults, 23 June 1965, in a small hemlock stand (author's observations). Observations by the author in late May and June of 1965 and 1966 suggest nesting at the following places: Mont St. Hilaire, Mont Yamaska and Mont Shefford. It is likely that this species was more numerous in the region when pine (Pinus sp.) and hemlock (Tsuga canadensis) were more abundant than at the present.

FORMER STATUS

Hall (1862:52) lists this species as a "common" summer resident but all the other authors are unanimous to consider it rare in summer and winter, and slightly more numerous in spring and fall (Vennor, 1860:426; Caulfield, 1890:150; Wintle, 1882:109; 1896:124). Wintle (1896:124) and Caulfield (1890:150) suggest it may nest on Mount Royal and in the Montreal area. Apparently this species has diminished considerably in numbers around the middle of the last century as a result of extensive removal of coniferous species from the forest that in general cut-over at a rapid rate.

SPECIMENS EXAMINED

R 2014, m. adult, 7 September 1919, Brosseau
 8, m. immature, 26 October 1964, Mont St. Hilaire
 31, m. adult, 14 April 1965, Mont St. Hilaire
 226, f. adult, 23 May 1966, Mont St. Hilaire

CERTHIIDAE

Brown Creeper Certhia familiaris americana Bonaparte

PRESENT STATUS

Uncommon permanent resident. The Brown Creeper has been recorded in small numbers throughout the Monteregian Hills region, particularly in spring, fall and winter when it is less secretive (P.Q.S.P.B., 1935-1964; author's observations 1964-1967). A nest with young was discovered at Como, on 5 June 1966 (P.Q.S.P.B., Nest Record Card). Observations by the writer in late May and June of 1965 and 1966 suggest nesting at the following places: Mont St. Hilaire, Mont Rouge, Mont Yamaska, and Mont Shefford. During the non-breeding season of 1964, 1965 and 1966, it was found more numerous by the writer in the region, particularly in October, February and March. Forest destruction has doubtless been detrimental to this bird in recent years.

FORMER STATUS

This species has been recorded in winter in various numbers by all the authors who wrote about the birds of the region (D'Urban, 1857:141; Vennor, 1860:426; Hall, 1862:52; Caulfield, 1890:150; Wintle, 1882:109, 1896:123), but only Hall (op. cit.) lists it as

a summer resident. Wintle (1896:123) states that "a few probably breed.... here". These authors have undoubtedly overlooked this species in summer as it is most secretive; for this reason, the writer believes that it was formerly much more numerous in the area, particularly in summer, and that forest destruction has considerably reduced its numbers since the middle of the last century.

SPECIMENS EXAMINED

5, m. adult, 22 October 1964, Mont St. Hilaire

32, m. adult, 21 April 1965, Mont St. Hilaire

33, m. adult, 21 April 1965, Mont St. Hilaire

TAXONOMY

The specimens examined have been assigned to americana on the basis of their size and coloration when compared with specimens from the West coast of North America.

TROGLODYTIDAE

House Wren	<u>Troglodytes aedon</u>	Vieillot
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PRESENT STATUS

Uncommon summer resident. The House Wren was a common summer resident in the Monteregian Hills region until about 1961, nesting data having been recorded throughout the region but particularly from the Montreal area (Senneville, Hudson, Mount Royal). Since 1961, it appears to have decreased considerably in numbers, and was apparently not recorded at places where it was known to occur regularly (P.Q.S.P.B., 1935-1964; author's observations 1964-1967).

During two seasons of field work in the area, the author has not recorded this species a single time. It is known to occur in the region from 18 April (P.Q.S.P.B., 1952:12) to 9 October (P.Q.S.P.B., 1960:12). There appears to be no known reason for the recent decline of this species at least in the Montereian Hills region.

FORMER STATUS

Hall (1862:51) lists it as a "common" summer resident, but Wintle (1882:109; 1896:121) considers it "scarce" in summer, and mentions that it bred at Montreal in 1890 and 1891. Apparently this wren was never abundant in the region, although it has been recorded regularly in good numbers, in the past.

Winter Wren Troglodytes troglodytes hiemalis Vieillot

PRESENT STATUS

Rare summer resident. Although no nesting record as such has so far been recorded in the Montereian Hills region, except that reported by Terrill (1911:62), the Winter Wren undoubtedly breeds in small numbers as suggested by the following summer records: Mount Royal, one all summer in 1938 (P.Q.S.P.B., 1937-1938:7); Mont St. Hilaire (1-2) from late May to early July 1965, (1-4) from mid-May to 21 June 1966; Mont Rouge (1) 12 and 23 June 1965; Mont Yamaska (1,4) 26 May and 17 June 1966; Mont Johnson (1) 25 May 1966 (author's observations).

Common transient. This species has been recorded during the migrations in good numbers at various places throughout the region.

The author observed daily, in 1965 and 1966, four to twelve

individuals from late April until mid-May on Mont St. Hilaire, Mont Rouge and Mont Yamaska. It is known to occur in the area from 3 April (P.Q.S.P.B., 1953:12) to 11 November (P.Q.S.P.B., 1945:21). It has been reported irregularly in winter in recent years which suggest that a small number of individuals may at times winter in the region (P.Q.S.P.B., 1935-1964).

FORMER STATUS

Hall (1862:51), and Wintle in his first paper (1882:109) list it as a "scarce" summer resident. In his second paper, Wintle (1896:122) considers it a "common transient" and suggests that it is found only as a migrant in the Montreal area. Apparently, Hall and Wintle, (at least in his first paper), were giving a true account of the status of the species in the region. However, it is difficult to know if it was then more abundant than at the present. It is the author's opinion that it was somewhat more numerous then and that habitat destruction has slightly reduced its numbers since the turn of the century. Indeed, Terrill (1911:62) remarked that he "heard it singing throughout the nesting season in cedar swamps". At the present, most of the cedar swamps have disappeared from the region and this may account for the small numbers of individuals found in the region during the breeding season.

SPECIMENS EXAMINED

2, m. immature, 21 October 1964, Mont St. Hilaire
201, f. adult, 11 May 1966, Mont St. Hilaire

TAXONOMY

The two specimens examined have been assigned to hiemalis on the basis of their general coloration.

Carolina Wren Thryothorus ludovicianus (Latham)

Casual wanderer. This southern wren was recorded once in the Monterey Hills region: Fort Chambly (1) from early December 1956 to 15 February 1957, by several observers (P.Q.S.P.B., 1957:27).

Long-billed Marsh Wren Telmatodytes palustris (Wilson)

PRESENT STATUS

Rare summer resident. This wren was tolerably numerous in the marshes of the Monterey Hills region a few years ago. Drainage of marshes and their utilization for agricultural or other purposes has caused this species to vanish almost completely from the area, only a few observations being recorded in recent years (P.Q.S.P.B., 1935-1964; author's observations). Nesting records were obtained as follows: La Salle, one nest under construction, 16 May 1950 (P.Q.S.P.B., 1950:39); Laprairie, six nests, 26 June 1950 (P.Q.S.P.B., 1950:39); Senneville (Stoneycroft Pond), two occupied nests, 24 June 1951 (P.Q.S.P.B., 1951:34). Terrill (1922:115) mentions that it was nesting near St. Lambert. It is known to occur in the region from 1 May (P.Q.S.P.B., 1954:12) to 15 October (P.Q.S.P.B., 1955:11).

FORMER STATUS

According to Wintle (1896:122) this wren was a "scarce summer resident" which was observed on Nun's Island and which was known to breed at Laprairie. A few singing individuals were recorded by Caulfield (1889:414) on 24 May 1888 at Côte St. Paul (Montreal Island). Judging from the published data, it appears that this species has been overlooked in many cases, and it is the author's opinion that it was formerly fairly abundant in the marshes of the region and that it has declined at the same rate as that of the marshes.

Short-billed Marsh Wren Cistothorus platensis (Latham)

PRESENT STATUS

Rare local summer resident. This wren, which was recorded in the Monteregian Hills region from 7 May (P.Q.S.P.B., 1950:17) to 28 September (P.Q.S.P.B., 1959:13), is known to have nested in the area as follows: Montreal West (P.Q.S.P.B., 1938-1939:12), Côte St. Luc (P.Q.S.P.B., 1944:21), Montreal- near Botanical Garden- (P.Q.S.P.B., 1945:23), Notre-Dame-de-Grâce (P.Q.S.P.B., 1947:19), St. Lambert (P.Q.S.P.B., 1949:13 and specimen R 2046), St. Hubert (Mousley, 1934:439). It has apparently not been recorded in the region in recent years. In spite of a careful search for it in 1965 and 1966, the writer was unable to find it in the region.

FORMER STATUS

Although the present species is not mentioned by any of the earlier authors, the present writer believes that this wren was present

in the region in small numbers in suitable habitats and that it has been overlooked, being difficult to observe unless special efforts are made to do so.

SPECIMEN EXAMINED

R 2046, nesting, 3 July 1932, St. Lambert.

MIMIDAE

Northern Mockingbird Mimus polyglottos (Linnaeus)

Casual permanent resident. The Mockingbird, which has not been recorded by any of the earlier writers, appears to have arrived only recently in the Monteregian Hills region. It was recorded as nesting on two occasions: Como, one nest and 4 eggs (hatched on 25 July), 14 July 1960 (P.Q.S.P.B., 1960:27); St. Lazare (near Vaudreuil), one nest with four young, 5 June 1965 (P.Q.S.P.B., Nest Record Card). It was observed once on Mount Royal: (1) 8 May 1957 (P.Q.S.P.B., 1957:28). During the winter of 1963-1964, one individual was recorded at Baie d'Urfé from 10 November 1963 until 1 May 1964, and again from 17 October to the end of December 1964 (P.Q.S.P.B., 1963:31; 1964:30).

Catbird Dumetella carolinensis (Linnaeus)

PRESENT STATUS

Common summer resident. This species was recorded in the Monteregian Hills region from 5 May (P.Q.S.P.B., 1951:15) to 1 November (P.Q.S.P.B., 1949:13). Nesting records are numerous and come from many localities in the region (including Mount Royal), but particularly from the wooded parts (P.Q.S.P.B., 1936-1964).

During the summers of 1965 and 1966 the writer recorded it in good numbers on all the Monteregian Hills (except Mount Royal) and in the adjacent wooded areas of the plain. Two to six individuals were regularly observed from 9 May 1965 to 29 July 1965 (similar situation in 1966). It was observed exceptionally late at a feeder in St. Lambert from 4 to 24 December 1946 (P.Q.S.P.B., 1946:30).

FORMER STATUS

According to Hall (1862:51) and Wintle (1882:108; 1896:120) the Catbird was a "common summer resident" before the turn of the century. Wintle (1896:120) states that it nested in the City of Montreal and on Mount Royal. This species has apparently not suffered greatly from habitat destruction as it is mostly found in second growth vegetation, tangles and hedgerows which are abundant in the region, probably to a greater extent than formerly.

SPECIMENS EXAMINED

R 2067, unsexed, adult, 15 July 1899, Senneville
 55, m. adult, 9 May 1965, Mont St. Hilaire
 144, f. adult, 2 July 1965, Mont St. Hilaire
 183, m. adult, 17 May 1966, Mont St. Hilaire

Brown Thrasher Toxostoma rufum rufum (Linnaeus)

PRESENT STATUS

Uncommon summer resident. The Brown Thrasher was recorded in the Monteregian Hills region from 16 April (P.Q.S.P.B., 1959:13)

to 29 October (P.Q.S.P.B., 1964:13). Nesting data were reported from the following localities: Caughnawaga, L'Abord-à-Plouffe, Ste. Dorothée, Hudson, Summerlea, Senneville, Beaurepaire, Mount Royal (P.Q.S.P.B., 1936-1964); Ste-Anne de Bellevue (P.Q.S.P.B., Nest Record Card). During the summer of 1965 and 1966, the writer recorded it on all the Monteregian Hills, except Mount Royal; one to four individuals were regularly observed during that period. On Mont Shefford, eight to ten individuals were recorded on 6 July 1965, 15 and 17 June 1966, undoubtedly being favored by the extensive second growth and bushy vegetation of the western part of the mountain. A few have been reported late in fall and in winter but none have apparently survived throughout the winter (P.Q.S.P.B., 1936-1964; author's observations).

FORMER STATUS

According to Hall (1862:51) and Wintle (1882:108; 1896:120-121) this species was "common" in summer before the turn of the century. Terrill (1911:62) found it rare a little later and writes that "for some unaccountable reason this bird has apparently disappeared from the vicinity of Montreal. On 1st June, 1897, I flushed one from its nest and four eggs, in a hawthorn bush on the slope of Mount Royal. Previous to 1897, I had noticed a few pairs each season but have seen none since". It appears that the species has recovered from this decline as can be seen by the present summer population.

SPECIMENS EXAMINED

R 3357, unsexed adult, 14 January 1960, Mount Royal

R 3732, m. adult, 25 September 1966, Iberville

85, m. adult, 28 May 1965, Mont St. Hilaire

225, m. adult, 23 May 1966, Mont St. Hilaire

326, m. adult, 13 June 1966, Mont St. Hilaire

327, m. adult, 13 June 1966, Mont St. Hilaire

345, f. adult, 15 June 1966, Mont St. Hilaire

TAXONOMY

The specimens examined have been referred to rufum on the basis of their small measurements, particularly that of the tail, and of the coloration of the dorsal parts.

TURDIDAE

American Robin Turdus migratorius migratorius Linnaeus

PRESENT STATUS

Abundant summer resident. The Robin was recorded in the Monteregian Hills region from 6 March (P.Q.S.P.B., 1941:18) to mid-November (P.Q.S.P.B., 1935-1964). Nesting data were obtained by the writer on all the Monteregian Hills and in the adjacent lowland in 1965 and 1966, in addition to the data recorded previously from other sources in virtually every sector of the region (P.Q.S.P.B., 1935-1964 and Nest Record Cards; F.N. Smith Egg Collection; Bull. ornith., 1956-1966). Small numbers of Robins have been recorded fairly regularly in winter in the Montreal area for many years (P.Q.S.P.B., 1935-1964). After having suffered greatly from pesticide

spraying in the early 1960's, at the height of the Dutch elm disease epidemic, the Robin has recovered successfully and appears to be at least as abundant as it was previously.

FORMER STATUS

Hall (1862:51) and Wintle (1882:108) list it as a "common" summer resident. Wintle (1896:128) mentions that it is an "abundant summer resident" and that it "breeds in the city and in Mount Royal Park". He lists also a few winter records. D'Urban (1857:141) and Vennor (1860:426) have recorded a few individuals in winter. The Robin is apparently as numerous throughout the region at the present as it was formerly. The writer suspects nevertheless that it has perhaps increased slightly in numbers as more habitats have become available as a result of forest destruction.

SPECIMENS EXAMINED

Five specimens have been collected on Mont Yamaska, Mont Shefford and Mont St. Hilaire during the nesting seasons of 1965 and 1966.

TAXONOMY

The specimens examined have been referred to migratorius on the basis of the light coloration of the dorsal parts.

Black Thrush Turdus infuscatus (Lafresnaye)

Hypothetical. A black thrush was observed by several persons on Mount Royal from 19 December 1948 to 19 March 1949 and was identified as the present species (P.Q.S.P.B., 1948:34; 1949:30).

Since the specimen was not collected for further identification, the record is here considered as questionable.

Wood Thrush Hylocichla mustelina (Gmelin)

PRESENT STATUS

Common summer resident. This thrush of mature deciduous forests was recorded in the Monteregian Hills region for the first time when a large colony was discovered at Mont St. Hilaire during the summer of 1936 (P.Q.S.P.B., 1935-1936:6). Although it appears that this species has arrived in the area in 1936, it is the author's opinion that it was already present here at that time and that it had been overlooked by all the observers, probably as a result of its small population or of the restricted habitats in which it was found. Nevertheless, it has increased in numbers in recent years and was reported as nesting (based on nests or observations during the breeding season) from the following localities: Mont St. Hilaire, Rougemont, Mount Royal, Mont Johnson, Hudson, Senneville, Ile Perrot, Côte Ste Catherine, Rigaud (P.Q.S.P.B., 1935-1964). In 1965 and 1966, the writer found it in good numbers from 19 May to 29 July on all the Monteregian Hills, Mount Royal included (4-6 in June 1966). Two clutches of eggs were collected on Mount Royal on 5 June 1950, and 20 May 1954 (F.N. Smith Egg Collection, 755 1/3, 2/3). Nests have been found by the writer on all the Mountains, except Mount Royal and Mont Brome, in mesic or xeric, moderately dense, beech (Fagus grandifolia) stands. During the same period, it was recorded only in small numbers in

the St. Lawrence Lowland, in mesic beech stands near Granby, Farnham, Ste. Madeleine, West Shefford and St. Mathias. It was recorded in the region from 1 May to 30 September (P.Q.S.P.B., 1961:14). The writer believes that the recent increase in the numbers of this bird throughout the region is the result of lack of competition in the habitat it occupies.

FORMER STATUS

The statements concerning the past status of this thrush in the region are contradictory. Hall (1862:51) lists it as a "common" summer resident; Wintle (1882:108) shares the same opinion. However, in 1896 Wintle (1896:126) states that it is an "accidental visitant"; he adds that it was reported in the Eastern Townships but that he has himself not recorded it in the Montreal area. Although the information is contradictory and sketchy the author thinks that the Wood Thrush was doubtless found in small numbers in the deciduous forest of the region and that it has been overlooked by the observers of the time.

SPECIMENS EXAMINED

43, m. adult, 6 May 1965, Mont St. Hilaire
 122, m. adult, 15 May 1965, Mont St. Hilaire
 123, f. adult, 17 June 1965, Mont St. Hilaire
 224, m. adult, 21 May 1966, Mont St. Hilaire

Hermit Thrush

Hylocichla guttata faxoni Bangs and Penard

PRESENT STATUS

Rare summer resident. This thrush was reported in the Monteregian

Hills region from 8 April (P.Q.S.P.B., 1945:12) to 20 November (P.Q.S.P.B., 1964:13), and exceptionally as late as 1 January (P.Q.S.P.B., 1951:34); however only a very few individuals appear to spend the summer in the region. No nesting data have been obtained in recent years but summer observations suggest that it may breed as follows: Hudson Heights (4 young) 16 July to 8 August 1944 (P.Q.S.P.B., 1944:22). Farnham (3) 22 July 1957 (Bull. ornith., 1957, 2 (4):10). Mont St. Hilaire (1-4) 6 May to 20 July 1965; a female with a breed patch collected on 4 June 1965; (1-4) 15 May to 5 June 1966; Mont Yamaska (4) 26 May 1966; Mont Rouge (2) 3 June 1966 (author's observations).

FORMER STATUS

Hall (1862:51) lists this species as a "common" summer resident, along with Wintle (1896:128) who states that it "is the most common thrush here", he adds that he found a nest at St. Bruno on 24 May 1885., and that it "breeds on Mount Royal Park". It is surprising that such a situation was existing then; only a few years later, Terrill (1911:63) writes that it was a "scarce bird on the Island in the nesting season". Undoubtedly, this Thrush was more numerous in the region before the turn of the century than at the present. Forest destruction certainly accounts for the present scarcity of this bird in the area.

SPECIMENS EXAMINED

44, m. adult, 6 May 1965, Mont St. Hilaire

107, f. adult, 4 June 1965, Mont St. Hilaire

212, m. adult, 20 May 1965, Mont St. Hilaire

R 2125, m. juvenile, 27 July 1920, Ste. Thérèse

R 2143, f. adult, 4 October 1915, Chambly

TAXONOMY

The adult specimens examined have been referred to faxoni on the basis of their dorsal coloration, which proved to be similar to that of specimens from adjacent regions.

Swainson's Thrush Hylocichla ustulata (Nuttall)

PRESENT STATUS

Uncommon transient. This thrush which is not known to have bred in the Monteregian Hills region in recent years, was recorded in small numbers from 3 May (author's observations) to 6 June (P.Q.S.P.B., 1950:17), and from 20 August (P.Q.S.P.B., 1952:12) to 11 November (P.Q.S.P.B., 1962:17). The writer recorded it as follows on the Monteregian Hills: Mont St. Hilaire (1-5) 3 May to 24 May 1965, (1-4) 15 May to 4 June 1966; Mont Yamaska (2) 26 May 1966; Mont Rouge (1) 3 June 1966.

FORMER STATUS

Wintle (1882:108) mentions that it is "rare" on the Island of Montreal but that it "nests in June". Later, the same author (1896:127-128) lists it as a "scarce transient visitant" and states that "a nest with eggs" was apparently discovered "a number of years ago, on the Island of Montreal". Therefore it appears that the status of this thrush has changed little since the turn of the century if one does not accept the breeding record given

by Wintle. On the other hand, if the breeding record is considered as valid, it implies that a small population may have been nesting in the Monteregian Hills region (this view is shared by the writer), which is likely as it is presently known to nest south of the study area (author's observations), and that it disappeared from the region since the turn of the century, doubtless as a result of habitat destruction.

SPECIMEN EXAMINED

R 2104, f. immature, 4 October 1915, Chambly.

Gray-cheeked Thrush Hylocichla minima (Lafresnaye)

Rare migrant. None of the earlier writers has mentioned this species, except Wintle (1896:127) who suspects that it may occur in the Montreal area as a migrant. In recent years, it was recorded in small numbers throughout the Monteregian Hills region, from 17 May (P.Q.S.P.B., 1963:14) to 2 June (P.Q.S.P.B., 1949:13), and from 6 September (P.Q.S.P.B., 1955:11) to 9 November (P.Q.S.P.B., 1947:11).

Veery Hylocichla fuscescens fuscescens (Stephens)

PRESENT STATUS

Common summer resident. This thrush of mesic or wet habitats was recorded in the Monteregian Hills region from 27 April (author's observations 1966) to 3 October (P.Q.S.P.B., 1957:14). Nesting data were recorded as follows: Ste. Dorothée (P.Q.S.P.B., 1950:41; 1952:29); Mount Royal (P.Q.S.P.B., 1949:21); Verdun

(F.N. Smith Egg Collection, 756 6/4); Mont St. Hilaire (P.Q.S.P.B., Nest Record Cards, author's observations 1965-1966; Mont St. Bruno, Mont Rouge, Mont Yamaska, Mont Brome and Mont Shefford (author's observations 1965-1966). On these visits to Mont Johnson, in June of 1965 and 1966, the author has recorded seven singing individuals which suggest that the species is also nesting there. It was recorded only in small numbers in the wooded parts of the plain adjacent to the Monteregian Hills, particularly in mesic woods and along wooded streams.

FORMER STATUS

Hall (1862:51) lists this thrush as a "scarce" summer resident but Wintle (1882:108; 1896:126-127) considers it a "common summer resident" on the Island of Montreal and states that it "breeds in Mount Royal Park". Although it appears that the status of this bird has not changed since the turn of the century, it is the author's opinion that it is presently less numerous than it was then, as a result of prolonged and extensive habitat destruction.

SPECIMENS EXAMINED

Fifteen specimens collected by the writer or already in the Redpath Museum were studied.

TAXONOMY

The nesting material (15 specimens) has been assigned to fucescens on the basis of the coloration of the dorsal parts, which ranged from light brownish olive to rich olive brown, and averaged very slightly darker than the birds from southern Ontario. The specimens examined were identical to two specimens from northern New Brunswick,

but had their under parts and flanks paler than those from Newfoundland.

Eastern Bluebird Sialia sialia (Linnaeus)

PRESENT STATUS

Uncommon summer resident. In spite of recent catastrophies on its wintering grounds and during its migrations, the Bluebird is holding its own in the Monteregean Hills region. Small numbers and nesting data were regularly reported in recent years throughout the region (P.Q.S.P.B., 1935-1964). From 8 May to 29 July 1965 a few pairs were regularly observed by the writer in the Mont St. Hilaire area but no observation have been obtained in 1966. This species was recorded in the region from 11 March (P.Q.S.P.B., 1946:12) to 22 November (P.Q.S.P.B., 1942:22).

FORMER STATUS

Hall (1862:51) and Wintle (1896:129) consider the Bluebird a "common" or an "abundant summer resident", the latter mentions that it bred on Mount Royal where nests were discovered. Apparently this species is considerably less numerous at the present in the region than formerly. There seems to be several reasons for this situation: catastrophies on the wintering grounds and during the migrations, and perhaps extensive use of pesticides in recent years may account to a large extent for the present situation, although habitat destruction may also have played a rôle in its decline.

SYLVIIDAE

Blue-gray Gnatcatcher Polioptila caerulea (Linnaeus)

Accidental wanderer. Wintle (1896:126) mentions a specimen supposedly collected on the Island of Montreal but the evidence as to the authenticity of the specimen is dubious. Two sight records were recorded in recent years: Mount Royal (Westmount Mountain) (1) 31 May 1962; Granby (1) 25 August 1963 (Bull. ornith., 1963, 8 (4):4).

Golden-crowned Kinglet Regulus satrapa satrapa Lichtenstein

PRESENT STATUS

Common transient, uncommon winter resident. This kinglet, which is not known to nest in the Monteregian Hills region, was recorded from 7 September (P.Q.S.P.B., 1958:15) to 27 May (P.Q.S.P.B., 1961:29). It is sometimes numerous in the wooded parts of the region from mid-September to mid-October, and from late April to mid-May (P.Q.S.P.B., 1935-1964; author's observations). The writer observed it in good numbers (4-8) from 3 to 24 May 1965 and 1966 at Mont St. Hilaire and adjacent wooded parts. Observations were recorded in early May 1965 and 1966 at Mont Shefford, Mont Yamaska, Mont Brome, Mont Johnson, Mont Rouge, and all the adjacent wooded sectors. In winter it is considerably less numerous, only a few individuals being irregularly reported (P.Q.S.P.B., 1935-1964). During the winter of 1964-1965, it was recorded on 31 different days by the writer at Mont St. Hilaire.

FORMER STATUS

Hall (1862:51) lists it as a "scarce summer resident", but Wintle (1896:125) considers it only as a "common transient visitant", and Caulfield (1890:150) adds that it is "occasional" in winter. Although the forests of the St. Lawrence Lowland and of the Monteregian Hills undoubtedly never offered good nesting habitats to this species, it is not unlikely that a few pairs were nesting throughout the region before the turn of the century, particularly at the time Hall wrote his paper. The disappearance of the few coniferous stands that were probably growing here and there in the area, has certainly caused the disappearance of this species as a breeding bird in the Monteregian Hills region.

SPECIMENS EXAMINED

R 2192, m. adult, 10 September 1922, Brosseau

R 3695, f. adult, 16 September 1966, Montreal (Mc Gill Campus)

Ruby-crowned Kinglet Regulus calendula calendula (Linnaeus)

PRESENT STATUS

Casual summer resident, common transient. This kinglet was recorded in the Monteregian Hills region from 12 April (P.Q.S.P.B., 1944:12) to 12 December (P.Q.S.P.B., 1953:13). It is rarely seen in summer but its nesting was reported as follows: Ste. Rose, one nest and 5 eggs, 7 June 1945 (P.Q.S.P.B., 1945:24); Senneville, one nest with five eggs and a cowbird's egg, 28 June 1946,

none of them hatched (P.Q.S.P.B., 1946:20); Senneville, one pair nested, six young out of the nest, 11 July 1948 (P.Q.S.P.B., 1948:35). From late April to mid-May and from mid-September to late October it can be observed in good numbers in the wooded parts of the region. The writer found it numerous in October 1964, from 3 May to 13 May 1965, and from 16 May to 24 May 1966 at Mont St. Hilaire and adjacent wooded parts; it was also recorded on Mont Rouge, Mont Johnson and Mont Yamaska during the same period.

FORMER STATUS

Hall (1862:51) lists it a "scarce" summer resident but Wintle (1896:125) found it "common" only during migrations. This species was undoubtedly nesting in small numbers throughout the area before the turn of the century as suggested by Hall. Wintle appears to have overlooked it in summer. Forest destruction, particularly coniferous stands, doubtless account for the scarcity of this bird in summer.

SPECIMENS EXAMINED

12, m. adult, 27 October 1964, Mont Yamaska
 179, f. adult, 16 May 1966, Mont St. Hilaire
 180, f. adult, 16 May 1966, Mont St. Hilaire
 R 2210, m. adult, 5 October 1924, Chambly

MOTACILLIDAE

Water Pipit Anthus spinoletta rubescens (Tunstall)

Uncommon transient. The Water Pipit was recorded in small numbers throughout the Monteregian Hills region from 4 April (P.Q.S.P.B., 1953:13) to 25 May (P.Q.S.P.B., 1958:15), and from 28 August

(P.Q.S.P.B., 1960:13) to 24 November (P.Q.S.P.B., 1956:13). It appears to have diminished considerably in numbers in recent years. The writer has not recorded it in the region from the fall of 1964 to the spring of 1967.

FORMER STATUS

It is listed by Hall (1862:51) as a "scarce" fall migrant. Wintle (1896:119-120) found it "common" during migrations, particularly in fall. Apparently, this bird has decreased in numbers as a migrant through the region since the turn of the century. The writer cannot account for such a situation as this bird seems to keep its own in other parts of its migratory range.

BOMBYCILLIDAE

Bohemian Waxwing Bombycilla garrulus (Linnaeus)

Irregular winter resident. Flocks of various sizes were irregularly recorded in the Monteregian Hills region, particularly in the Montreal area, from 30 November (P.Q.S.P.B., 1961:14) to 10 April (P.Q.S.P.B., 1962:17). Flocks very seldom group more than thirty individuals (P.Q.S.P.B., 1935-1964). All the earlier writers (D'Urban, 1857:144; Vennor, 1860:427; Hall, 1862:57; Caulfield, 1890:149; Wintle, 1896:108; Terrill, 1916:15-16; Lewis, 1932:82-83) are unanimous to state that this species occurs irregularly in the area in various numbers.

Cedar Waxwing

Bombycilla cedrorum (Vieillot)PRESENT STATUS

Common summer resident; uncommon and irregular winter resident.

Although the Cedar Waxwing can be observed in the Monterey Hills region at all times of the year it is more numerous from late April to mid-October (P.Q.S.P.B., 1935-1964; author's observations 1964-1967). Small flocks only have been irregularly recorded in winter (op. cit.). Nesting data were recorded from many localities throughout the region (P.Q.S.P.B., 1935-1964; Nest Record Cards; author's observations 1965, 1966).

FORMER STATUS

Hall (1862:51) list it as a "common" summer resident but Caulfield (1890:149) and Wintle (1896:108) say that it was "abundant". Wintle (op. cit.) adds that it "breeds in the city and in Mount Royal Park". Caulfield (op. cit.) mentions that it is "occasionally" seen in winter and Wintle (op. cit.) states that "flocks of these birds appear in the city..." at that time of the year. The status of this bird has apparently changed little since the turn of the century, although it is perhaps at the present somewhat less numerous than it was formerly as a result of habitat destruction.

SPECIMENS EXAMINED

The writer has examined six specimens collected at Mont St. Hilaire and Mont Yamaska during the summer of 1965 and 1966.

LANIIDAE

Northern Shrike Lanius excubitor Linnaeus

Uncommon winter resident. The Northern Shrike occurs in small numbers throughout the Monteregian Hills region from 8 October (P.Q.S.P.B., 1961:14) to 9 May (P.Q.S.P.B., 1945:12). The writer observed it as follows in the fall of 1964: Beloeil (1) 24 November; St. Jean Baptiste (1) 16 December; Montreal (Mc Gill Campus) (1) 11 December. Most of the earlier writers (D'Urban, 1857:143; Vennor, 1860:427; Caulfield, 1890:149) mention that a few individuals have been observed in winter but Wintle (1896:109) lists it as a "common winter visitant". The numbers of migrating individuals of this northern staggler undoubtedly vary considerably from year to year; nevertheless, it appears that it is not as numerous in the region in winter as it was in Wintle's time, and the writer cannot offer any explanation for this decline.

Loggerhead Shrike Lanius ludovicianus Linnaeus

PRESENT STATUS

Uncommon summer resident. The Loggerhead Shrike appears to have declined considerably in numbers in recent years, although it can still be observed in the Monteregian Hills region in small numbers. It was reported in the region from 19 March (P.Q.S.P.B., 1963:15) to 30 November (P.Q.S.P.B., 1962:17). Nesting data were recorded as follows: Ville St. Pierre (Jacques Cartier), two nests with 5 eggs, 14 and 28 May 1943 (F.N. Smith Egg Collection, 622E 5/5); Pont Viau, one nest and 4 eggs, 12 May 1918 (F.N. Smith Egg Collection, 622E 2/4); Kensington (Jacques Cartier Co.), one nest and 6 eggs,

3 May 1903 (F.N. Smith Egg Collection, 622E a/6); Town of Mount Royal, Montreal West, Côte St. Luc, one nest at each locality in 1942 (P.Q.S.P.B., 1942:25); Richelieu, one nest and 5 eggs, 3 June 1950 (P.Q.S.P.B., 1950:42); Senneville, one pair feeding young, 1 July 1954 (P.Q.S.P.B., 1954:24); West Shefford, one nest under construction, 5 May 1962 (P.Q.S.P.B., 1962:31); Pointe Claire, 3 young raised, in 1963 (P.Q.S.P.B., 1963:33); Lachine, one nest and 3 young, 13 June 1963 (P.Q.S.P.B., Nest Record Card). During two summers of field work in the region the writer has observed it only once: plain near Mont St. Hilaire (1) 21 April 1965. The writer cannot offer any explanation for the present decline of this species.

FORMER STATUS

Hall (1862:50) and Wintle (1896:109-110) list it as a "common summer resident"; Wintle (op. cit.) mentions several nests found in the Montreal area. It appears that the numbers of this bird have remained fairly stable until quite recently, and that it has declined rather dangerously in recent years (i.e., since about 1958).

STURNIDAE

Common Starling Sturnus vulgaris Linnaeus

Abundant permanent resident. This introduced species from the Old World was recorded for the first time in the province of Quebec in 1917 at Betchouane (Godfrey, 1966:313). It was first reported as nesting in the Montreal area when a breeding pair was observed at St. Lambert in the summer of 1922 (Terrill, 1924:58).

Thereupon it was regularly recorded in the Montereian Hills region and has increased tremendously. In 1931, flocks counting between 25,000 and 30,000 individuals were observed at St. Lambert (P.Q.S.P.B., 1943:25). In recent years, it was observed throughout the region in large numbers at all times of the year, although it is somewhat less numerous than previously, and nests everywhere in the region, even in the middle of the best forest stands, competing with other species nesting in cavities (P.Q.S.P.B., 1935-1964; author's observations 1964-1967). It appears that a small portion of the local population may migrate south in winter as it does not appear to be as numerous then as at other times of the year (author's observations, 1964-1967).

VIREONIDAE

Yellow-throated Vireo Vireo flavifrons Vieillot

PRESENT STATUS

Uncommon summer resident. This vireo was recorded in small numbers throughout the Montereian Hills region from 4 May (P.Q.S.P.B., 1954:12) to 28 September (P.Q.S.P.B., 1963:15). It was reported in the nesting season as follows: Ile Bizard, one pair and a nest, 14 June 1960 (Bull. ornith., 1960, 5 (4):10); Maple Grove (1) 9 June 1962 (Bull. ornith., 1962, 7 (4):5); St. Lambert, 22 July 1921, and Senneville, 10 July 1937, fledglings fed by parents at both places (Terrill, 1961:6); Mont St. Hilaire (2) 24 and 28 June 1965, (2-3) irregularly 18 May to 29 June 1966 (author's observations); Mont Yamaska (2) 3 June 1965, (4) 26 May 1966 (author's observations).

This species is apparently more numerous during migrations (P.Q.S.P.B., 1935-1964; author's observations 1965-1967).

FORMER STATUS

Hall (1862:50) and Wintle (1896:111) have listed the present species as a "scarce" and "rare summer resident". Its status has apparently not changed in the region since the turn of the century.

SPECIMENS EXAMINED

99, m. adult, Mont Yamaska, 3 June 1965

240, m. adult, Mont Yamaska, 26 May 1966

R 2263, f. adult, near Chambly, 30 May 1926

Solitary Vireo Vireo solitarius solitarius (Wilson)

Rare transient. The status of this vireo has apparently not changed since the turn of the century as Wintle (1896:111) lists it as a "rare transient visitant". In recent years it was reported in small numbers throughout the Monteregian Hills region from 2 May (P.Q.S.P.B., 1949:13) to 22 May (P.Q.S.P.B., 1963:15). and from 30 August (P.Q.S.P.B., 1955:27) to 28 October (P.Q.S.P.B., 1963:15). It is not known to summer in the region. The writer observed it as follows: Mont St. Hilaire (2) 20 and 21 May 1966.

SPECIMENS EXAMINED

215, m. adult, 21 May 1966, Mont St. Hilaire

R 2273, f. adult, 17 September 1922, Brosseau.

Red-eyed Vireo

Vireo olivaceus (Linnaeus)PRESENT STATUS

Abundant summer resident. This vireo was reported in good numbers in the wooded parts of the Montereian Hills region from 2 May (P.Q.S.P.B., 1955:11) to 19 October (P.Q.S.P.B., 1952:12). It is known to breed in the region where it is found in summer (author's observations, 1965-1966; P.Q.S.P.B., 1935-1964 and Nest Record Cards, F.N. Smith Egg Collection). In 1965 and 1966, the author observed it in good numbers (6-10) on all the Montereian Hills and adjacent wooded parts, in late May, during June and July; many nests were discovered both on the Montereian Hills, except Mount Royal, and in the Lowland.

FORMER STATUS

According to Hall (1862:50) and Wintle (1882:109; 1896:110) the Red-eyed Vireo was "common" or "abundant" in summer. Wintle (1896:110) mentions that it bred "in the city and in Mount Royal Park". Although it appears that the status of this bird has not changed since the turn of the century, it is the author's opinion that it is presently more numerous, having doubtless been favored by forest clearing and the ensuing second growth vegetation.

SPECIMENS EXAMINED

Sixteen specimens from the Montereian Hills region, either collected by the writer or in the Redpath Museum, have been studied.

Philadelphia Vireo Vireo philadelphicus (Cassin)

Rare summer resident. The writer observed a pair attending a nest at Mont Yamaska on 2 July 1965 and collected the male; this constitutes, as far as known by the writer the southernmost breeding record of the species for the province of Quebec (Godfrey, 1966:318-319). Summer records from Granby (3 individuals, 6 June 1961), Rosemere (1, 11 July 1961) (Bull. ornith., 1961, 6 (4):11), Senneville (1, 14 June 1947) (P.Q.S.P.B., 1947:20), and Harrington, Argenteuil County (1, 3 June 1960) (P.Q.S.P.B., 1960:30) suggest that the species may perhaps nest there also, if correctly recorded. The species was otherwise recorded in small numbers during migrations from 8 May (P.Q.S.P.B., 1955:11) to 4 October (P.Q.S.P.B., 1949:13). Wintle (1896:110-111) or any of the earlier writers do not appear to have recorded this species in the region; they have perhaps overlooked it.

SPECIMENS EXAMINED

145, m. adult, 2 July 1965, Mont Yamaska

R 2302, m. adult, 24 May 1919, Chambly

Warbling Vireo Vireo gilvus (Vieillot)

PRESENT STATUS

Uncommon summer resident. This inconspicuous bird was recorded in small numbers throughout the Monteregian Hills region from 23 April (P.Q.S.P.B., 1953:13) to 2 October (P.Q.S.P.B., 1954:24). Summer

observations have been reported in good numbers and suggest a uniform distribution in the region (P.Q.S.P.B., 1935-1964; Bull. ornith., 1956-1966); author's observations, 1965-1966. The writer observed it as follows: Mont St. Hilaire (2) 28 and 2 June, (1) 1 July 1965; Mont Shefford (2) 6 July 1965; Beloeil (2) 6 June 1966.

FORMER STATUS

Hall (1862:50) lists it as a "rare" summer resident but Wintle (1896:111), who has doubtless overlooked it, considers it as a "scarce transient visitant", and mentions that two specimens were collected on the Island of Montreal in May of 1886 and 1887. This vireo has apparently increased slightly in numbers since the turn of the present century. Since it prefers semi-open forest stands and ornamental trees along roads and streams, particularly elms and poplars, it has no doubt benefited to a large extent from man's modification on the natural forest communities.

PARULIDAE

Black-and-white Warbler Mniotilta varia (Linnaeus)

PRESENT STATUS

Common transient, uncommon summer resident. This warbler, which was recorded in the Monteregian Hills region from 28 April (P.Q.S.P.B., 1964:13) to 30 October (P.Q.S.P.B., 1952:12), is sometimes quite numerous during migrations, particularly in spring. In summer it is found in very small numbers in the wooded parts of the region. A pair, which has undoubtedly nested, was recorded in summer on Mount Royal, until 9 July 1958 (P.Q.S.P.B., 1958:35).

In 1965 and 1966, the writer has recorded irregularly two to four individuals, until the middle of the summer on all the Monteregian Hills, except Mount Royal, and in the adjacent wooded parts of the Lowland. These birds were doubtless breeding, although no nest has been found.

FORMER STATUS

Hall (1862:50) and Wintle (1882:109) list this species as a "common" summer resident, but Wintle (1896:111-112) considers it as a "scarce summer resident" which used to nest on Mount Royal. Vennor (1861:361-362) found it "very abundant" in spring. Apparently, this warbler has steadily decreased in numbers since the middle of the last century until the present. Forest destruction is undoubtedly the chief factor for such a decline.

SPECIMENS EXAMINED

Nine specimens, collected by the writer or in the Redpath Museum, from Mont St. Hilaire, Mont Rouge, Brosseau and Beaconsfield, represent migrating and nesting birds.

Worm-eating Warbler Helmintheros vermivorus (Gmelin)

Hypothetical. An individual of the species was apparently identified at Sainte-Thérèse on 27 May 1957 (Bull. ornith., 1963, 8 (4):7); pending additional information on the distribution of this species in the province of Quebec, the present record is considered here as hypothetical.

Golden-winged Warbler Vermivora chrysoptera (Linnaeus)

Hypothetical. This species was recorded twice from Mount Royal: one individual on 17 May 1962, and on 5 June 1964 (P.Q.S.P.B., 1964:34). Wintle (1882:109), undoubtedly mistaken, states that it "arrives early in spring". None of these records ~~is~~ accepted here owing to the circumstances of the observations.

Tennessee Warbler Vermivora peregrina (Wilson)

PRESENT STATUS

Common transient. This warbler can be observed in good numbers from 3 May (P.Q.S.P.B., 1954:12) to 13 June (P.Q.S.P.B., 1952:12), and from 10 August (P.Q.S.P.B., 1952:12) to 15 October (P.Q.S.P.B., 1948:23). Although it was reported several times in summer, it is not known to breed in the Monteregian Hills region: Senneville (1) 11 July 1955, 18 June 1956, 12 July 1961, 9 July 1962, 4 July 1963; Hudson Heights (Pine Lake) (1) 1 July 1962; St. Bruno (1) 20 July 1956 (P.Q.S.P.B., 1955:27; 1956:26; 1961:30; 1962:31; 1963:34). These summer reports doubtless represent early migrants or birds that did not reach the breeding grounds. The writer has observed 2 to 4 individuals daily at Mont St. Hilaire from 12 May to 7 June; two birds seen on 26 July were undoubtedly early migrants. In 1966, 2 to 4 birds were seen on 21, 22 and 23 May.

FORMER STATUS

Wintle (1896:113) lists it as a "common transient visitant". It is not listed by any of the other authors, although it certainly occurred throughout the region in good numbers during the migrations.

SPECIMENS EXAMINED

Eight specimens from Brosseau and Mont St. Hilaire, which represent migrating individuals, have been studied.

Orange-crowned Warbler Vermivora celata (Say)

PRESENT STATUS

Rare transient. This warbler was apparently recorded on less than ten occasions since 1950 throughout the Monteregian Hills region (P.Q.S.P.B., 1935-1964), between 3 May (P.Q.S.P.B., 1953:29) and 13 May (P.Q.S.P.B., 1964:35), and from 1 September (P.Q.S.P.B., 1963:34) to 23 November (P.Q.S.P.B., 1958:36).

FORMER STATUS

It appears that this warbler was rare in the past, as Wintle (1896:112) lists it as a "rare transient visitant" after a specimen that he collected on Mount Royal on 21 May 1890 (Wintle 1896:112). Mousley (1923:168-169) mentions a specimen taken by Wintle at Côte St. Antoine on the same date. In spite of the slight confusion concerning the locality (less than 5 miles), as both authors are talking about the same specimen, this record is here accepted as valid.

Nashville Warbler

Vermivora ruficapilla ruficapilla (Wilson)PRESENT STATUS

Uncommon transient; rare summer resident. This warbler, which is considerably more numerous throughout the Monteregian Hills region during the migrations than during the nesting season, was recorded from 1 May (P.Q.S.P.B., 1956:12) to 27 October (P.Q.S.P.B., 1935-1936:7). Nesting data are few but establish beyond doubt that the species nests at least in the Montreal area: Ile Jésus (Ste. Dorothée), one nest and 2 eggs, 25 May 1950 (P.Q.S.P.B., 1950:43). Ste. Dorothée (Ile Jésus), two nests with 5 eggs each, 26 May 1949 (P.Q.S.P.B., 1949:32); one nest with 4 eggs (2 of Molothrus ater), 4 June 1943 (Terrill, fide W.J. Brown, 1961:6) Senneville, one nest and 3 eggs of Molothrus ater, 3 June 1939 (Terrill, 1961:6). A summer sight record at Farnham on 7 July 1958 suggests its nesting there also (Bull. ornith., 1958, 3 (4):14). The writer has recorded it as follows: Mont St. Hilaire (2) 12 May 1965, (1) 1 June 1965, (2) 18 May 1966. In spite of a careful search for the species, it was not discovered in the course of the field studies of the writer during the nesting season of 1965 and 1966.

FORMER STATUS

Vennor (1861:361) found it "rare" in the Montreal area but mentions that "a few years ago the Nashville Warbler was not so rare on our mountain as at present". Hall (1862:50) lists as "rare" from June to September and Wintle (1896:112), who has observed it only twice,

mentions that it is a "scarce transient visitant", and adds that it was reported to him as nesting "in swampy parts of woods on the Island". This species has no doubt diminished considerably in numbers since the turn of the century as a result of extensive forest destruction, although earlier writers do not appear to have evaluated its real status, having doubtless overlooked it in summer.

SPECIMENS EXAMINED

R 2347, m. adult, 15 June 1919, Morrison
 R 2337, f. juvenile, 17 September 1922, Brosseau
 196, m. adult, 18 May 1966, Mont St. Hilaire

TAXONOMY

The specimens examined have been assigned to ruficapilla the population of Eastern North America (A.O.U. Check-list, 1957:484).

Parula Warbler Parula americana (Linnaeus)

PRESENT STATUS

Uncommon transient. This small warbler, which is not known to breed in the Monteregian Hills region, was reported from 2 May (P.Q.S.P.B., 1954:12) to 5 June (P.Q.S.P.B., 1955:11), exceptionally as late as 23 June (P.Q.S.P.B., 1959:14), and from 2 August (P.Q.S.P.B., 1952:12) to 15 October (P.Q.S.P.B., 1955:11). It was never recorded in large flocks during migrations as some of the other species (P.Q.S.P.B., 1935-1964; author's observations 1964-1967).

The author observed it as follows: Mont St. Hilaire (2) 12 and 14 May, 1 June 1965, none in 1966.

FORMER STATUS

Wintle (1882:109; 1896:113) found it a "common transient visitant". If Wintle's statement is correct this species has apparently declined since the turn of the century, undoubtedly as a result of habitat destruction.

SPECIMEN EXAMINED

R 2361, m, age not given, 4 September 1921, Ste. Thérèse.

Yellow Warbler Dendroica petechia aestiva (Gmelin)

PRESENT STATUS

Abundant summer resident. This warbler occurs in good numbers in suitable habitats throughout the Monteregian Hills region. It was reported from 30 April (P.Q.S.P.B., 1954:13) to 4 October (P.Q.S.P.B., 1958:16). It is abundant in certain places; thirteen nests have been discovered at Summerlea (Island of Montreal) on 28 May 1949, in a small bushy area (P.Q.S.P.B., 1949:32). The writer observed regularly 4 to 6 individuals at Mont St. Hilaire from 15 May to 20 July 1965, and from 18 May to 21 June 1966; it was also recorded during the nesting season of 1965 and 1966 in good numbers (4-6) at Mont Yamaska, Mont Shefford, Mont Brome, Mont Johnson and Mont St. Bruno.

FORMER STATUS

All the earlier writers (Vennor, 1861:352; Hall, 1862:178; Wintle, 1882:109; 1896:114) are unanimous to list this species as an "abundant" summer resident. They all state that it breeds in the region and that its nests have been found in the city of Montreal and on Mount Royal (Wintle, 1896:114; Vennor, 1861:352). There is no doubt in the author's mind that habitat destruction has considerably reduced the numbers of this warbler as a nesting bird since the turn of the century although it still occurs in the region in good numbers.

SPECIMENS EXAMINED

Thirteen specimens from Longueuil, Mont St. Hilaire, Mont Johnson and Mont Yamaska, collected during the breeding season, have been studied.

TAXONOMY

The Monteregian Hills specimens when compared with birds from Ontario and westward proved to be of a slightly less intense yellow on the upper parts but their dorsal coloration is less olivaceous than specimens from Newfoundland and Labrador. On the other hand, they were identical to specimens from the Eastern Townships and thus were considerably paler (overall coloration) than amnicola; their upper parts were also brighter (i.e., of a purer yellow, not tinted with olivaceous). Therefore the population of the Monteregian Hills region (and of the Eastern Townships) is here assigned

to aestiva.

Magnolia Warbler Dendroica magnolia (Wilson)

PRESENT STATUS

Common transient. This warbler was recorded in good numbers in the Monteregian Hills region from 28 April (P.Q.S.P.B., 1954:13) to 26 May (author's observations), and from 27 August (P.Q.S.P.B., 1950:17) to 28 October (P.Q.S.P.B., 1963:15). At Mont St. Hilaire, the writer observed it as follows: (1) 21 May 1965; (2-6) 20 May to 25 May 1966; two were also recorded at Mont Yamaska on 26 May 1966. This species was apparently known to nest in the Montreal area some years ago, as Terrill (1911:61) reports that it is "not at all a common breeder in the vicinity of Montreal, I have thrice found its nest". Forest destruction undoubtedly accounts for the present situation.

FORMER STATUS

Vennor (1861:357) has apparently not found it in any numbers in the Montreal area, although he suspects that a few may have bred in the area. Hall (1862:50) lists it as "common" from June to September but Wintle (1896:114-115) mentions that it is a "common transient visitant" which he has not observed in the fall. These various statements make it difficult to ascertain the status of this warbler prior to the turn of the century; however, since Terrill (1911:61) found it breeding in the area only a few years later, it is the author's opinion that the Magnolia Warbler has

been overlooked by Wintle at least, and that a small breeding population occurred throughout the region. The population has later gradually diminished and vanished as a result of habitat destruction.

SPECIMENS EXAMINED

Ten specimens, collected by the writer (5) or in the Redpath Museum (5), were taken at the following places during migrations: Ste. Thérèse, Longueuil, Brosseau, Chambly Canton, Mont St. Hilaire; Morrison (29 June 1919) possibly breeding.

Cape May Warbler Dendroica tigrina (Gmelin)

PRESENT STATUS

Uncommon transient. This warbler is not known to breed in the Monteregian Hills region. It occurs in small numbers during the migrations and was recorded from 5 May (P.Q.S.P.B., 1960:13) to 2 June (P.Q.S.P.B., 1964:13), and from 29 July (P.Q.S.P.B., 1952:12) to 8 October (P.Q.S.P.B., 1958:13). The writer observed one at Mont St. Hilaire on 12 May 1965.

FORMER STATUS

Wintle (1896:113) lists it as a "scarce transient visitant". It is almost certain that this warbler of the coniferous forest has never nested in the Monteregian Hills area, as its habitat has probably never occurred here in sufficient magnitude to allow it to do so.

SPECIMEN EXAMINED

R 2463, m. adult, 20 May 1923, Chambly.

Black-throated Blue Warbler Dendroica caerulescens caerulescens (Gmelin)

PRESENT STATUS

Common transient; uncommon summer resident. This small warbler of deciduous forests is found in small numbers throughout the Monteregian Hills region from 1 May (P.Q.S.P.B., 1960:13) to 19 October (P.Q.S.P.B., 1952:12). A nest containing four young was recorded at Ste. Dorothée on 24 June 1951 (P.Q.S.P.B., 1951:37). The writer has observed it in 1965 and 1966 on all the Monteregian Hills (except Mount Royal) and in their adjacent wooded parts, in small numbers (3-6), from 10 May to 21 July; although no nest has been found, there is no doubt that this species breeds where it occurs in early summer.

FORMER STATUS

Vennor (1861:356) found it "exceedingly rare in Lower Canada" and mentions that "certainly they do not breed here regularly, if at all, a stray individual may sometimes remain to rear its brood on our mountain, but not often". Wintle (1882:109; 1896:114) says that it "arrives early in spring" in his first paper, but later, he is more explicit and considers it a "common transient visitant" suggesting "that a few breed near Montreal". The status of this warbler has apparently not changed considerably since the turn of the century.

SPECIMENS EXAMINED

Six specimens were collected during the migration and the breeding period of 1965 and 1966 on Mont St. Hilaire and Mont Rouge.

TAXONOMY

The specimens examined have been assigned to the northeastern population caerulescens (A.O.U. Check-list, 1957:491) on the basis of their dorsal coloration and of their measurements.

Myrtle Warbler Dendroica coronata coronata (Linnaeus)

PRESENT STATUS

Common transient. This large warbler was recorded in the Monterey Hills region from 16 April (P.Q.S.P.B., 1959:14) to 26 June (R 2388, Chambly, 26 June 1920), and from 29 July (P.Q.S.P.B., 1952:12) to 14 December (P.Q.S.P.B., 1947:12); it is not known to breed in the region. During migrations it can usually be observed in good numbers in the wooded parts of the region. At Mont St. Hilaire, two to six individuals were recorded from 4 May to 15 May 1965. On 1966, two to five were observed from 17 May to 26 May, and two individuals on Mont Yamaska on 26 May.

FORMER STATUS

Vennor (1861:354) states that "a few breed in our mountain", and Hall (1862:50) lists it as "common" from May to September". Wintle (1882:109; 1896:114), however, considers it as an "abundant transient visitant". Although these statements are contradictory,

it is the author's opinion that this species of coniferous habitats has ~~is~~ all probability never nested in the area, even at a time when coniferous species were more abundant.

SPECIMENS EXAMINED

Four migrating specimens were collected at Chambly, St. Lambert, Brosseau and Mont St. Hilaire.

TAXONOMY

The specimens examined have been referred to coronata the breeding subspecies of Eastern North America (A.O.U. Check-list, 1957:492).

Black-throated Gray Warbler Dendroica nigrescens (Townsend)

Hypothetical. A sight record was reported for Saraguay (Montreal Island) on 29 May 1952 (P.Q.S.P.B., 1952:31). Owing to the circumstances of the observation, the record is not considered as valid for the purposes of the present study.

Black-throated Green Warbler Dendroica virens virens (Gmelin)

PRESENT STATUS

Common transient, rare summer resident. This warbler which can be observed in good numbers during the migrations, is scarce in summer throughout the Monteregian Hills region (P.Q.S.P.B., 1935-1964; author's observations). It was recorded in the region from 24 April (P.Q.S.P.B., 1954:13) to 25 October (P.Q.S.P.B., 1952:12).

A nest containing four eggs, one of which was from Molothrus ater, was discovered at Ste. Rose on 11 June 1938 (W.J. Brown in Terrill, 1961:7). Observations by the writer suggest strongly that the species was breeding as follows: Mont St. Hilaire, two to four singing males until 30 June 1965, and until 21 June 1966; Mont Yamaska, two singing males, 3 June 1965; Mont Rouge, two singing males, 23 June 1965, four singing males 17 June 1966. These birds were always observed in hemlock (Tsuga canadensis) stands of various sizes. A pair in the Redpath Museum, collected by L.M. Terrill at Ste. Madeleine on 13 June 1920, suggests that the species may have bred there also.

FORMER STATUS

Hall (1862:50) lists it as "scarce" from June to September. Wintle (1896:116) considers it as a "scarce summer resident" but as a "common spring migrant"; he mentions a specimen collected on Mount Royal on 18 June 1887 which suggest breeding there. Apparently this species was never numerous in summer in the area; nevertheless it is the author's opinion that it may have been more numerous before the turn of the century than at the present as the coniferous stands of the region were no doubt more numerous and more extensive at that time.

SPECIMENS EXAMINED

Eight specimens taken during migrations or the nesting season represent the following localities: Ste. Madeleine, Ste. Thérèse, Mont Rouge, Mont St. Hilaire and Mont Yamaska.

TAXONOMY

The examined specimens have been referred to the northeastern subspecies virens (A.O.U. Check-list, 1957:495).

Cerulean Warbler Dendroica cerulea (Wilson)

Rare summer resident. This warbler, which has apparently moved into the province of Quebec rather recently, was recorded in the Monteregian Hills region from 13 May (P.Q.S.P.B., 1962:31) to 23 June (author's observations 1965). It was recorded in the nesting season on Mont St. Hilaire (P.Q.S.P.B., 1961-1964; Ouellet, 1966:335-337), Mont Rouge and Mont Yamaska (Ouellet, op. cit.). In 1966, three to six singing males were regularly recorded by the writer at Mont St. Hilaire from 20 May to 21 June; four singing males were also observed on Mont Yamaska on 26 May. It appears therefore that this species is well established on some of the Monteregian Hills, and that it may perhaps extend its range in the future.

Blackburnian Warbler Dendroica fusca (Müller)

PRESENT STATUS

Uncommon transient; rare summer resident. This warbler, which occurs only in small numbers, during the summer has been reported on numerous occasions during migrations. It occurs in the Monteregian Hills region from 2 May (P.Q.S.P.B., 1954:13) to 3 October (P.Q.S.P.B., 1957:14). Various summer records suggest that it breeds in the region as follows: Senneville (Morgan Arboretum)

(3 singing males) 21 June 1960 (P.Q.S.P.B., 1960:31); Mont St. Hilaire (2-3 singing males) 19 May to 24 June 1965, (2-4 singing males 19 May to 21 June 1966; Mont Yamaska (6 singing males) 17 June 1966.

FORMER STATUS

Vennor (1861:358) and Hall (1862:50) consider it rare in the Montreal area, but Hall (op. cit.) implies that it is a summer resident. Wintle (1896:116) found it a "common" spring transient. This species has doubtless been overlooked by earlier writers as a nesting bird, although Hall (op. cit.) considers it a summer resident. Therefore, it appears that it probably more numerous in the region before the turn of the century than it is at the present, as coniferous stands were then more numerous and more extensive.

SPECIMENS EXAMINED

Five specimens from Brosseau, Mont St. Hilaire and Mont Yamaska were collected during migrations or during the breeding period.

Chestnut-sided Warbler Dendroica pensylvanica (Linnaeus)

PRESENT STATUS

Common transient and summer resident. This warbler occurs in good numbers in suitable habitats throughout the Monteregian Hills region from 5 May (P.Q.S.P.B., 1954:13) to 1 October (P.Q.S.P.B., 1964:14). The writer recorded it as follows: Mont St. Hilaire

(2-8) 19 May to 20 July 1965, (3-6) 18 May to 21 June 1966; Mont Johnson (2) 1 June 1965; Mont St. Bruno (3) 4 June, (6) 11 June 1966; Mont Rouge (4) 12 June, (5) 23 June 1965, (4) 3 and 9 June 1966; Mont Yamaska (4) 3 June and 2 July 1965, (4) 15 June (6) 17 June 1966; Mont Shefford (4) 6 July 1965, (2) 15 June 1966; Mont Brome (4) 15 June 1966; all these summer records represent singing males which were undoubtedly defending their territories.

FORMER STATUS

Vennor (1861:353) mentions that "few individuals breed here" but Hall (1862:50) and Wintle (1896:115) list it as a "common summer resident". Wintle (op. cit.) adds that it "breeds in Mount Royal Park". Although no quantitative data are available on the past populations of this warbler in the region, it has undoubtedly increased in numbers as a result of forest cutting and plant successions of many sorts that have occurred throughout the region for many years.

SPECIMENS EXAMINED

Sixteen specimens, collected by the writer during the migrations and the breeding season or in the Redpath Museum, represent the following localities: Ste. Thérèse, Ste. Madeleine, Chambly Canton, Mont St. Hilaire, Mont Rouge, Mont Shefford and Mont Yamaska.

Bay-breasted Warbler Dendroica castanea (Wilson)

PRESENT STATUS

Uncommon transient. This warbler of the coniferous forest occurs in the Monteregian Hills region only as a transient. It was recorded

from 5 May (P.Q.S.P.B., 1960:13) to 7 June (P.Q.S.P.B., 1947:12), and from 29 July (P.Q.S.P.B., 1952:13) to 9 October (P.Q.S.P.B., 1955:12). The writer observed it as follows at Mont St. Hilaire: (1) 19 May 1965, (3) 27 May 1966.

FORMER STATUS

Vennor (1861:355) is certainly mistaken when he states that "very few individuals breed in our vicinity". Hall (1882:50) lists it as "scarce" from May to September, and Wintle (1896:115) mentions that it is a "scarce transient visitant" which is said to breed on the Island of Montreal. Notwithstanding these statements, the writer **strongly** believes that this warbler of coniferous woods has probably never occurred in the region as a nesting bird and that these statements are erroneous, and the coniferous stands of the area were no doubt never extensive enough to satisfy the requirements of this species.

SPECIMENS EXAMINED

Four migrant specimens in the Redpath Museum from Brosseau, Chambly Canton and St. Bruno.

Blackpoll Warbler Dendroica striata (Forster)

PRESENT STATUS

Uncommon transient. This late migrant was recorded in small numbers throughout the Monteregian Hills region from 16 May (P.Q.S.P.B., 1961:15) to 19 June (P.Q.S.P.B., 1963:15), and from 26 July (P.Q.S.P.B., 1947:12) to 27 October (P.Q.S.P.B., 1963:15). The writer observed it as follows: Mont St. Hilaire (4) 28 May,

(3) 1-6 June 1966, (2) 27 May 1966; Mont Rouge (2) 12 June 1966.

FORMER STATUS

Vennor (1861:355) mentions that it is "rare around this city" and Hall (1862:50) that it is "common" from May to September. Wintle (1896:115-116) has recorded it only as an "irregular spring migrant". These statements are evidently confusing and it is the author's opinion that Wintle (op. cit.) is probably correct. On this assumption, it appears that the status of this migrant warbler has changed little in the region since the turn of the century.

SPECIMENS EXAMINED

Seven migrant specimens from Brosseau, Ste. Thérèse, St. Bruno, and Mont St. Hilaire, were in the Redpath Museum of have been collected by the writer.

Pine Warbler Dendroica pinus pinus (Wilson)

PRESENT STATUS

Rare transient and summer resident. This species was recorded in small numbers throughout the Monteregian Hills region from 15 April (P.Q.S.P.B., 1945:12) to 18 October (P.Q.S.P.B., 1947:12). Nesting evidence was obtained by Terrill who collected a female with a brood patch at Chambly during the summer of 1922 (in litt. to National Museum of Canada). A pair was observed carrying nesting material at Hudson on 23 May 1964 (P.Q.S.P.B., 1964:36); this also suggests breeding there. There are apparently

no other nesting records available for the region.

FORMER STATUS

Hall (1862:50) lists it as "common" from May to September but Vennor (1861:358) considers it rare. Wintle (1896:117) says that it is a "scarce transient visitant". It is nevertheless the author's opinion that this warbler was more numerous in the past throughout the region and that its decline has been caused by the removal of pine stands. This has undoubtedly started at the time the first settlers established themselves in the region; pine was then in great demand both for local use and exportation. The disappearance of the pine stands has apparently been gradual and was probably completed sometime in the middle of the last century. The decline of the present species would therefore have occurred at about the same time, and this may explain Hall's statement, since his paper was written in the late 1830's.

Prairie Warbler Dendroica discolor (Vieillot)

Hypothetical. This warbler was apparently observed at Saraguay on 29 May 1952 (P.Q.S.P.B., 1952:31), but the record is not accepted here.

Palm Warbler Dendroica palmarum (Gmelin)

PRESENT STATUS

Uncommon transient. This warbler was reported in small numbers in the Monteregean Hills region from 19 April (P.Q.S.P.B., 1964:14) to 27 May (P.Q.S.P.B., 1962:17), and from 7 August

(P.Q.S.P.B., 1952:13) to 18 October (P.Q.S.P.B., 1952:13). The writer has not recorded it from the fall of 1964 to the spring of 1967.

FORMER STATUS

Wintle (1896:117) lists it as a "rare transient visitant" on the basis of a specimen collected on 7 May 1891 at Montreal (Wintle (1891:396). This species appears otherwise to have been unknown to earlier writers. It has doubtless never been a numerous migrant in the region.

Ovenbird

Seiurus aurocapillus aurocapillus (Linnaeus)

PRESENT STATUS

Common summer resident. The Ovenbird was recorded in the Monteregian Hills region from 2 May (P.Q.S.P.B., 1954:13) to 11 October (P.Q.S.P.B., 1950:18). It occurs in summer throughout the wooded parts of the region (P.Q.S.P.B., 1935-1964, author's observations). The writer observed it as follows: Mont St. Hilaire (3-10, several nests) 6 May to 29 July 1965, (2-8, 7 nests) 15 May-21 June 1966; Mont Johnson (5) 1 June 1965, (4) 25 May 1966; Mont Bruno (4) 4 June, (2) 11 June 1966; Mont Rouge (6) 12 June, (12) 23 June 1965; (4) 3 June, (2) 9 June 1966; Mont Yamaska (12) 3 June, (6) 2 July 1965, (2) 26 May, (4) 15 June, (10) 17 June 1966; Mont Shefford (2) 6 July 1965, (10) 15 June 1966; Mont Brome (4) 15 June. It was scarce during the same period in the wooded parts adjacent to the Hills, only a few specimens (2-4) being observed on the various visits to these areas.

FORMER STATUS

Hall (1882:109) lists the Ovenbird as a "rare" summer resident but Wintle (1896:117) considers it a "common summer resident" which breeds on Mount Royal. It is likely that selective logging and the management of maple stands for the sap industry have favored greatly this species which appears to have increased in numbers since the middle of the last century.

SPECIMENS EXAMINED

Eight specimens collected at Chambly, Mont St. Hilaire, Mont Rouge and Mont Yamaska during the breeding season have been examined.

TAXONOMY

The specimens examined, along with series from southern Quebec in the National Museum of Canada, have been assigned to aurocapillus on the basis of the bright greenish olive coloration of their dorsal parts when compared with material from Newfoundland, and proved to be identical ~~with~~ material from the Maritime Provinces.

Northern Waterthrush Seiurus noveboracensis (Gmelin)

PRESENT STATUS

Uncommon migrant, rare summer resident. This ground warbler was recorded in the Monteregian Hills region from 28 April (P.Q.S.P.B., 1957:14) to 12 October (P.Q.S.P.B., 1952:13). It appears to be never numerous, although it was reported fairly regularly (P.Q.S.P.B., 1935-1964; author's observations). The writer has seen it at Mont St. Hilaire as follows: (2) 21 May 1965,

(1) 18 May 1966. Nesting data are few but establish the presence of this species in summer as follows: Ile Jésus, one nest and 4 eggs (one of Molothrus ater) 11 June 1938, one nest and four eggs (two of Molothrus ater) 22 May 1941, one nest and 5 eggs (one of Molothrus ater) 1 June 1947 (W.J. Brown in Terrill, 1961:8); St. François de Sales (Ile Jésus) one nest and 5 eggs, 27 May 1918 (F.N. Smith Egg Collection, 675 2/5); it has apparently been recorded in summer nowhere else in the region.

FORMER STATUS

Hall (1862:51) and Wintle (1896:117) list it as a "rare" and "scarce summer resident". Notwithstanding these statements, it is the writer's opinion that this species was formerly more numerous throughout the region than it is at the present and that the drainage and destruction of wooded swamps in region has caused to a great extent the decline of this species.

SPECIMENS EXAMINED

R 3708, f. adult, 20 May 1966, Montreal (Mc Gill Campus).

TAXONOMY

The single migrant specimen has been referred to noveboracensis on the basis of the coloration of its under and dorsal parts.

Connecticut Warbler Oporornis agilis (Wilson)

Hypothetical. A bird identified as the present species was recorded at Montreal on 17 September 1952 (P.Q.S.P.B., 1952:31). Although the species is known to breed in central-western Quebec (Godfrey,

1966:343), the writer does not consider as valid the record obtained at Saraguay.

Mourning Warbler Oporornis philadelphia (Wilson)

PRESENT STATUS

Common transient, uncommon summer resident. This warbler occurs in good numbers in migrations throughout the Monteregian Hills region, and was recorded from 12 May (P.Q.S.P.B., 1959:14) to 2 October (P.Q.S.P.B., 1959:14). In summer it is found in small numbers in suitable habitats (P.Q.S.P.B., 1935-1964; author's observations 1965, 1966). Nesting evidence was recorded as follows: Ste. Anne de Bellevue (Morgan Arboretum) (P.Q.S.P.B., 1960:31); Senneville (P.Q.S.P.B., 1958:31, 1954:25; Terrill, 1961:8); Mount Royal (Westmount Mountain) one nest, 8 June 1905 (P.Q.S.P.B., 1943:28; Terrill, 1911:62); Caughnawaga (Terrill, 1961:8); Ste. Dorothee (W.J. Brown in Terrill, 1961:8). The writer recorded it as follows: Mont St. Hilaire (2-6) 19 May to 29 July 1965, (2-6) 21 May to 20 June 1966; Mont Rouge (6) 12 June, (4) 23 June 1965, (6) 3 June, (2) 9 June 1966; Mont Johnson (2) 14 June 1966; Mont Yamaska (4) 26 May, (2) 15 and 17 June, 1966; Mont Shefford (2) 6 July 1965, (4) 15 June 1966; Mont Brome (1) 15 June 1966. All these observations represent singing males, and the dates on which they were recorded, after the end of May, doubtless represent nesting birds.

FORMER STATUS

Earlier writers (Vennor, 1861:359; Hall, 1862:50; Wintle, 1882:109, 1896:118) list this species as a "scarce" summer resident. Only Vennor (op. cit.) mentions that it breeds in the region. Apparently this species has increased in numbers in the region since the turn of the century, undoubtedly as a result of forest clearing and of the ensuing stages of plant successions.

SPECIMENS EXAMINED

Seven specimens collected during the breeding season by the writer in 1965 and 1966 represent the following localities: Mont St. Hilaire, Mont Rouge and Mont Yamaska.

Common Yellowthroat Geothlypis trichas brachidactyla (Swainson)

PRESENT STATUS

Common summer resident. This small warbler was recorded in the Monteregian Hills region from 6 May (P.Q.S.P.B., 1964:14) to 15 November (P.Q.S.P.B., 1952:13). It is somewhat more numerous in migrations than during the summer (P.Q.S.P.B., 1935-1964; author's observations 1964-1967). During the breeding season it is well distributed in suitable habitats throughout the region although only a few individuals may be recorded then (op. cit.). The writer observed it as follows: Mont St. Hilaire (1-4) 20 May to 29 July 1965, (2-6) 27 May to 21 June 1966; Mont Rouge (2) 12 June 1965; Mont Shefford (8) 6 July 1965, (3) 15 June 1966; Mont Brome (2) 15 June 1966; Mont St. Bruno (2) 4 and 11 June 1966. These summer

observations suggest undoubtedly that the species was nesting wherever it was observed.

FORMER STATUS

Vennor (1861:360) mentions that it "breeds at Lachine", and Wintle (1896:118) found it a "common summer resident" which used to breed on Mount Royal. This species may, to a certain extent, have benefited from forest clearing in the region but swamp and marsh management has undoubtedly voided the former's effects. It is therefore the author's opinion that this species is almost as abundant at the present as it was prior to the turn of the century, although it may be slightly less numerous.

SPECIMENS EXAMINED

Fifteen specimens from Chambly, Mont St. Hilaire, Mont Shefford and Mont Rouge, have been collected during the breeding season.

TAXONOMY

The specimens from the Monteregian Hills region have the coloration of their under and upper parts identical to that of birds found east of central Ontario; the gray area on the forehead was also similar, and their measurements fall within the range of the northeastern population. The birds from the Monteregian Hills region have therefore been assigned to brachidactyla.

Yellow-breasted Chat Icteria virens (Linnaeus)

Accidental straggler. Although no specimen of the species has

so far been collected in the province of Quebec (Godfrey, 1966:346), the following sight record is considered valid by the writer:
 Town of Mount Royal (Island of Montreal), (1) 12 September 1962 (P.Q.S.P.B., 1962:32).

Hooded Warbler Wilsonia citrina (Boddaert)

Accidental straggler. This well marked species has been identified on a few occasions in the Monteregian Hills region: Baie d'Urfé (1) 3 and 4 May 1947 by several observers (Gray, 1948:42); Hudson (1) 18, 21 and 22 May 1956 by several observers (P.Q.S.P.B., 1956:27). Although no specimen has yet been collected in the province of Quebec there is no reason not to accept the records listed here.

Wilson's Warbler Wilsonia pusilla pusilla (Wilson)

PRESENT STATUS

Rare summer resident and transient. This warbler is very scarce in the Monteregian Hills region, particularly during the nesting season. It was recorded in small numbers from 7 May (P.Q.S.P.B., 1964:14) to 31 May (P.Q.S.P.B., 1963:15), and from 18 August (P.Q.S.P.B., 1952:13) to 3 October (P.Q.S.P.B., 1964:14). Although it has not been reported in summer in recent years the following nesting records establish beyond doubt that it used to breed in the region: Ile Jésus, nested in summer of 1941 (P.Q.S.P.B., 1941:19); Brosseau, two nests with 5 eggs each, 5 June 1927 and 10 June 1933 (F. N. Smith Egg Collection, 685 2/5, 3/5).

It appears that habitat destruction has chased away this bird from the region in recent years.

FORMER STATUS

Wintle (1896:118) lists it as a "scarce transient visitant" and remarks that a few individuals may breed in the area. All the other authors appear to have overlooked it. This warbler was no doubt more numerous as a breeding bird in the region before the turn of the century than it was until a few years ago, and the writer believes that it has gradually disappeared as a result of habitat destruction.

SPECIMEN EXAMINED

R 2608, m. adult, 25 May 1919, Chambly.

TAXONOMY

The single specimen studied, perhaps a breeding bird, is referable to pusilla on the basis of its size and coloration.

Canada Warbler Wilsonia canadensis (Linnaeus)

PRESENT STATUS

Common transient, uncommon summer resident. This warbler, which is more numerous in the Monteregian Hills region during migrations, was recorded from 12 May (P.Q.S.P.B., 1953:13) to 14 November (P.Q.S.P.B., 1963:15). In summer it can be found in small numbers in suitable habitats and nesting data have been reported as follows: Hudson, a pair nesting, 26 June 1963 (P.Q.S.P.B., 1963:35); Brosseau, one nest and 5 eggs, 10 June 1933 (F.N. Smith Egg Collection,

686 1/5). The writer has recorded it as follows: Mont St. Hilaire (1-5) irregularly from 19 May to 26 June 1965, (2) irregularly from 20 May to 20 June 1966; Mont Rouge (2) 12 and 23 June 1965, (2) 9 June 1966; Mont St. Bruno (2) 11 June 1966; Mont Yamaska (2) 17 June 1966; Mont Shefford (2) 6 July 1965, (3) 15 June 1966; Mont Brome (1) 15 June 1966. These records represent doubtless breeding individuals although no nest has been discovered.

FORMER STATUS

Vennor (1861:351) mentions that it occurred around Mount Royal in spring only but Hall (1862:50) lists it as a "common" summer resident. On the other hand, Wintle (1896:119) says that it is a "scarce summer resident" and that "a few may breed" in the area. This species, although it may have benefited from forest destruction and from the plant successions that occur after logging for many years, was doubtless more numerous in the region before the turn of the century than it suggested by the earlier writers quoted here. Indeed, forest and habitat destruction has no doubt affected to some extent the breeding population of this bird in the region during recent years.

SPECIMENS EXAMINED

Four specimens from Brosseau, Mont St. Hilaire, and Mont Yamaska were taken during migrations and the breeding period.

American Redstart Setophaga ruticilla tricolora (Muller)

PRESENT STATUS

Abundant summer resident and transient. This is undoubtedly the most

numerous warbler of the Monteregeian Hills region, where it was reported from 3 May (P.Q.S.P.B., 1953:13) to 25 October (P.Q.S.P.B., 1952:13). In migrations it is somewhat more numerous than during the breeding period although large numbers of nesting birds can be seen in proper habitats. Nesting records are numerous and were obtained from many localities (P.Q.S.P.B., 1935-1964, Nest Record Cards; F.N. Smith Egg Collection; author's observations). The writer found it in good numbers (8-12)(each time) on all the Monteregeian Hills and adjacent wooded parts, except on Mount Royal, during the breeding season of 1965 and 1966.

FORMER STATUS

Hall (1862:50) lists it as a "common" summer resident but Wintle (1896:119) apparently found it more numerous and considers it as an "abundant summer resident" which "breeds in the city and in Mount Royal Park". This species has no doubt increased tremendously in numbers since the middle of the last century as a result of forest clearing and the ensuing second-growth vegetation, although no quantitative data are available for comparison.

SPECIMENS EXAMINED

Fourteen migrating or nesting birds in the Redpath Museum or collected by the writer represent the following localities: Brosseau, Mont St. Hilaire, Mont Rouge, and Mont Yamaska.

TAXONOMY

The specimens examined have been referred to the northern subspecies tricolora (A.O.U. Check-list, 1957:519).

PLOCEIDAE

House Sparrow

Passer domesticus domesticus (Linnaeus)PRESENT STATUS

Abundant permanent resident. This introduced species occurs in large numbers outside the wooded areas of the Monteregian Hills region, being particularly numerous about farms, villages, towns and cities. It is undoubtedly the most numerous bird of the region.

FORMER STATUS

Wintle (1896:129-130) suggests that the first individuals recorded in the Montreal area have spread from Quebec City where they were apparently introduced in 1854 and where they were known to winter successfully in 1871. By 1882, (Wintle, 1882:109) it was "abundant" and nested in the Montreal region, but Caulfield (1890:149) remarks that the breeding populations move "into the towns and villages" in winter, no doubt to seek food and shelter. From then on, its numbers have increased and appear to have reached the present level shortly after the turn of the century. Its numbers appear to be fairly stable in the region since then.

SPECIMENS EXAMINED

R 2723, pure albino, 12 October 1915, Montreal

308, m. adult, 8 June 1966, Mont Rouge

309, m. adult, 8 June 1966, Mont Rouge

TAXONOMY

The specimens examined have been assigned to domesticus, the North American population (A.O.U., Check-list, 1957:520).

ICTERIDAE

Bobolink

Dolichonyx oryzivorus (Linnaeus)PRESENT STATUS

Abundant summer resident. This species is found in large numbers in the open areas of the Monteregian Hills region from 27 April (P.Q.S.P.B., 1957:15) to 28 September (P.Q.S.P.B., 1956:13). The writer recorded it in large numbers (6-40) in all the open fields adjacent to the Monteregian Hills, south of the St. Lawrence River, from 15 May to 20 July 1965, and from 17 May to 21 June 1966. Although this bird has suffered somewhat in recent years from habitat destruction, it appears to remain fairly stable in numbers.

FORMER STATUS

Hall (1862:51) and Wintle (1882:110) found it a "common" summer resident, and later, Wintle (1896:87) says that it was an "abundant summer resident" which nested "in the fields on the Island of Montreal, and probably in Mount Royal Park". Apparently this species has increased in numbers since Hall's time until the end of the last century, undoubtedly as a result of forest clearing. However, the numbers of this bird have not increased considerably since the turn of the century according to the author, but it is doubtless more numerous at the present than it was in the region in Hall's time. Although, Kalm (1771) mentions that it was abundant in the southern part of Quebec in 1749, it was probably not as numerous as it is now.

SPECIMENS EXAMINED

Seven specimens from St. Jean Baptiste, Mont St. Hilaire, Mont Rouge and Mont Shefford were collected by the writer in 1965 and 1966.

Eastern Meadowlark Sturnella magna magna (Linnaeus)

PRESENT STATUS

Common summer resident. The Meadowlark was recorded in good numbers in the open areas of the Monteregian Hills region from 15 March (P.Q.S.P.B., 1945:13) to 11 December (P.Q.S.P.B., 1949:14). It was recorded frequently in winter in the region: St. Lambert (P.Q.S.P.B., 1949:34), St. Basile le Grand (P.Q.S.P.B., 1959:29), Hudson (P.Q.S.P.B., 1964:36), Verchères and Ste. Anne de Bellevue (P.Q.S.P.B., 1961:32). This species has apparently increased tremendously in numbers since the turn of the century. Terrill (1911:59) found it "fairly well distributed in spring of 1905" at Côte St. Luc, and found "an occupied nest" at Côte St. Paul on 9 June of the same year; he remarks that it became "yearly more numerous since" and that it has become a "nearly abundant summer resident". The writer observed good numbers (2-25) in all the open areas adjacent to the Monteregian Hills (except Mount Royal) from 3 May to 27 July 1965, and from 16 May to 21 June 1966.

FORMER STATUS

Hall (1862:52) lists it as a "rare" summer resident and Wintle (1896:92) shares the same opinion. The latter mentions however that it was reported to him as nesting at St. Jean; he also remarks that "it is possible that the meadowlark does visit the island of Montreal, although I have never met with any here". It is the writer's opinion that the remarkable increase in numbers

of this bird since the turn of the century is doubtless the result of forest clearing which has produced a greater amount of available habitats.

SPECIMENS EXAMINED

128, m. adult, 18 June 1965, Mont St. Hilaire
 127, f. juvenile, 18 June 1965, Mont St. Hilaire
 168, m. juvenile, 21 July 1965, Mont St. Hilaire

TAXONOMY

The specimens examined have been referred to the breeding population of Eastern North America, magna (A.O.U., Check-list, 1957:522).

Yellow-headed Blackbird Xanthocephalus xanthocephalus (Bonaparte)

Accidental straggler. Wintle (1896:135), who lists this species as a "rare accidental visitant", reports a specimen collected at Hochelaga (Island of Montreal) in July of 1894.

Red-winged Blackbird Agelaius phoeniceus phoeniceus (Linnaeus)

PRESENT STATUS

Abundant summer resident; rare winter resident. Although marshes and wet lands have almost completely disappeared from the Monteregian Hills region, the Red-winged Blackbird has increased tremendously in numbers during the last 40 years (various authors), undoubtedly as a result of its facility of adaptation to new habitats. It was recorded in good numbers in the region from mid-March to mid-October (P.Q.S.P.B., 1935-1964; author's observations), and frequently, in small numbers, throughout the winter (op. cit.). The writer recorded

it in good numbers (10-60) throughout the Monteregian Hills region (except near Montreal) from 16 March to 29 July 1965, and from 16 May to 21 June 1966.

FORMER STATUS

Although Hall (1862:51) and Wintle (1882:110; 1896:91) consider it as a "common" and an "abundant" summer resident, it is the author's opinion that it was not as numerous ~~than~~ as it is at the present. At that time suitable habitats were doubtless more abundant than they are presently but owing to the adaptability of the species to new conditions it has increased significantly in numbers in spite of habitat destruction.

SPECIMENS EXAMINED

41, m. adult, 5 May 1965, Mont Rouge
293, m. adult, 6 June 1966, Mont St. Hilaire
350, f. adult, 15 June 1966, Mont Shefford

TAXONOMY

The specimens examined, along with several others from adjacent areas in the Redpath Museum, have been assigned to phoeniceus on the basis of their measurements and coloration when compared with specimens from western Ontario and Manitoba.

Baltimore Oriole Icterus galbula (Linnaeus)

PRESENT STATUS

Common summer resident. This oriole, which was recorded from 30 April (P.Q.S.P.B., 1954:13) to 10 October (P.Q.S.P.B., 1949:14),

occurs in good numbers throughout the wooded and semi-open areas of the Monteregian Hills region. It breeds where it occurs throughout the region as can be seen by the numerous nests that can be observed in the fall. The writer recorded it on all the Monteregian Hills and adjacent areas from 7 May to 29 July 1965, and from 15 May to 21 June 1966; many nests (37) were discovered during that period. Although this species was recorded in winter, it is not known to winter regularly: Lachine (1) from 5 November 1959 to 8 January 1960, at a feeder (P.Q.S.P.B., 1959:29; 1960:32); Chambly, one wintered (P.Q.S.P.B., 1959:29-30); La Salle (1) 26 December 1966 (several observers).

FORMER STATUS

Hall (1862:51) lists it as a "common" summer resident but Wintle (1882:110) mentions that it was becoming "common" in 1882. Later, Wintle (1896:93) considers it a "common summer resident" which breeds in the city of Montreal; he reports a nest found at Dorval on 7 June 1890. This species has apparently become more numerous in the region late in the last century, and it is the author's opinion that its present status is no different than it was around the turn of the century, although it is perhaps slightly less numerous in certain areas of the region as a result of habitat destruction.

SPECIMENS EXAMINED

Thirteen specimens from Mont St. Hilaire, Mont Yamaska, Mont Rouge and Mont Shefford have been collected by the writer during the breeding season of 1965 and 1966.

Rusty Blackbird

Euphagus carolinus (Müller)PRESENT STATUS

Common transient. This blackbird is more numerous in the Monteregian Hills region in the fall than in the spring; it was recorded from 15 March (P.Q.S.P.B., 1949:14) to 15 May (P.Q.S.P.B., 1960:13), and from 30 August (P.Q.S.P.B., 1952:13) to 24 November (P.Q.S.P.B., 1959:14). In the fall, flocks counting several hundred birds have occasionally been recorded (P.Q.S.P.B., 1935-1964; author's observations 1964-1967).

FORMER STATUS

Hall (1862:51), who has doubtless mistaken this species, lists it as a "scarce" summer resident. Wintle (1882:110; 1896:93) found it a "common transient visitant". The status of this species does not appear to have changed appreciably since the turn of the century, although it is the author's opinion that it may have been slightly more numerous then and that habitat destruction, particularly on its wintering grounds, may have reduced the local migrant population. Although it is recorded by Hall as a summer resident, it probably never has bred in the region, but may have done so, south and north of the area, in the Laurentians or in the Sutton Mountains.

Common Grackle

Quiscalus quisculus versicolor Vieillot.PRESENT STATUS

Abundant summer resident. The Common Grackle was recorded throughout the Monteregian Hills region, from 6 March (P.Q.S.P.B., 1946:13) to mid-November (P.Q.S.P.B., 1935-1964). Small numbers of individuals

are known to winter irregularly (P.Q.S.P.B., 1935-1964; author's observations, 1964-1967). The writer observed it in good numbers (3-35) throughout the region from 16 March to 27 July 1965, and from 15 May to 21 June 1966.

FORMER STATUS

Hall (1862:51) and Wintle (1882:110), in his first paper, list it as a "common" summer resident; some years later, Wintle (1896:94) found it an "abundant summer resident" which bred in the city of Montreal. Although no quantitative data are available, it appears that this species has increased considerably in numbers since the middle of the last century until the early 1900's, and that from then on its numbers have stabilized somewhat to reach the present level. Habitat modifications (i.e., forest destruction, more extensive agricultural lands) are doubtless responsible for the situation.

SPECIMENS EXAMINED

7, f. immature, 22 October 1964, Mont St. Hilaire
324, f. adult, 10 June 1966, Mont St. Hilaire

TAXONOMY

The breeding population of Canada has been assigned to versicolor (Godfrey, 1966:360).

Brown-headed Cowbird Molothrus ater ater (Boddaert)

PRESENT STATUS

Abundant summer resident. The Brown-headed Cowbird occurs in large

numbers throughout the Monteregian Hills region (rarely around towns and cities) from 1 March (P.Q.S.P.B., 1961:15) to late November (P.Q.S.P.B., 1935-1964); it has often been recorded in small numbers in winter but irregularly (P.Q.S.P.B., 1935-1964; author's observations 1964-1967). The writer recorded it in good numbers (3-25) in the Monteregian Hills region from 6 April to 27 July 1965, and from 15 May to 21 June 1966. Many parasitized nests of several other species were found during the same period.

FORMER STATUS

Hall (1862:51) lists it as a "scarce" summer resident; a few years later Wintle (1882:110; 1896:91) mentions that it is a "common summer resident" and that he has found its eggs in "many nests" of other species. This cowbird appears to have increased tremendously in numbers since the middle of the last century. This increase is alarming because the number of parasitized nest has doubtless increased accordingly. The writer cannot offer any explanation on the reason for the increase in numbers of this bird, although it may be a consequence of forest destruction.

SPECIMENS EXAMINED

Seven specimens have been collected in the Mont St. Hilaire area by the writer in 1965 and 1966.

TAXONOMY

The specimens examined have been referred to ater on the basis of their measurements and of the coloration of the females.

THRAUPIDAE

Scarlet Tanager Piranga olivacea (Gmelin)

PRESENT STATUS

Uncommon summer resident. The Scarlet Tanager was recorded in the Monteregian Hills region from 8 May (P.Q.S.P.B., 1954:13) to 29 October (P.Q.S.P.B., 1949:14). It occurs in the well wooded parts of the region and was observed as follows by the writer: Mont St. Hilaire (2-4) 12 May to 26 July 1965, (2-6) 19 May to 21 June 1966; Mont Johnson (2) 1 June 1966, (2) 25 May 1966; Mont Yamaska (8) 3 June, (3) 2 July 1965, (6) 26 May, (2) 15 June, (3) 17 June 1966; Mont Rouge (2) 12 June, (2) 23 June 1965; Mont Shefford (4) 15 June 1966. In addition to these records which undeniably suggest breeding, nesting data were obtained elsewhere as follows: Ste. Dorothée, one pair feeding young at the nest, 18 July 1942 (P.Q.S.P.B., 1942:20); Ste Anne de Bellevue (Morgan Arboretum) one male feeding young, 14 June 1959 (P.Q.S.P.B., 1959:30; Nest Record Card). This bird which can still be observed in numbers in early summer has no doubt suffered greatly from forest destruction, particularly during the last few years when only very small forest areas have been left untouched.

FORMER STATUS

Hall (1862:51) lists it as a "common" summer resident but Wintle (1882:109; 1896:105), who has apparently overlooked it as a nesting bird, states that it was a "common transient visitant" and that he observed one on 17 June 1882 on Mount Royal, which

suggest that the species was breeding there at the time. Only a few years later, Terrill (1911:60) found it breeding in the Montreal area. It is certain that this species has declined considerably in the region through the years as a result of forest destruction, and that it occurs nowadays in small numbers only in the less disturbed parts of the wooded areas of the region.

SPECIMENS EXAMINED

Six specimens from Mont St. Hilaire and Mont Yamaska were collected by the writer in 1965 and 1966.

Summer Tanager Piranga rubra (Linnaeus)

Hypothetical. Wintle (1896:105), who is certainly mistaken, lists this western and southern species as a "rare transient visitant" on the basis of eight specimens said to have been shot in the vicinity of Montreal, and of a personal sight record at St. Bruno late in the last century. Therefore there is no basis to consider this species as having occurred in the Montereian Hills region.

FRINGILLIDAE

Cardinal Richmondia cardinalis cardinalis (Linnaeus)

Rare permanent resident. This southern bird is a recent arrival not only in the Montereian Hills region but also in the province of Quebec, except for an old specimen collected at Quebec City

on 24 August 1869 (LeMoine, 1870:225-231). The first record of recent years consists of a female observed at Hudson on 19, 24 and 25 February 1942 (P.Q.S.P.B., 1942:24); although, this information has been obtained from a third person, it is documented well enough to be accepted as valid, in view of the records that have followed it. Since 1956, the Cardinal was reported fairly regularly in winter, but the numbers of birds observed appears to never have exceeded three individuals per year (P.Q.S.P.B., 1956-1964). In 1958, a pair was observed fairly regularly until June on Mount Royal (Summit Park) and this observation undoubtedly suggests breeding although no other evidence has been obtained (P.Q.S.P.B., 1958:38). Two birds observed twice on Mount Royal on 3 May 1959 (P.Q.S.P.B., 1959:30) may have been only stragglers. In 1964, a male was heard singing on 5 June at Westmount, and a pair was recorded at the same place during June and July of the same year; later in the fall, a nest which has been identified almost positively as that of a Cardinal (P.Q.S.P.B., 1964:37) was found in a nearby bush. This therefore constitutes the first nesting record of the species for the province of Quebec. During the summer of 1966, two pairs were reported nesting at Rigaud to the writer by Father Louis Genest, who also secured a specimen on 3 February 1967; the writer has examined one of the nests and a photograph of the other. Their structure and building materials agree with the descriptions provided by numerous authors. Therefore, these definitely establish

the nesting of this bird in the province. The writer cannot offer any explanation for the recent arrival of this bird in the province, except that this species has increased its range eastward and northward in recent years (after several authors).

SPECIMEN EXAMINED

R 3714, m. adult, 3 February 1967, Rigaud.

TAXONOMY

The single specimen examined, which no doubt represents the breeding individuals, has been assigned to cardinalis, the nesting population of Canada (Godfrey, 1966:364).

Rose-breasted Grosbeak Pheucticus ludovicianus (Linnaeus)

PRESENT STATUS

Abundant summer resident. This typical bird of the deciduous forest was recorded in the Monteregian Hills region from 4 May (P.Q.S.P.B., 1963:15) to 22 October (P.Q.S.P.B., 1960:14). It occurs in good numbers in all the deciduous stands of the region, except those too close to human habitations. Nesting data are well distributed throughout the region (P.Q.S.P.B., 1935-1964, Nest Record Cards; F.N. Smith Egg Collection; Terrill, 1911:60; author's observations 1965-1966). The writer observed it in good numbers (3-8) on all the Monteregian Hills, except Mount Royal, and in the adjacent wooded parts from 6 May to 29 July 1965, and from 15 May to 21 June 1966. Many nests were discovered during that period.

FORMER STATUS

Hall (1862:51) found it a "scarce" summer resident but Wintle (1882:110) lists it as a "rare spring visitant". Later Wintle (1896:104) mentions that it is a "common transient visitant" and that a few have been recorded in summer on the Island of Montreal. It is the author's opinion that Wintle has overlooked this species in summer, although it probably occurred at that time only in small numbers. A few years later, Terrill (1911:60) found a nest containing three eggs on Mount Royal on 22 June 1897 and remarks that it has "increased in numbers since". Therefore, it is almost certain that this bird has become more numerous in the region since the turn of the century, undoubtedly as a result of forest destruction, as it is well known to prefer second-growth vegetation to mature deciduous stands.

SPECIMENS EXAMINED

Ten specimens from the Mont St. Hilaire area and Mont Yamaska were collected by the writer during the spring migration and nesting season of 1965 and 1966.

Indigo Bunting Passerina cyanea (Linnaeus)

PRESENT STATUS

Common summer resident. This finch was reported in the Monteregian Hills region from 12 May (P.Q.S.P.B., 1953:14) to 25 September (P.Q.S.P.B., 1956:13). Nesting data have been obtained throughout the region (P.Q.S.P.B., 1935-1964, Nest Record Cards; F.N. Smith Egg Collection; author's observations 1965-1966). The writer

observed it regularly in good numbers (1-5) on all the Montereyan Hills (including Mount Royal) and their adjacent wooded parts from 15 May to 29 July 1965, and from 24 May to 21 June 1966.

FORMER STATUS

Earlier writers (Hall, 1862:51; Wintle 1882:110, 1896:104) consider this species as a "common summer resident". Wintle (1896:104) remarks that it was formerly breeding on Mount Royal, and it still does so (author's observations 1965-1966). Apparently this bird has been numerous in the region for many years, probably as a result of forest clearing and the plant successions which constitutes the preferred habitat of the species.

SPECIMENS EXAMINED

Eight specimens, collected by the writer in 1965 and 1966 or in the Redpath Museum, represent the following localities: Chambly, Mont St. Hilaire and Mont Yamaska.

Dickcissel Spiza americana (Gmelin)

Hypothetical. An individual apparently observed at Laprairie on 23 September 1961 (P.Q.S.P.B., 1961:33) can not be accepted here as a valid record.

Evening Grosbeak Hesperiphona vespertina vespertina (Cooper)

PRESENT STATUS

Common irregular winter resident. The Evening Grosbeak, which is

not known to nest in the Monteregian Hills region, occurs occasionally in large numbers, and was recorded from August (P.Q.S.P.B., 1955:12) to 15 June (P.Q.S.P.B., 1946:13). The writer observed flocks of 400-600 birds at Mont St. Hilaire from 31 March to 21 April 1965, and the last birds were seen in the area on 21 May 1965; in 1966, a few (4-10) were recorded at Mont St. Hilaire from 18 to 25 May, and four at Mont Yamaska on 26 May. During the winters of 1964-1965, 1965-1966, 1966-1967, it was irregularly recorded in small numbers throughout the region by the writer.

FORMER STATUS

This bird has been known to occur in the region for a relatively short period of time and according to Caulfield (1890:109-110, 148) and Wintle (1890:209; 1896:94) the first recorded date of occurrence of the species is 1890. Then an adult male was collected on 1 February (Caulfield, 1890:109-110) or during the last week of January (Wintle, 1890:209). Afterwards, it was apparently recorded fairly regularly in small numbers, at least until 1916; then Terrill (1916:15-16) mentions a few sight records and a few specimens collected in the region. The species appears to have become considerably more numerous in the following years, particularly since the late 1940's. This increase in numbers has been generally recorded in Eastern Canada and no explanations for such a situation have been offered yet.

SPECIMENS EXAMINED

Several specimens from the Monteregian Hills region have been studied.

TAXONOMY

The specimens examined have been referred to vespertina, the breeding subspecies of Eastern Canada (Godfrey, 1966:369).

Purple Finch Carpodacus purpureus purpureus (Gmelin)

PRESENT STATUS

Uncommon permanent resident. Although this finch has been recorded in the region in every month of the year, it is more numerous during the migrations (April, October) than in summer or in winter (P.Q.S.P.B., 1935-1964; author's observations, 1964-1967). The writer recorded it in small numbers (2-5) at Mont St. Hilaire on nine occasions from 10 November 1964 to mid-March 1965; during the winters of 1965-1966, and 1966-1967, it was recorded in the vicinity of Montreal on six occasions during January, February and early March. During the breeding season it was recorded on all the Monteregian Hills (except Mount Royal) and their adjacent wooded areas in small numbers (3-10) until 29 July 1965, and 21 June 1966. Although no nest has been found, the numbers of singing males in late May, June and July indicate that the species breeds in good numbers throughout the region.

FORMER STATUS

Hall (1862:51) lists it as a "common" summer resident, and Wintle (1896:96) shares the same opinion although, some years earlier (1882:109), he mentions that it was "not common" in the Montreal area. Wintle (1896:96) states that it "breeds on the Island of Montreal" and that he found a nest containing 4 eggs on 20 June 1891, on Mount Royal. Although good numbers of this bird still occur in the wooded parts of the region, there is no doubt that this species is less numerous in the region at the present than it was before the turn of the century. Its decline is no doubt the result of forest destruction and of the near extirpation of coniferous species from the forest stands throughout the region.

SPECIMENS EXAMINED

Six specimens, collected by the writer or in the Redpath Museum have been studied.

TAXONOMY

The specimens examined have been referred to purpureus on the basis of their coloration.

Pine Grosbeak Pinicola enucleator (Linnaeus)

PRESENT STATUS

Uncommon and irregular winter resident. This grosbeak was recorded in the Monteregian Hills region from 14 October (P.Q.S.P.B., 1951:16) to 18 May (P.Q.S.P.B., 1952:13). The scarcity of coniferous trees undoubtedly accounts for the small numbers of this species

that winter in the region.

FORMER STATUS

Earlier authors (D'Urban, 1857:142; Hall, 1862:51; Caulfield, 1890:148; Wintle, 1882:109, 1896:96) list the present species as a common but irregular "winter visitant". Although quantitative data are not available, there is no doubt that the Pine Grosbeak is less numerous in winter in the region at the present, doubtless as a result of forest destruction.

SPECIMEN EXAMINED

R 2863, m. immature, 3 November 1918, Chambly Canton.

TAXONOMY

The specimen examined has been assigned to eschatosa on the basis of its measurements: wing, 112.0 mm; tail, 88.0 mm.; exposed culmen, 14.0 mm.; tarsus 22.5 mm..

Hoary Redpoll Acanthis hornemanni (Holboell)

Rare winter wanderer. This species is considered to occur in the Monteregian Hills region on the basis of the following sight records: Hudson, Senneville and Dorval (P.W.S.P.B., 1946:36, 1954:26, 1952:33, 1958:39). Although it is seldom reported, the Hoary Redpoll probably occurs in greater numbers in winter than it is suspected. Careful checking of all flocks of redpolls would certainly reveal the true status of the species in winter.

Common Redpoll Acanthis flammea flammea (Linnaeus)

Common irregular winter resident. The Common Redpoll was recorded in the Monteregian Hills region in irregular numbers from 21 October (P.Q.S.P.B., 1950:18) to 8 May (P.Q.S.P.B., 1947:12). Flocks of several hundred individuals have been recorded on four occasions by the writer near Mont St. Hilaire during the winter of 1964-1966. Earlier writers (D'Urban, 1857:141; Hall, 1862:51; Caulfield, 1890:148; Wintle, 1882:109, 1896:97-98) report it in good numbers as a winter resident in the Montreal area.

SPECIMENS EXAMINED

Five specimens collected throughout the Monteregian Hills region have been studied.

TAXONOMY

The specimens examined have been referred to flammea on the basis of their size and coloration.

Pine Siskin Spinus pinus pinus (Wilson)

PRESENT STATUS

Uncommon winter resident. Although this species is known to breed in the highlands south of the Monteregian Hills region and in the Laurentian Mountains to the north, it has been reported in the region only in winter. It was recorded from 18 September (P.Q.S.P.B., 1957:15) to 30 May (P.Q.S.P.B., 1947:12). Flocks grouping over one hundred individuals or more have occasionally been observed in fall

(P.Q.S.P.B., 1935-1964; author's observations).

FORMER STATUS

Most of the earlier writers (D'Urban, 1857:142; Caulfield, 1890:149) list it as an irregular fall migrant, but Hall (1862:51) mentions that it is a "rare" summer resident. Wintle (1882:109; 1896:98) on the other hand considers it as a "common winter visitant". Notwithstanding these contradictory statements, this species, which may formerly have nested in the region, was doubtless more numerous as a winter resident. It is the author's opinion that its decline, either as a nesting bird or as winter resident, has been brought about by the disappearance of the coniferous species in the forests of the region.

SPECIMEN EXAMINED

R 2984, f. adult, 24 Oct. 1915, Contrecoeur.

TAXONOMY

The Canadian population has been referred to pinus (Godfrey, 1966:376).

American Goldfinch Spinus tristis tristis (Linnaeus)

PRESENT STATUS

Abundant summer resident, uncommon winter resident. Although the Goldfinch has been recorded in every month of the year, it is more numerous in the Monteregian Hills region from late April to the end of November (P.Q.S.P.B., 1935-1964; author's observations 1964-1967). Nesting data are numerous throughout the region (P.Q.S.P.B., 1935-1964, Nest Record Cards; F.N. Smith Egg Collection;

Terrill, 1961; author's observations 1965-1966). The writer observed it in good numbers (4-20) on all the Monteregian Hills, except Mount Royal, and their adjacent wooded parts from 3 May to 29 July 1965, and from 16 May to 21 June 1966.

FORMER STATUS

D'Urban (1857:145) has recorded it once in winter. Hall (1862:51) found it "common" from May to November, and Wintle (1896:98) mentions it as an "abundant summer resident" known to breed on Mount Royal. Apparently, the destruction of the forest stands of the region since the turn of the century has affected only slightly, if at all, the nesting population of this bird. It appears indeed to be more numerous at the present.

SPECIMENS EXAMINED

Twelve breeding specimens were collected in 1965 and 1966 at Mont St. Hilaire, Mont Rouge, Mont Yamaska and Mont Shefford.

TAXONOMY

The breeding population of Eastern Canada, east of western Ontario, has been assigned to tristis (Godfrey, 1966:377).

Red Crossbill

Loxia curvirostra Linnaeus

PRESENT STATUS

Rare winter wanderer. This nomadic species occurs irregularly in small numbers throughout the Monteregian Hills region. Although the region falls in its breeding range (Godfrey, 1966:378-379), there are

apparently no nesting data available for the study area. It was recorded in small numbers, about one hundred individuals being the largest reported flock (P.Q.S.P.B., 1960:30), from 22 September (P.Q.S.P.B., 1946:13) to 3 June (P.Q.S.P.B., 1964:13). The writer has not observed it from the fall of 1964 to the spring of 1967.

FORMER STATUS

Caulfield (1890:148) mentions that it has been recorded in "large flocks" in the Montreal area but that it is "irregular visitant". Wintle (1896:97) lists it as a "common transient visitant". Apparently, this species has diminished considerably in numbers in the region, and it is the author's opinion that the disappearance of coniferous species is responsible for the present situation.

White-winged Crossbill Loxia leucoptera Gmelin

PRESENT STATUS

Uncommon winter wanderer. This nomadic species occurs in small numbers only irregularly in the Monteregian Hills region, and was recorded from 28 September to 7 May (P.Q.S.P.B., 1953:14). The writer has not observed it in the region from the fall of 1964 to the spring of 1967.

FORMER STATUS

Caulfield (1890:148) has observed it "unexpectedly in considerable numbers" in the Montreal area, and Wintle (1896:97) mentions that it is a "common transient visitant". Apparently, the local decrease in numbers of this bird is related to the disappearance of the coniferous trees from the forest stands of the region.

Rufous-sided Towhee Pipilo erythrophthalmus erythrophthalmus (Linnaeus)

Rare summer resident. This towhee which was observed throughout the Monterey Hills region from 28 April (P.Q.S.P.B., 1947:12) to 4 November (P.Q.S.P.B., 1945:13), is more numerous during the migrations than during the nesting season. It was recorded in winter, at feeders, on a few occasions (P.Q.S.P.B., 1964:39; 1963:38; 1958:32; 1958:39) but is not known to winter regularly. The writer observed two singing males and three breeding females at Mont Shefford on 6 July 1965; two females with brood patches were then collected. In 1966, three females, which behaved as if they were nesting, and a singing male were observed at the same place; two males were also recorded at Mont St. Hilaire from 28 May to 4 June 1966 but were not seen afterwards. The Mont Shefford breeding record therefore constitutes a considerable increase in the range of the species as the nearest known nesting breeding locality is Ormstown (Godfrey, 1966:381). This species has apparently arrived recently in the region as none of the earlier writers mention it.

SPECIMENS EXAMINED

155, f. adult (with brood patch), 6 July 1965, Mont Shefford
 156, f. adult (with brood patch), 6 July 1965, Mont Shefford
 341, m. adult (in breeding condition), 15 June 1966, Mont Shefford

TAXONOMY

The specimens examined have been assigned to erythrophthalmus on the basis of the coloration of their upper parts.

Savannah Sparrow

Passerculus sandwichensis mediogriseus AldrichPRESENT STATUS

Abundant summer resident. This small sparrow of hayfields has certainly benefited greatly from forest clearing and agriculture. It was reported in the Monteregian Hills region from 30 March (P.Q.S.P.B., 1945:13) to 1 November (P.Q.S.P.B., 1947:12). During the nesting season of 1965 and 1966 the writer recorded it throughout the open fields of the region in large numbers, at least 68 individuals being counted in fields of about three acres near St. Jean Baptiste on 6 June 1965. Many nests have been found in 1965 and 1966 by the writer.

FORMER STATUS

According to Wintle (1896:100) this sparrow was an "abundant summer resident" although the other writers appear to have overlooked it. Nevertheless, it is the writer's opinion that this bird was formerly present in good numbers and that it has been greatly favored by forest clearing and agriculture for many years, thus increasing greatly in numbers.

SPECIMENS EXAMINED

Several specimens in the Redpath Museum or collected by the writer have been studied.

TAXONOMY

The specimens examined, which represent the breeding population of the region, have assigned to mediogriseus, pending a more adequate treatment of the variation of this species in Eastern Canada.

Grasshopper Sparrow Ammodramus savannarum pratensis (Vieillot)

Rare summer resident. This sparrow of open areas appears to have arrived only recently in the province of Quebec, the first individuals being recorded in 1920 (Terrill, 1921:115-116); it is indeed very possible that prior to that, the Grasshopper Sparrow has been overlooked by all earlier observers owing to its secretive habits and very small local population. Thus, it was reported at Chambly for the first time on 26 June 1920 when a male was heard singing; a second visit to the area revealed five birds, of which three were singing males, on 5 July 1920 (Terrill, 1921:115-116). Thereafter, it was regularly reported in the same area but the small colony appears to never have increased considerably in size (P.Q.S.P.B., 1935-1964). Summer observations, which suggest that the species is established elsewhere, were reported from the following localities: St. Lambert (P.Q.S.P.B., 1942:25), Côte St. Luc (P.Q.S.P.B., 1945:30; 1948:38), Hudson (P.Q.S.P.B., 1947:21; 1951:33; 1961:35), and Choisy (P.Q.S.P.B., 1962:34). The species was recorded in the region from 8 May (P.Q.S.P.B., 1961:35) to 5 July (Terrill, 1921:115-116). During the summer of 1965 and 1966, the writer has not recorded it once in spite of a careful search.

SPECIMEN EXAMINED

R 3156, m. adult, 5 July 1920, Chambly.

Henslow's Sparrow Passerherbulus henslowii (Audubon)

Rare summer resident. Although the species has not been collected yet in the province of Quebec, a few birds (1-3) observed at Côte St. Luc suggest that the species has nested there at least once: one to three birds were seen there on several occasions during June 1947; on 21 June, a pair was seen carrying food, and they were last recorded on 26 June (P.Q.S.P.B., 1947:21-22). This constitutes the only nesting record of the species for the Monteregian Hills region. Another individual was reported at the same place on 21 May 1950 (P.Q.S.P.B., 1950:18) but was not seen afterwards.

Sharp-tailed Sparrow Ammodramus caudacuta (Gmelin)

Rare transient. Owing to its secretive habits, this small migratory sparrow was recorded only once in the Monteregian Hills region: Pointe Claire (8-10) 15 September 1962 (P.Q.S.P.B., 1962:34). Intensive field work during the migrations may reveal that this species is more numerous than suspected until now.

Vesper Sparrow Pooecetes gramineus gramineus (Gmelin)

PRESENT STATUS

Common summer resident. This species, which was recorded from 29 March (P.Q.S.P.B., 1945:13) to 1 November (P.Q.S.P.B., 1947:12), occurs in good numbers in open fields throughout the Monteregian Hills region. The writer observed good numbers (2-8) in the open areas adjacent to the Monteregian Hills (Island of Montreal included) on several occasions between 3 May and 26 July 1965 and from 17 May

to 21 June 1966; several nests were discovered during that period.

FORMER STATUS

Hall (1862:51) and Wintle (1882:109; 1896:100) list it as a "common summer resident". This species, which has undoubtedly benefited from forest destruction and agriculture almost is certainly more numerous now than it was in the past, although it was already "common" in Hall's time.

SPECIMENS EXAMINED

Several specimens, collected by the writer or in the Redpath Museum, represent many localities in the region.

TAXONOMY

The specimens examined have been identified as gramineus, the breeding subspecies of Eastern Canada, on the basis of their coloration.

Slate-colored Junco Junco hyemalis hyemalis (Linnaeus)

PRESENT STATUS

Rare summer resident; abundant transient; rare and irregular winter resident. The Slate-colored Junco, which is abundant from late March to late April, is found only in small numbers during the summer months in the wooded parts of the Monteregian Hills region. In the fall, it is again numerous from mid-September to mid-October, and small numbers have been known to winter fairly regularly (P.Q.S.P.B., 1935-1964; author's observations). Two to three individuals were recorded daily by the writer on Mont St. Hilaire from 24 May to 21 July 1965, and from 30 May to 20 June 1966. On Mont Rouge, two individuals were observed on 12 and 23 June 1965, and four on 3 June 1966; four on Mont Yamaska on 2 July 1965, and two on 15 June 1966,

three on Mont Shefford on 6 July 1965, and four on 15 June 1966. Although nesting data have not been obtained, the records mentioned here represent singing males and indicate that the species was breeding where it was recorded. This bird has doubtless declined considerably in the region as a breeding bird. As far as 1911, Terrill (1911:60) made the following comments: "I have never found the Junco, during the breeding season, in the vicinity of Montreal. No doubt in years gone by it nested on Mount Royal, as they still do to some extent, on the slopes of neighbouring isolated mountains, such as Beloeil (=Mont St. Hilaire), Yamaska and Oka".

FORMER STATUS

According to earlier writers (D'Urban, 1857:141; Vennor, 1860:427; Hall, 1862:51; Wintle, 1882:109, 1896:102) the **Slate-colored Junco** was a "common", even an "abundant summer resident". Wintle (1896:102) remarks that it used to breed on Mount Royal and that it was known to winter. Forest destruction doubtless accounts for the important decline suffered by the breeding birds of this species throughout the region.

SPECIMENS EXAMINED

Several nesting and migrating specimens, collected by the writer or in the Redpath Museum, have been studied.

TAXONOMY

The specimens examined have been assigned to hyemalis, the northeastern nesting population, on the basis of their coloration.

Oregon Junco Junco oreganus (Townsend)

Hypothetical. Although this western species has apparently been recorded in winter, the writer does not accept the following records owing to the difficulty of identifying this species in the field:

Hudson Heights (1) at a feeder 19 November to 30 December 1959 (P.Q.S.P.B., 1959:33); Baie d'Urfé (1) 13 and 17 March 1959 (P.Q.S.P.B., 1959:3); Ste. Thérèse (1) 3, 4 and 5 April 1959 (P.Q.S.P.B., 1959:33); Hudson (1) from 10 February to 31 March 1960 (P.Q.S.P.B., 1960:35); Laval des Rapides (1) 23 December 1961 (P.Q.S.P.B., 1961:35).

Tree Sparrow Spizella arborea (Wilson)

PRESENT STATUS

Common transient, rare winter resident. The Tree Sparrow was recorded in the Montereian Hills region from 25 September (P.Q.S.P.B., 1953:25) to 30 May (P.Q.S.P.B., 1964:14). It is more numerous in fall from mid-October to mid-November, and in spring from mid-April to early May (P.Q.S.P.B., 1935-1964; author's observations 1964-1967). In winter it was reported fairly regularly in small numbers both at feeders and under natural conditions (P.Q.S.P.B., 1935-1964; author's observations 1964-1967).

FORMER STATUS

Hall (1862:51), certainly mistaken, lists it as "common" from May to September. Wintle (1896:101) found it "common" during the migrations. Although quantitative data are not available, it appears that the status of this bird has not changed in the region since the

turn of the century.

SPECIMENS EXAMINED

Four specimens in the Redpath Museum represent individuals taken during the spring and fall migrations.

Chipping Sparrow Spizella passerina passerina (Bechstein)

PRESENT STATUS

Abundant summer resident. This small sparrow was recorded in numbers throughout the Monteregian Hills region from 10 April (P.Q.S.P.B., 1945:13) to 5 November (P.Q.S.P.B., 1952:13). It is found in parks, semi-open wooded areas, along roadsides and about farms everywhere in the region (author's observations 1965, 1966). Several nests were discovered by the writer during the nesting season of 1965 and 1966, and was recorded from 3 May to 29 July 1965, and from 16 May to 21 June 1966.

FORMER STATUS

Hall (1862:51), who certainly mistook it for Spizella arborea, lists it as "common" from December to March. Wintle (1882:109; 1896:101) recorded it as an "abundant summer resident" which breeds in the city and on Mount Royal. The status of this bird has apparently changed only slightly since the turn of the century. It is however the author's opinion that it may at the present be more numerous as a result of the habitats which became available in greater quantities after forest clearing.

SPECIMENS EXAMINED

Four specimens, taken by the writer at Mont St. Hilaire and Mont Yamaska, were in breeding condition.

TAXONOMY

The specimens examined have been referred to passerina on the basis of their measurements and coloration.

Clay-colored Sparrow Spizella pallida (Swainson)

Accidental straggler. An individual of this western species, which appears to have extended its range eastward in recent years (Godfrey, 1966:393-394), was recorded beyond doubt in the Morgan Arboretum, Ste-Anne de Bellevue, on 6 and 8 June 1961 by several observers (Montgomery, 1961:263-264; P.Q.S.P.B., 1960:35).

Field Sparrow Spizella pusilla pusilla (Wilson)

PRESENT STATUS

Uncommon summer resident. This small sparrow occurs in the Monteregian Hills region from 20 April (P.Q.S.P.B., 1958:16) to 23 December (P.Q.S.P.B., 1961:15), although most of the resident birds have departed south by the middle of October (P.Q.S.P.B., 1935-1964). Nests of this species have apparently not been found in the region but sight records during the breeding season establish beyond doubt that the species occurs as follows: Hudson (P.Q.S.P.B., 1942:25); Choisy and Rigaud (P.Q.S.P.B., 1962:35); Brome and West Shefford (P.Q.S.P.B., 1961:35; 1962:35). The writer observed four singing males on the western slope of Mont Shefford on 15 June 1966, and collected a female in breeding condition which constitutes the

easternmost breeding record for the species in the province of Quebec. It was not recorded elsewhere by the writer.

FORMER STATUS

According to Wintle (1896:101) this sparrow was a "scarce summer resident" on the basis of very indefinite data. Apparently, this species has moved in rather recently in the southern part of the province; nevertheless, it is possible that it may have been overlooked by earlier writers owing to the small numbers of individuals found in the area.

SPECIMEN EXAMINED

346, f. adult, 15 June 1966, Mont Shefford.

TAXONOMY

The specimen examined has been referred to pusilla, the breeding subspecies of eastern North America (A.O.U. Check-list, 1957:616).

Harris's Sparrow Zonotrichia querula (Nuttall)

Accidental wanderer. An adult of this northwestern species was caught and banded at St. Laurent on 29 September 1957 (P.Q.S.P.B., 1959:33).

White-crowned Sparrow Zonotrichia leucophrys leucophrys (Forster)

PRESENT STATUS

Common transient. This northern breeder was recorded throughout the Monteregian Hills region from 25 April (P.Q.S.P.B., 1954:14) to 31 May (P.Q.S.P.B., 1958:16), exceptionnally as late as 17 June

(P.Q.S.P.B., 1956:28), and From 8 September (P.Q.S.P.B., 1963:16) to 2 November (P.Q.S.P.B., 1963:16). It occurs during the migrations in a variety of situations and in good numbers. The writer observed four to ten individuals daily at Mont St. Hilaire, from 11 to 20 May 1965, but none were seen in 1966.

FORMER STATUS

Hall (1862:51) and Wintle (1882:109; 1896:100) have apparently not observed it in any numbers in the Montreal area. Perhaps they have overlooked it. However, it is possible that the habitat modifications that have occurred in the area since the turn of the century attract, at the present, more of these birds during the migrations.

SPECIMENS EXAMINED

R 3289, f. adult, 4 October 1915, Chambly
64, f. adult, 13 May 1965, Mont St. Hilaire

TAXONOMY

The specimens examined have been assigned to leucophrys on the basis of their coloration.

White-throated Sparrow Zonotrichia albicollis (Gmelin)

PRESENT STATUS

Uncommon summer resident. This sparrow was recorded in good numbers throughout the wooded parts of the Monteregian Hills region from 19 March (P.Q.S.P.B., 1945:13) to 31 December (P.Q.S.P.B., 1962:18). The writer recorded a few nests and several adults on all the Monteregian Hills and adjacent wooded parts (except Mount Royal) during the summers of 1965 and 1966, from 21 April to 29 July.

FORMER STATUS

Hall (1862:51) and Wintle (1896:100-101) list it as a "common summer resident". Wintle (1896:100-101) found it breeding on Mount Royal.

This species appears to have decreased considerably in numbers since the turn of the century, and forest destruction is doubtless responsible for the present situation.

SPECIMENS EXAMINED

Specimens in the Redpath Museum or collected by the writer represent nesting and migrant individuals.

Fox Sparrow Passerella iliaca iliaca (Merrem)

PRESENT STATUS

Uncommon transient. The Fox Sparrow is a regular migrant through the Monteregian Hills region, but never occurs in large numbers (P.Q.S.P.B., 1935-1964; author's observations 1964-1967). It was reported from 24 March (P.Q.S.P.B., 1946:14) to 29 May (P.Q.S.P.B., 1955:14), and from 23 September (P.Q.S.P.B., 1953:14) to 30 December (P.Q.S.P.B., 1955:14). Although it was recorded on several occasions in winter (P.Q.S.P.B., 1935-1964), it is not known to winter regularly in the region.

FORMER STATUS

The status of this bird appears not to have changed in the region for many years. It is listed by Hall (1862:51) as "rare" from May to September; Hall is certainly mistaken as to the breeding status of the species in the Montreal area; indeed this species is not known to have nested anywhere near the region of Montreal

(Godfrey, 1966:399). Wintle (1896:103) considers it as a "scarce transient visitant", which appears to be an objective statement.

SPECIMENS EXAMINED

R 3334, m. adult, 13 October 1918, Longueuil

6, m. adult, 22 October 1964, Mont St. Hilaire

TAXONOMY

The two specimens examined, which doubtless represent the migrating population, have been referred to iliaca on the basis of their coloration.

Lincoln's Sparrow Melospiza lincolni (Audubon)

PRESENT STATUS

Rare transient. This sparrow was recorded in small numbers but fairly regularly in the Monteregian Hills region (P.Q.S.P.B., 1935-1964) from 5 May to 30 May (P.Q.S.P.B., 1954:14), and from 5 August (P.Q.S.P.B., 1945:13) to 25 October (P.Q.S.P.B., 1963:16). The writer has not observed it from the fall of 1964 to the spring of 1967.

FORMER STATUS

Wintle (1896:103), who has not observed it on the Island of Montreal, lists it as a "transient visitant" which is supposed to occur in the area. However, it is the author's opinion that this bird was always found in small numbers during migrations in the Montreal area, and that it may have nested in some of the extensive bogs of the region

(St. Hubert, Farnham, Oka) before they were disturbed by human activity.

Swamp Sparrow Melospiza georgiana (Latham)

PRESENT STATUS

Rare summer resident. This bird of wetlands was recorded in small numbers at many places in the Monteregian Hills region from 2 April (P.Q.S.P.B., 1952:12) to 29 October (P.Q.S.P.B., 1949:12). The F.N. Smith Egg Collection provides the following nesting records: St. Lambert, 4 eggs, 1 June 1927 (584 1/4); Ville Emard, 5 eggs, 27 May 1927 (584 2/5), 4 eggs, 1 June 1927 (584 3/4); Ile Bizard, 5 eggs, 29 May 1930 (584 4/5); Brosseau Junction, 4 eggs, 1 June 1913 (584 5/4). The writer has not recorded it during the nesting season of 1965 and 1966 in spite of an intensive search. This species has occasionally been recorded in winter but is not known to winter in the region (P.Q.S.P.B., 1935-1964).

FORMER STATUS

Wintle (1896:103), who, alone among the earlier writers, recorded it, lists it as a "common summer resident" and found it "plentiful" in the marshes of the Montreal area. In 1965 and 1966, the writer has visited many marshes, or what is left of the original marshes, in the Monteregian Hills region and has not found a single individual of this species. It appears that the recent decline of the Swamp Sparrow in the region is the result of extensive habitat destruction which is the result of drainage and recuperation for agricultural or industrial purposes of most, if not all, the marshes

of the region.

SPECIMEN EXAMINED

R 3169, unsexed adult, 22 June 1919, Chambly

TAXONOMY

The single specimen examined represents doubtless the nesting population of the region, and has been assigned to georgiana.

Song Sparrow Melospiza melodia melodia (Wilson)

PRESENT STATUS

Abundant summer resident, rare winter resident. The Song Sparrow occurs in large numbers in suitable habitats throughout the Monteregian Hills region from mid-March to mid-October (P.Q.S.P.B., 1935-1964; author's observations, 1964-1967). From late fall it diminishes in numbers but a few remain regularly in the region throughout the winter, and becomes more numerous with the first days of March (P.Q.S.P.B., 1935-1964; Terrill, 1923:30; author's observations 1964-1967). The writer observed it in good numbers (8-10 daily) in the Monteregian Hills region during the breeding season of 1965 and 1966, and discovered several nests.

FORMER STATUS

D'Urban (1857:145) recorded a wintering individual, and Hall (1860:51) lists it as a "common" summer resident. Wintle (1896:102-103) considers it an "abundant summer resident" and states that it "breeds in the city and in Mount Royal Park". It is the author's opinion that the status of this bird in the region has remained fairly stable

since the turn of the century, although many new habitats have been created after forest clearing; however, human activity is claiming more and more of the new habitats so that, it is felt here, that no gain has been made since the turn of the century by this species.

SPECIMENS EXAMINED

Twelve specimens taken by the writer during the nesting season or in the Redpath Museum, represent the following localities: Mont St. Hilaire, Mont Rouge, Mont Shefford and Chambly.

TAXONOMY

The specimens examined have been referred to melodia on the basis of the coloration of their upper parts, when compared to series of specimens from Eastern Canada (southern Ontario to Nova Scotia).

Lapland Longspur Calcarius lapponicus (Linnaeus)

Rare winter resident. This northern bird was apparently never numerous in the Monteregian Hills region, as all the earlier writers (Hall, 1862:51; Caulfield, 1890:149; Wintle, 1896:99) list is a "rare" winter resident. In recent years it was recorded in small numbers, only a few records almost every year, throughout the Monteregian Hills region from 29 October (P.Q.S.P.B., 1952:14) to 14 May (P.Q.S.P.B., 1950:19). It is often seen in flocks with Snow Buntings (Plectrophenax nivalis) (author's observations 1964-1967).

Snow Bunting Plectrophenax nivalis (Linnaeus)

PRESENT STATUS

Common irregular winter resident. This northern species often occurs

in the open areas of the Monterey Hills region in immense flocks, sometimes grouping 400-500 individuals (author's observations, winters 1964-1965, 1965-1966). Although it is recorded regularly every winter, its numbers fluctuate considerably from year to year. It was recorded in the region from 23 September (P.Q.S.P.B., 1961:16) to 21 April (P.Q.S.P.B., 1947:13).

FORMER STATUS

Earlier writers (D'Urban, 1857:141; Vennor, 1860:427; Hall, 1862:51; Caulfield, 1890:149; Wintle, 1882:109, 1896:98) consider it a "common" or an "abundant" winter resident. Caulfield (op. cit.) remarks that it is "not so abundant as in former years", and that some individuals have been seen "until the beginning of June". Apparently this bird has diminished somewhat as a winter bird in this region; the writer can not offer any explanation for the present situation unless there has been a shift in the migrating routes and in the wintering grounds which has not been reported upon by recent writers.

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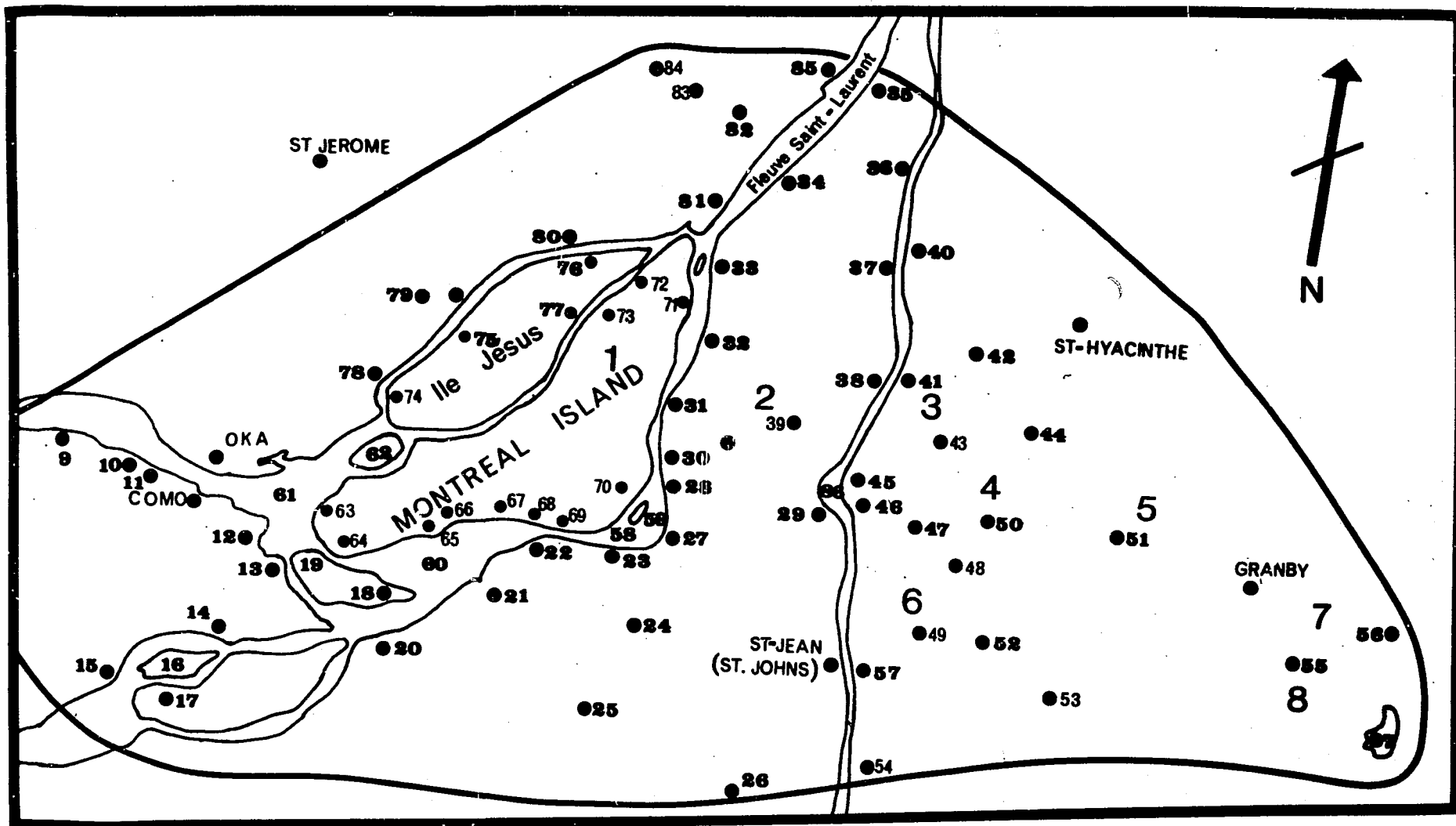
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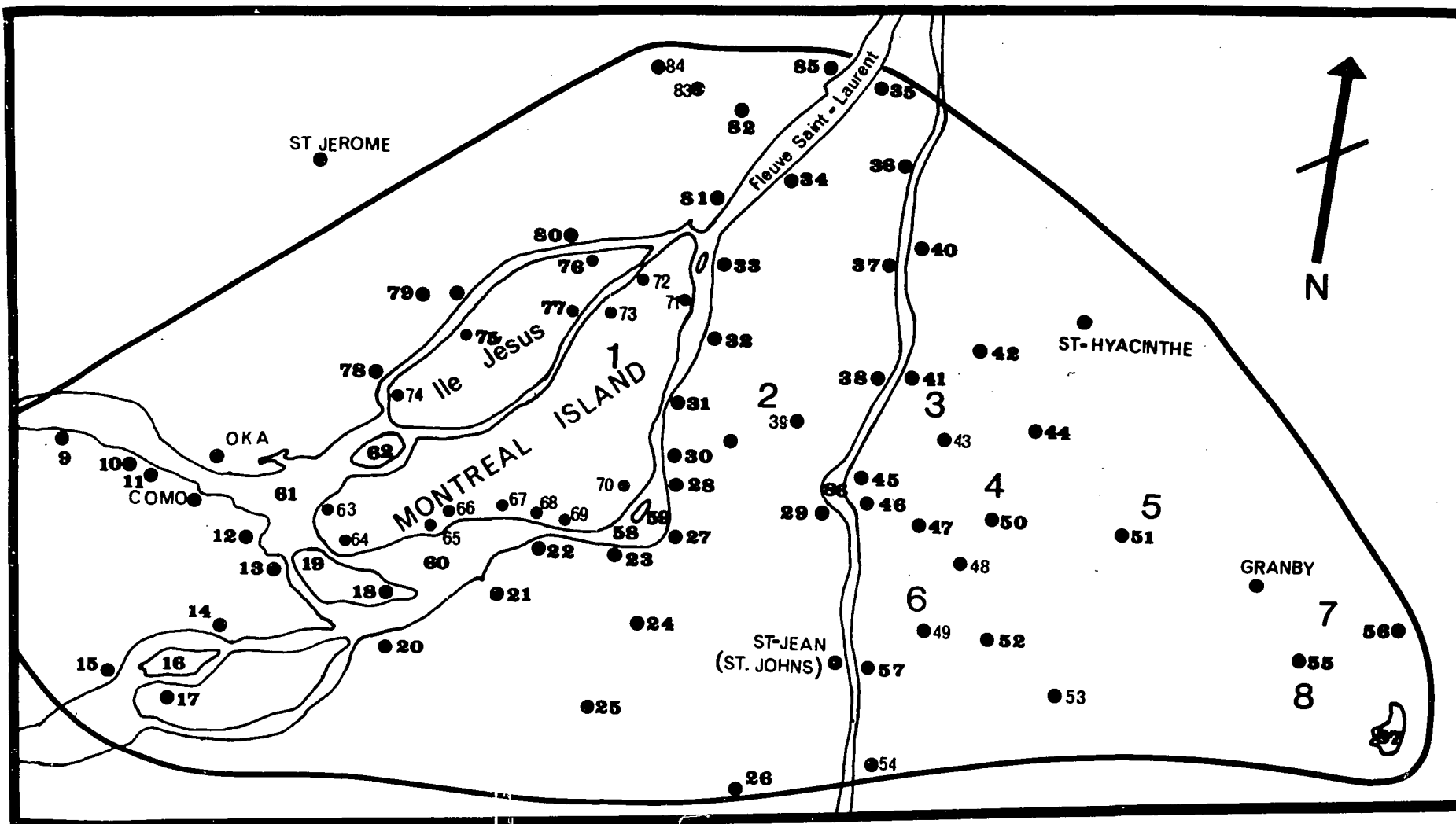
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APPENDIX



MAP 1. The Monteregian Hills region (within the bold line).
For legend see next pages.



MAP 1. The Monteregian Hills region (within the bold line).
For legend see next pages.

LEGEND OF MAP 1

- | | |
|---------------------------|---------------------------------------|
| 1. Mont Royal | 2. Mont St. Bruno |
| 3. Mont St. Hilaire | 4. Mont Rouge |
| 5. Mont Yamaska | 6. Mont Johnson |
| 7. Mont Shefford | 8. Mont Brome |
| 9. Rigaud | 10. Hudson Heights |
| 11. Hudson | 12. Vaudreuil |
| 13. Dorion | 14. Les Cèdres (Cedars) |
| 15. Coteau Landing | 16. Ile de Salaberry |
| 17. Valleyfield | 18. Pointe-au-Moulin (Windmill Point) |
| 19. Ile Perrot | 20. Beauharnois |
| 21. Châteauguay | 22. Caughnawaga |
| 23. Côte-Ste-Catherine | 24. St. Constant |
| 25. St. Rémi | 26. Napierville |
| 27. Laprairie | 28. Brossard (Brosseau nearby) |
| 29. Chambly | 30. St. Lambert |
| 31. Longueuil | 32. Boucherville |
| 33. Varennes | 34. Verchères |
| 35. Contrecoeur | 36. St. Antoine-sur-Richelieu |
| 37. St. Marc | 38. Beloeil |
| 39. St. Bruno | 40. St. Charles |
| 41. St. Hilaire | 42. Ste. Madeleine |
| 43. St. Jean Baptiste | 44. St. Damase |
| 45. St. Mathias | 46. Richelieu |
| 47. Marieville | 48. Ste. Angèle |
| 49. St. Grégoire | 50. Rougemont |
| 51. St. Paul d'Abbotsford | 52. Ste. Brigide |
| 53. Farnham | 54. Sabrevois |
| 55. Shefford Ouest | 56. Waterloo |
| 57. Iberville | 58. Lachine Rapids, Heron Island |
| 59. Nun's Island | 60. Lake St. Louis |
| 61. Lake of Two Mountains | 62. Ile Bizard, Rivière des Prairies |
| 63. Senneville | 64. Ste. Anne de Bellevue |
| 65. Beaconsfield | 66. Pointe Claire |
| 67. Dorval | 68. Lachine |
| 69. LaSalle | 70. Verdun |
| 71. Pointe aux Trembles | 72. Rivière des Prairies |
| 73. Ahuntsic | 74. Ste. Dorothée |
| 75. Ste. Rose | 76. St. François de Sales |
| 77. St. Vincent de Paul | 78. St. Eustache |
| 79. Ste. Thérèse | 80. Terrebonne |
| 81. Repentigny | 82. L'Assomption |
| 83. L'Épiphanie | 84. Vacluse |
| 85. Lavaltrie | 86. Richelieu River |
| 87. Brome Lake | |

TABLE 1

altitude above surrounding area .

Mont Royal	650 feet	195.5 metres
Mont St. Bruno	620 "	186.6 "
Mont St. Hilaire	1,230 "	370.2 "
Mont Rouge	1,140 "	340.3 "
Mont Johnson	685 "	203.0 "
Mont Yamaska	1,300 "	390.8 "
Mont Shefford	1,225 "	368.4 "
Mont Brome	1,100 "	330.7 "

(adapted from Dresser and Denis, 1944:455-482)

Altitude of the Monteregian Hills

TABLE 2

mean precipitation

	May	June	July
Mont St. Hilaire	2.67"	2.74"	4.03"
Montreal	3.19"	3.57"	3.81"

TABLE 3

		May	June	July
Mont St. Hilaire	Max.	63.9	72.3	74.5
	Min.	45.6	57.5	58.4
	Mean	54.8	63.4	66.5
Montreal	Max.	64.0	74.0	78.0
	Min.	46.0	56.0	61.0
	Mean	55.2	64.8	69.5
Les Cèdres	Max.	62.0	76.0	77.0
	Min.	44.0	54.0	60.0
	Mean	53.0	63.0	68.0
Farnham	Max.	65.0	74.0	79.0
	Min.	41.0	52.0	57.0
	Mean	53.0	63.0	68.0
Brome	Max.	63.0	72.0	76.0
	Min.	41.0	50.0	55.0
	Mean	52.0	61.0	66.0

(after Dept. of Transport Monthly Weather Reports, and
Gault Estate Weather Summaries).

Temperature (in °F) during the breeding season

TABLE 4

A= number of species recorded in the region
 B= number of species known to breed in 1896
 C= number of species known to breed in 1967
 D= number of species vanished as breeding birds from the region
 E= number of new arrivals as breeding birds
 F= cumulative number of breeding species

	A	B	C	D	E	F
Gaviidae	3			1		1
Podicipedidae	4	1	1			1
Hydrobatidae						
Sulidae	1					
Phalacrocoracidae	2			1		1
Ardeidae	8	3	5			5
Threskiornithidae	1					
Anatidae	36	6	11	1	6	12
Cathartidae	1					
Accipitridae	11	7	5			7
Pandionidae	1	1		1		1
Falconidae	4	3	2	1		3
Tetraonidae	2	1	1			1
Phasianidae	3		2		2	2
Rallidae	6	3	4		2	4
Charadriidae	6	1	1			1
Scolopacidae	25	2	4		2	4
Phalaropodidae	3					
Stercorariidae	1					
Laridae	11	1	4		3	4
Alcidae	5					
Columbidae	3	1	2	1	2	3
Cuculidae	2	1	2		1	2
Tytonidae	1				1	1
Strigidae	10	2	5		3	5
Caprimulgidae	2	1	2			2
Apodidae	1	1	1			1
Trochilidae	1	1	1			1
Alcedinidae	1	1	1			1
Picidae	9	6	6			6
Tyrannidae	8	7	6	1		7
Alaudidae	1	1	1			1
Hirundinidae	6	5	6		1	6
Corvidae	4	2	2	1		3

TABLE 4 (concluded)

	A	B	C	D	E	F
Paridae	3	1	1			1
Sittidae	2	2	2			2
Certhiidae	1	1	1			1
Troglodytidae	5	3	4		1	4
Mimidae	3	2	3		1	3
Turdidae	7	6	5	1		6
Sylviidae	3	1	1			1
Motacillidae	1					
Bombycillidae	2	1	1			1
Laniidae	2	1	1			1
Sturnidae	1		1		1	1
Vireonidae =	5	3	4		1	4
Parulidae	27	15	17	2	3	18
Ploceidae	1	1	1			1
Icteridae	8	6	6			6
Thraupidae	2		1			1
Fringillidae	32	13	18		5	18

Totals	288	114	142	11	35	155
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TABLE 5

Temperature and climate in St. Lawrence Lowland

5. Colder and moist	Increase of spruce-fir, paper birch, broad-leaved genera, yellow birch, appearance of chesnut, decline of pine and hemlock
4. Warm, moist	Hemlock, pine, beech, and other broad-leaved genera; rising spruce-fir
3. Warm, dry	Pine peak, decline of paper birch and hemlock; spruce-fir very-low. Increase in oak.
2. Colder, moist	Spruce-fir higher. Small decrease in pine, small increase in paper birch. Increase in oak and other broad-leaved genera
1. Initial warm period	Pine high, spruce-fir low, low hemlock peak, rising paper birch, low oak

(modified from Potzger, 1953:400)

Post-Pleistocene vegetation and temperature sequence in southern Quebec.