SKIPPERS AND BUTTERFLIES OF THE PINAWA-LAC DU BONNET REGION, SOUTHEASTERN MANITOBA

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Introduction

This is a summary of butterfly observations, mainly sight records, made in the Pinawa-Lac du Bonnet region of Manitoba between 1976 and 1988. Unless otherwise stated, sightings were by the author alone. Binoculars were usually used as an aid to identification. Some records were confirmed photographically; pictures of some of the less common species accompany this article. Record-keeping was sporadic from 1976 to 1985 and more systematic in the next three years.

The most recent checklist of Manitoba butterflies was published in 1984 by Klassen.⁴ The list below follows the same sequence, but includes several recent changes. The changes were made in consultation with Klassen et al., to be consistent with both English and scientific names in Butterflies of Manitoba.⁵ With two exceptions, subspecies are not given here; those occurring in southeastern Manitoba are given by Klassen.⁴

The study area is shown in the map, Figure 1. Abundance estimates are based on records within the circle, 25 km radius, centred at the junction of Manitoba Highway 11 and Provincial Road 211 (the Pinawa road). The flight dates include a few records from up to 15 km farther afield.

The relationship between the areas covered by this and previous lists is shown in Figure 1. In 1972, Masters published two annotated lists, excluding skippers, for Whiteshell Provincial Park and for Grand Beach Provincial Park and Belair Forest Reserve (now Provincial Forest), as well as simple lists for Northwest Angle and Sandilands Provincial Forests.^{78 9 10} These papers include

some information previously published by Bird, Brodie, and Brooks.¹²³ The present study area just overlaps the western edge of the Whiteshell park.[–]

The principal geographic features and habitat types of the Pinawa-Lac du Bonnet region have been described elsewhere.¹³ The study area is in the boreal forest at the edge of the Canadian shield, at an elevation of 240-300 m. It straddles the divide between the Winnipeg River and Brokenhead River drainages; both rivers flow into Lake Winnipeg. The dividing feature is a low sandy ridge, known locally as Milner Ridge, which is also the name of a hamlet (Fig. 1). The ridge originated as a beach of glacial Lake Agassiz; it is part of a beach-ridge complex extending from Lake Winnipeg to northern Minnesota, sometimes referred to as La Petite Montagne des Cypres.⁹

There is little surface relief in the land. but small changes in elevation can result in dramatic changes in habitat. Welldrained rock outcrops and sandy ridges are clad mainly in Jack Pine, while most wet, low-lying areas are dominated by Tamarack and Black Spruce. Intervening areas have a lot of deciduous trees, mainly Trembling Aspen, with some White Birch and Balsam Poplar, as well as White Spruce. Bur Oak, Black and Green Ash, and American Elm are more localized. There are also numerous marshes, bogs and fens, some like the Whitemouth Bog (5 km northeast of Whitemouth) being very extensive. Much forest has been converted to farmland, especially between Elma and Lac du Bonnet, and at the western fringe of the study area, and land clearing con-

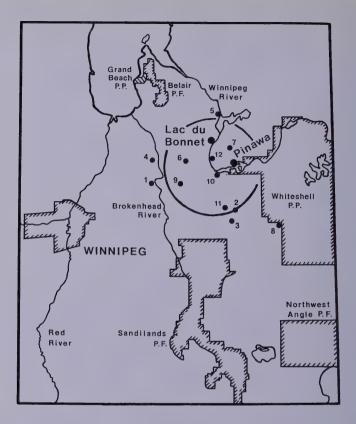


Figure 1. Southeastern Manitoba, showing the study area in relation to those investigated by Masters.^{7 8 9 10} Numbers represent localities mentioned in the text: 1 Beausejour; 2 Darwin; 3 Elma; 4 Ladywood; 5 McArthur Falls; 6 Milner Ridge; 7 Old Pinawa; 8 Rennie; 9 Seddon's Corner; 10 Seven Sisters Falls; 11 Whitemouth; 12 Whiteshell Nuclear Research Establishment (WNRE).

tinues today. Much of the existing upland forest is second growth, having been burned or felled within this century.

There is thus a rich variety of habitats within a small geographic area. Many butterflies are edge-loving species, so the greatest variety can usually be found along roadsides and woodland trails and in meadows adjoining the forest.

The Butterfly Year

The first warm, sunny days of spring, usually around the end of March, prompt the emergence of overwintering tortoise shells and Mourning Cloaks in the woods, followed a little later by commas. By late April, Spring Azures are sometimes on the wing.

May is the month to find some of the localized, single-brooded coniferous

forest specialties — elfins and Creamy Marblewings then fly among the Jack Pines and Red Disked Alpines and Frigga Fritillaries in some bogs. It is also the time for some more widespread species, such as Dreamy Dusky Wing, Tiger Swallowtail and Common Sulphur, to appear.

June is the peak month for the most common blues, Silvery and Greenish. Ringlets flutter up from grassy meadows, while a variety of skippers haunt both meadows and woodland trails. White Admirals are widespread, and most numerous towards the end of the month.

Butterfly diversity is greatest around the beginning of July, when twenty or more species can be found on a good day. July is the best month to see greater fritillaries and several of the lessers, and also hairstreaks other than elfins. It is time, too, for the midsummer flight of multiple-brooded species such as tortoise shells, Mourning Cloak, Common Sulphur and both Veined and Cabbage whites. Common Wood Nymphs abound in the fields where Ringlets previously flew, with a few Eyed Browns in wetter spots and Northern Pearly Eyes in the forest.

The coppers are a late-flying group, rarely seen before late July, with some species flying well into September. Late summer seems best for Checkered Whites as well. Diversity falls off rapidly during August, however, and only a few species are still in the air by the fall equinox. Fall, like early spring, belongs mainly to the tortoise shells, along with Common Sulphurs and occasional stragglers of a few other species. Activity continues until the last mild days. Sunshine and a temperature above about 8° C will usually tempt out at least a few Milbert's Tortoise Shells. The final flight of the year normally occurs in late October, occasionally early November, and often just a few days before the arrival of lasting snow cover.

Definition of Terms

Estimated abundances are based on the following criteria:

Abundant: More than 50 individuals have been recorded in one day.

Common: Maximum counts of 11 to 50 individuals have been recorded in one day.

Fairly common: More than 10 individuals seen in a season, but no more than 10 seen in a day.

Uncommon: 3 to 10 individuals seen in a season.

Rare: No more than two individuals seen in a season.

The abundance of some species that are inconspicuous or localized, or have short flight periods, may have been underestimated. Such species are indicated with a query (?). For more widespread and common species, an indication of year-to-year variation in abundance, e.g., "fairly common to common," is given. Abbreviations are used for Provincial Road (PR) and the Whiteshell Nuclear Research Establishment (WNRE), 8 km south of Lac du Bonnet. Much of the abundance data was derived from lunch-hour walks at the latter location.

ANNOTATED LIST

HESPERIIDAE — Skippers

Silver Spotted Skipper (*Epargyreus* clarus) — Uncommon, near edges of deciduous or mixed woods. Three sightings each in 1981 and 1985. 11 June - 24 June.

Northern Cloudy Wing (*Thorybes pylades*) — Fairly common, mainly near forest trails and clearings; normal peak in first half of June. 29 May - 7 July.

Dreamy Dusky Wing (*Erynnis icelus*) — Fairly common, mainly near trails and clearings in a variety of wooded habitats. The earliest skipper to fly in spring, it is most common in the second half of May. 9 May - 25 June. Columbine Dusky Wing (*Erynnis lucilius*) — Hypothetical. A Dusky Wing photographed on the edge of a granite outcrop about 10 km east of Lac du Bonnet, 11 August 1979, appeared to be this species, but some other species of the "Persius" group cannot be ruled out (Figure 2).

Common Checkered Skipper (*Pyrgus communis*) — Rare. One sighting near Whitemouth, 1 August 1981.

Arctic Skipper (*Carterocephalus palaemon*) — Sometimes locally common, mainly near trails and clearings in deciduous woods; most numerous in late May and the first half of June. 25 May - 1 July.

Least Skipper (Ancyloxypha numitor) — Rare? One was seen in emergent vegetation along the southeastern shore of Natalie Lake, 4 km east of Seven Sisters Falls, 5 August 1979.

European Skipper (*Thymelicus lineola*) — Fairly common to abundant in meadows and along grassy roadsides. This newcomer to Manitoba (see Preston and Westwood¹²) was especially numerous in 1986. On 1 July that year, 73 were counted in a 5-ha meadow of grass and Alfalfa just west of Pinawa. Few were seen prior to 1986, the first in early July 1983. 19 June - 27 July.

Laurentian Skipper (Hesperia comma laurentina) — Locally common. Paul Klassen (pers. comm.) collected 10 specimens, and saw many more, in a Black Spruce bog off PR 435, west of Milner Ridge, 26 July 1988. Previously, individuals had been seen there on 9 August 1981 and 26 July 1987.

Indian Skipper (*Hesperia sassacus*) — Hypothetical. Two skippers at WNRE, 12 June 1987, appeared to be this species.

Peck's Skipper (*Polites coras*) — Rare. One was closely inspected in Pinawa, 19 June 1987. A dead one found on a Pinawa street, 12 July 1985, may well have fallen from a vehicle, having been killed outside the study area.

Tawny-edged Skipper (*Polites themistocles*) — Fairly common. This appears to be an adaptable species. It has been found in a variety of habitats, from dry meadows to Black Spruce bog. 6 June -26 July.

Long Dash (*Polites mystic*) — Uncommon, usually seen in or near lush meadows. 10 June - 27 July.

Hobomok Skipper (*Poanes hobomok*) — Fairly common to common near woodland trails and clearings in June, often in the same areas as Arctic Skipper,



Figure 2. Possible Columbine Dusky Wing near Lac du Bonnet, 11 August 1979. Peter Taylor

but favouring somewhat higher perches. The dark female form, "Pocahontas," is uncommon. 27 May - 1 July.

Dun Skipper (*Euphyes ruricola*) — Uncommon. Found in a variety of clearings, trails, roadsides and meadows, but not more than three per day. Most frequently seen feeding on Alfalfa, vetches and clovers. 1 July - 12 August.

Pepper and Salt Skipper (*Amblyscirtes hegon*) — Hypothetical. Some small, dark skippers, seen in Pinawa on dates from 31 May to 23 June, resembled this species, but photographs were not definitive.

Roadside Skipper (*Amblyscirtes vialis*) — Uncommon, usually found in dry, open habitats. No more than two recorded per day. 9 May - 27 June.

PAPILIONIDAE — Swallowtails and Parnassians

Black Swallowtail (*Papilio polyxenes*) — Rare; a few singles seen in June and July. An exceedingly late, badly worn individual was sunning on a roof at Ladywood, 26 September 1987. 4 June - 26 September.

-Tiger Swallowtail (*Papilio glaucus*) — Common along roads and woodland edges and visiting Lilac in gardens. Most numerous from late May to mid-June. 15 May - 7 July.

PIERIDAE — Whites, Marbles and Sulphurs

Checkered White (*Pontia protodice*) — Uncommon. Recorded at Grand Beach in late May by Masters, but found in this study in late summer, with thirteen records from six years at eight scattered locations.⁹ A road-killed individual in Pinawa, 2 September 1978, was identified as this species, rather than *P. occidentalis*, by Paul Klassen. The latter species may occur here. 25 July; 25 August - 15 September. Veined White (*Pieris napi*) — Fairly common to common in both meadows and woodland; most numerous in July. Earliest record, 28 April 1987; extreme late dates uncertain because of possible confusion with worn Cabbage Whites. Probably flies until about the beginning of September.

Cabbage White (*Pieris rapae*) — Common to abundant, most frequently seen in or near gardens and fields. The flight period is long, with peak numbers around the end of July. A total of 118 was counted in one binocular scan of a weedy Canola field east of Seven Sisters Falls, 25 July 1987. 17 May - 30 September.

Creamy Marblewing (Euchloe ausonides) — Locally common in Jack Pine stands on glacial beach ridges in the Seddon's Corner-Milner Ridge area, and less common on rock outcrops in mixed boreal forest. 5 May - 5 June.

Common Sulphur (Colias philodice) - Abundant in Alfalfa fields, and penetrating into the forest along roadsides and trails wherever Alfalfa occurs as a weed. The first adults emerge in May, and small numbers can be found throughout the summer. Large flights have been observed both in early summer and early fall, and a few continue to fly into October. More than 500 were counted over a guarter-section of Alfalfa near Whitemouth, 1 July 1988, and hundreds more were seen in the area. About 180 sulphurs, only about 5% of them orange, were seen in one binocular-scan of a 20-ha Alfalfa field east of Seven Sisters Falls, 20 September 1987; 170 were counted four days later. 5 May - 20 October.

Alfalfa Sulphur (*Colias eurytheme*) — Common. Very similar in habits and flight periods to the preceding species. It sometimes outnumbers the Common Sulphur, e.g., in summer 1987, but not in major flights. White sulphurs, probably albinistic females of this species, are seen quite often, and account for about 5-10% of the population. 28 May - 3 November. Pink Edged Sulphur (*Colias interior*) — Fairly common to common in both rocky and sandy areas where blueberries abound. 14 June - 24 July.

LYCAENIDAE — Gossamer Wings

Harvester (*Feniseca tarquinius*) — Rare. A road-killed specimen was found on Forestry Road 28, just north of the CPR main line, 24 July 1982, and is now in the Manitoba Museum of Man and Nature. Masters referred to a specimen collected 15 June 1954 by Bird in the Whiteshell.¹⁷

Bronze Copper (*Lycaena hyllus*) — Uncommon, in grassy ditches and wet meadows, mainly in July and August. 5 June - 8 September.

Bog Copper (*Lycaena epixanthe*) — Uncommon. Singles were photographed along a cutline in a Black Spruce bog adjoining PR 435 (west of Milner Ridge), 25 July 1982 and 26 July 1987. Three were seen there, 24 July 1988, and Klassen collected a female two days later. This species appears to be less common than indicated by Masters.⁶⁷

Dorcas Copper (*Lycaena dorcas*) — Sometimes locally abundant. Found in clearings in spruce bogs east of Seven Sisters and west of Milner Ridge. Klassen (*pers. comm.*) saw over 100 while searching for Bog Coppers in the latter area, 26 July 1988. Found in the Whiteshell by Masters, usually at the edges of bogs in early July.⁷ 20 June - 26 July.

Purplish Copper (Lycaena helloides) — Uncommon, found at scattered localies, often near open water. Usually seen in late August and September, but a newly emerged female was closely observed at the Beausejour sewage lagoons, 7 June 1987. 7 June; 25 August -22 September.

Coral Hairstreak (*Harkenclenus titus*) — Rare? Three scattered records, near Seddon's Corner, Darwin and McArthur Falls. Expected more frequently, since Masters found it "not uncommon" along roadsides in the Whiteshell in July.⁷ 1 July - 31 July

Acadian Hairstreak (*Satyrium acadica*) — Uncommon along grassy roadsides. Eight, including a mating pair, were seen alongside PR 211 about 11 km west of Pinawa, 8 August 1979. 18 July - 18 August.

Banded Hairstreak (*Satyrium calanus*) — Rare. Only one record, of two individuals (both photographed, Figure 3), visiting sweet clover blooms at the eastern extremity of PR 211, 18 July 1986. Not mentioned in any of Masters' articles.



Figure 3. Banded Hairstreak, Pinawa, 18 July 1986. Peter Taylor

Striped Hairstreak (*Satyrium liparops*) — Uncommon. Six recorded, all in July, three of them visiting sweet clover and one, Alfalfa. 1 July - 26 July.

Brown Elfin (*Callophrys augustus*) — Uncommon? Recorded near Seddon's Corner, Milner Ridge, and Old Pinawa, in Jack Pine stands in sandy areas. 18 May - 2 June. Hoary Elfin (*Callophrys polios*) — Locally common, in Jack Pine stands with Bearberry ground cover in the Seddon's Corner-Milner Ridge area (Figure 4). 18 May - 28 May.

Pine Elfin (*Callophrys niphon*) — Rare? Singles of this well-marked species were found with other elfins among Jack Pines near Seddon's Corner, 18 May 1987, and east of Milner Ridge, 28 May 1988. It was recorded in the Whiteshell by Bird and found in small numbers at Grand Beach by Masters.¹⁷⁹

Eastern Tailed Blue (Everes comyntas) — Uncommon? Late-flying tailed blues at Pinawa, 7 September (2) and 11 September 1980, were probably this species. One at WNRE, 19 July 1988, was identified on the basis of wing pattern and long "tails."

Western Tailed Blue (*Everes amyntula*) — Uncommon to fairly common. Most tailed blues have been identified as this species, on the basis of very pale underwings with greatly reduced spots and short "tails." 14 May - 1 July.

Spring Azure (*Celastrina argiolus*) — Common. The earliest blue to emerge in the spring, this species is seen most frequently along trails in deciduous or mixed woodland from late April to mid-May. 26 April - 23 June.

Silvery Blue (*Glaucopsyche lygdamus*) — Common to abundant. This species usually emerges about two weeks later than the Spring Azure. It is found both in meadows and along woodland trails. Eighty were counted in a 5-ha meadow near Pinawa, 31 May 1987. Subsequent counts were 56 on 7 June, 69 on 13 June, and only five on 22 June. 14 May - 2 July.

Northern Blue (*Lycaeides idas*) — Uncommon, but fairly widespread, on rock outcrops in mixed-wood forest. Masters commented on the localized distribution of this species and did not find it himself, although he referred to records from the Whiteshell and Grand Beach.^{7 9} Highest count five, 15 July 1986. 22 June - 15 July. Orange Bordered Blue (*Lycaeides melissa*) — Hypothetical. A female blue, with rusty-orange margins on the dorsal surface of all four wings, was observed briefly in a meadow at WNRE, 4 June 1987.

Greenish Blue (*Plebejus saepiolus*) — Sometimes common in meadows, often occurring with Silvery Blues, but peaking slightly later, around mid-June. 15 May - 4 July.

NYMPHALIDAE — Brush-footed Butterflies

Variegated Fritillary (*Euptoieta claudia*) — Uncommon, found both in open meadows and woodland clearings. At least one or two are seen in most years. This species was more common than usual in 1986, with eight records between 30 June and 12 August. A freshly emerged individual was seen at WNRE, 5 September 1984, and a worn one was caught and released at WNRE, 1 October 1979. Recorded in the Whiteshell by both Bird and Masters.^{1,7}12 June - 1 October.

Great Spangled Fritillary (*Speyeria cybele*) — Uncommon to fairly common. Frequently observed in open areas in or near Black Spruce bogs. 19 July - 1 September.

Aphrodite Fritillary (*Speyeria aphrodite*) — Status unclear; it appears to be less common than the very similar Atlantis Fritillary, but too many greater fritilaries pass by unidentified!

Atlantis Fritillary (*Speyeria atlantis*) — Common. As indicated by Masters, this is the most common greater fritillary in the area.⁷⁹ Most common in July and early August, when it is often seen visiting clover, Alfalfa, Canada Thistles and Spreading Dogbane. 14 June - 1 September.

Bog Fritillary (*Boloria eunomia*) — Uncommon? At least three were seen, and photographs were taken (Figure 5), along a boggy trail through Black Spruce forest west of Seven Sisters, 13 and 14 June 1987. Masters found this species near Rennie, 29 June 1968.



Figure 4. Hoary Elfin near Milner Ridge,22 May 1988.Peter Taylor

Silver Bordered Fritillary (Boloria selene) — Sometimes locally abundant. A total of 109 was counted during a 3-km hike through coniferous bog and sedge fen, about 10 km north of Whitemouth, 30 July 1988. Smaller numbers are widespread in moist grassy habitats, often flying with other lesser fritillaries. 26 May - 12 August.

Meadow Fritillary (Boloria bellona) — Uncommon, in both moist and dry grassy habitats, along roadsides as well as in fields. An extremely late lesser fritillary seen at WNRE, 21 September 1987, did not settle within view. It appeared to be this species. 18 May - 18 August.

Frigga Fritillary (Boloria frigga) — Sometimes locally common. On 23 May 1988, over 30 were found along a 1-km trail through a Swamp Birch-Tamarackwillow bog 3 km southeast of Lac du Bonnet. Paul Klassen obtained a few specimens three days later, when photographs were also obtained (Figure 6). One other possible sighting was in Black Spruce-Tamarack forest about 3 km west of WNRE, 11 June 1982.



Figure 5. Bog Fritillary near Seven Sisters Falls, 14 June 1987. Peter Taylor

Purple Lesser Fritillary (*Boloria titania*) — Fairly common. Most frequently seen visiting Canada Thistles on trails or roadsides adjoining Black Spruce forest. Seems easier to approach than the other lesser fritillaries. 26 July - 12 August.

Harris' Checkerspot (*Chlosyne harrisii*) — Uncommon. One was caught and closely examined along a trail in mixedwood forest near Pinawa, 14 June 1980. Eight other sightings were nearly all in bogs and marshes. An individual of the well-marked *hanhami* race was seen in dry forest east of Milner Ridge, 19 June 1988. 13 June - 18 July.

Northern Pearl Crescent (*Phyciodes morpheus*) — Common to abundant. This is the only one of the recently "split" Pearl Crescents definitely identified here, although Pearl Crescent (*P. tharos*) has been reported from the Whiteshell (Klassen, *pers. comm.*). It may be found from late May to early September, but the greatest numbers by far occur in early July. High counts were 182 along trails near Pinawa, 1 July 1985, and 116 at various localities, 1 July 1986. 28 May - 7 September. Satyr Anglewing (*Polygonia satyrus*) — Uncommon, most frequently found in roadways and clearings not far from woodland, in July and August. Highest count four, 18 July 1986. 28 April - 23 August.

Green Comma (*Polygonia faunus*) — Only one record, a fresh roadkill near Milner Ridge, 28 May 1988. Masters found this the commonest anglewing in the Whiteshell, with a spring flight to mid-June and fresh adults in August and September.⁷

Gray Comma (*Polygonia progne*) — Fairly common. Most frequently observed between July and early September, with overwintering adults emerging in late April and early May. 20 April - 24 September.

Compton Tortoise Shell (Nymphalis vau-album) --- Uncommon to fairly common. This is the least common species of this genus, and appears to be less common than Masters found it at Grand Beach and in the Whiteshell in 1966-71. I have seen no more than three in a day. One at WNRE, 20 March 1987, was the earliest flying butterfly recorded in the area. Another was seen at McArthur Falls dam the following day. There is a small flight in July and early August, but the species is seen most frequently in September, often fluttering around buildings in search of somewhere to hibernate. Two were found dead in a large building at WNRE, 17 October 1988. On 18 November 1988, Klaus Spitz (pers. comm.) saw a flying butterfly in a corridor of the same building. Almost certainly, it was a Compton Tortoise Shell, disturbed from hibernation. 20 March -13 October.

Mourning Cloak (*Nymphalis antiopa*) — Fairly common. This handsome butterfly can be found along woodland trails, and sometimes in open fields, at any time from the first warm days of spring to the last ones of fall. The main spring flight occurs in the second half of April and the first half of May. The peak of the summer flight is in July. 29 March - 26 October.

Milbert's Tortoise Shell (Nymphalis milberti) — Fairly common to common. Somewhat more numerous than the Mourning Cloak, its pattern of occurrence is similar. It usually edges out that species as the first to emerge in spring. The main spring flight is in April, tailing off into May. Worn survivors from this flight may still be on the wing when the first brightly coloured summer adults emerge. There is a definite midsummer peak in the second half of June. The main fall flight is from late August through September, with stragglers into October and even November, 29 March - 3 November.

American Painted Lady (Vanessa virginiensis) — Uncommon in fields and along rights-of-way in forested areas. Unlike the following species, this but terfly is seen in most years, but only in small numbers. 11 May - 5 September.

Painted Lady (Vanessa cardui) — Erratic, sometimes abundant. Although rare or absent in most years, this migrant sometimes appears in great numbers. The last major flight in this area was in 1979. Unfortunately, detailed records were not kept, but sightings occurred from late June until 1 October. The only more recent definite records were singles on 27 July 1986, 30 July 1988, and 14 September 1988.

Red Admiral (Vanessa atalanta) — Uncommon to common in a variety of habitats; Masters found it scarce, although widespread, in 1966-71.⁷⁹ The flight period is long, with an ill-defined peak in mid-summer. Fresh individuals are sometimes seen in September. This migratory species was especially common in 1987, and scarce in 1988. 7 May - 29 September.

White Admiral (*Limenitis arthemis*) — Fairly common to abundant. This species is most numerous from mid-June to early July, with a much scarcer second flight in August. 30 May - 3 September.

Viceroy (*Limenitis archippus*) — Uncommon, usually found in wet grassy areas with willows. No more than two have been seen per day. Of two seen



Figure 6. Frigga Fritillary near Lac du Bonnet, 26 May 1988.

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together, 24 July 1988, one was freshly emerged, and the other was exceedingly worn. 13 June - 22 August.

SATYRIDAE ---- Satyrs and Wood Nymphs

Northern Pearly Eye (*Enodia anthedon*) — Fairly common along woodland trails, mainly between late June and mid-July. 14 June - 5 August.

Eyed Brown (Satyrodes eurydice) — Fairly common in sedge marshes and boggy clearings, mainly in July. A small patch of sedges in a roadside ditch is often enough to hold this butterfly. 20 June - 16 August.

Little Wood Satyr (*Megisto cymela*) — Fairly common in Trembling Aspen woodland with Beaked Hazelnut understory in June. Most records in and near Pinawa. 1 June - 1 July.

Ringlet (Coenonympha tullia) — Common in moderately lush grassy meadows; less frequent along roadsides and woodland trails. The main flight is in June, with stragglers frequently seen well into July. 27 May - 25 July. Common Wood Nymph (*Cercyonis* pegala) — Abundant in meadows and along roadsides, often at the same sites that Ringlets favour. Numbers usually peak in late July or early August. Masters expected, but did not find this species in the Whiteshell.⁷ It presently occurs at least at the western boundary of the park. 6 July - 30 August.

Red Disked Alpine (*Erebia discoidalis*) — Uncommon. About ten were flying in a small burned and cleared area, in the early stages of regeneration, at the edge of a Black Spruce stand west of Milner Ridge, 19 May 1986. Five were flying with Frigga's Fritillaries in a bog 3 km southeast of Lac du Bonnet, 23 May 1988.

Macoun's Arctic (*Oeneis macounii*) — Rare? Seen in sandy Jack Pine stands near Seddon's Corner, 5 and 27 June 1982, and may be fairly common in that area. It was surprising to see individuals in Pinawa gardens, 8 June 1986 and 6 June 1988. Macoun's Arctic flies only in evennumbered years in southeastern Manitoba.^{9 11}

DANAIDAE — Milkweed Butterflies

Monarch (*Danaus plexippus*) — Uncommon. A few Monarchs are seen nearly every year, in a variety of fairly open habitats, no more than three per day. 31 May - 29 August.

Discussion

This account includes most of the species listed by Masters for the Whiteshell and Grand Beach/Belair areas.79 The only species included in both those lists but not found in this study are Tawny Crescent (Phyciodes batesii) and Silvery Checkerspot [Crescent] (Chlosyne nycteis). Both are hard to identify in the field, and may have been overlooked. Masters' Whiteshell list also includes Disa Alpine [Spruce Erebia] (Erebia disa) and Jutta [Bog] Arctic (Oeneis jutta), the latter flying only in odd-numbered years.7 Masters also suspected the presence of Freija Fritillary (Boloria freija) and Giant Sulphur (Colias gigantea) in the Whiteshell area.⁷ His Grand Beach / Belair list includes records of Comma (Polygonia comma) and Great Copper (Lycaena xanthoides): he questioned previous reports of Callippe Fritillary (Speyeria callippe) and Orange-bordered Blue

Six species found in this study were reported by Masters for Whiteshell but not Grand Beach/Belair, and the converse was true for another seven.^{7 9} Most of these cases probably reflect low abundance and localized distribution, rather than range boundaries. Two species recorded here, Banded Hairstreak and Frigga Fritillary, were not reported for either Whiteshell or Grand Beach / Belair. The 17 species of skipper listed here compare favourably with Masters' estimate of a dozen in the Whiteshell.⁷

Records compiled by Klassen et al. (ref. 5 and pers. comm.) include several additional species found within 50 km of the present study area: Juvenal's Dusky Wing (Erynnis juvenalis), Sleepy Dusky Wing (Erynnis brizo), Grizzled Skipper (Pyrgus centaureae), Garita Skipper (Oarisma garita), Leonardus Skipper (Hesperia leonardus), Baltimore (Euphydryas phaeton), and Common Alpine (Erebia epipsodea), as well as Pearl Crescent (as noted above) and Giant Sulphur. Clearly, these species should be sought here.

Additional skipper and butterfly species will no doubt be found in this area. Most are likely to be prairie species at the eastern fringe of their range, localized forest species or stray migrants. Most of the species discussed in this section fall into the first two of these three categories.

Given the great year-to-year fluctuations in numbers of many species, the differing study areas, and the more limited abundance data in previous publications, it is difficult to identify any long-term changes in abundance. The apparent reversal of relative abundance of Mourning Cloak and Compton Tortoise Shell, greater recent numbers of Red Admiral in some years, and lower numbers of Coral Hairstreak, Bog Copper and Green Comma, are the most striking apparent differences from Masters' observations.

Acknowledgements

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- ⁶MASTERS, J.H. 1968. Notes on the occurrence of the Bog Copper, *Lycaena epixanthe*, in Manitoba. *Blue Jay* 26:146-148.
- ⁷ _____ The butterflies of Manitoba's provincial parks I: Whiteshell Provincial Park. *Blue Jay* 30:113-118.
- ⁸ _____ A list of butterflies taken at Northwest Angle Provincial Forest, Manitoba. *Blue Jay* 30:118-119.
- ⁹_____ The butterflies of Manitoba's provincial parks II: Grand Beach Provincial Park and Belair Forest Preserve. *Blue Jay* 30:161-166.
- ¹⁰_____ A list of butterflies taken at Sandilands Provincial Forest, Manitoba. *Blue Jay* 30:166-167.
- ¹¹_____ and J.T. SORENSEN. 1968. Bionomic notes on the Satyrid butterfly *Oeneis macounii* at Riding Mountain, Manitoba. *Blue Jay* 26:38-40.
- ¹² PRESTON, W.B. and A.R. WESTWOOD. 1981. The European Skipper, *Thymelicus lineola* (*Lepidoptera:Hesperiidae*), in Manitoba and Northwestern Ontario. *Can. Ent.* 113:1123-1124.
- ¹³ TAYLOR, P. 1983. Wings along the Winnipeg: the birds of the Pinawa - Lac du Bonnet region, Manitoba. *Eco Series* No. 2, Man. Nat. Soc., Winnipeg. 216 pp.

NOTE:

TO COLLECT OR NOT TO COLLECT, THAT IS THE QUESTION

Most lepidopterists will raise their eyebrows at a butterfly list based largely on sight records. Their concern is appropriate, for as Taylor admits, an unknown number of errors result from sight identification. As butterfly field guides improve, will lists of sight records gradually become more acceptable?

One thinks back to the time when bird lists not based solidly on specimen records were looked at askance. The report of the ornithological branch of the Ottawa Field-Naturalists' Club for 1889 was published in the Ottawa Naturalist 4:69-70, in July 1890. A Mr. Lees had propounded a revolutionary method of "observation with an opera glass" and Professor John Macoun had "questioned the accuracy of the results obtained ... and asked for a detailed explanation of the system." At that time, ornithologists often went overboard in their enthusiasm for collecting.

Now there is a growing revulsion against killing any bird, to the point where sound scientific research plans by museums may be cancelled simply because of perceived adverse public opinion. Has the pendulum perhaps gone too far the other way in ornithology? And who knows how far it will go with regard to butterflies? — C. Stuart Houston

NORTHERN REDBELLY SNAKE AT GERALD, SASKATCHEWAN

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In September my attention was drawn to a "large dead earthworm" by my neighbour's children, who were playing in our driveway.

From the limited references I have on herpetology I was able to identify it as a

Redbelly Snake Storeria occipitomaculata (Storer). An uncommon species, it is the smallest ground snake in the province, attaining a length of about 10 in. It is a secretive animal, hiding under rubbish and leaves, feeding on earthworms and small insects.