Report on Birds Observed in Wells Gray Park between May 9 and June 6, 1962 Douglas D. Dow

General Description of Field Work

The field work in this region consisted mainly of observation and recording. Usually, in a given area, as many habitats as possible were visited daily. Frequently, longer periods were devoted to covering habitats thoroughly. Daily lists of all my observations were kept as well as a record of significant or interesting occurrences reported to me by reliable observers in the park.

Because of the difficulty involved in making accurate counts of birds in the field, most of the "counts" of individuals are careful estimates made at the end of the day. These, as a rule, tend to be fairly conservative. Two censuses were taken; one on May 16 and the other on June 6. The area covered lay along the Clearwater Road between the Ludtke Road and the Placid Lake Trail. All birds seen or heard in this area were counted. The count was made in one direction only and birds seen on the return journey counted only if they were new species or unquestionably different individuals of a species already counted.

Particular attention was given to the study of flycatchers, vireos, and wood warblers as well as to gulls and grebes when in suitable habitat.

Some collecting (mainly of flycatchers) was undertaken, but on the whole this constituted a very small part of the field work.

A record was kept of all breeding birds and completed cards will be sent to the University of British Columbia Nest Record Scheme.

Areas and Habitats Visited

I have divided the total region in which I worked into twelve area divisions for greater accuracy in an attempt to determine the status of different species (see p 20). Unfortunately, these are not divided according to habitat, but rather are geographic divisions comprising many and varied habitats. The divisions, with the percentage of available time spent in them, are as follows:

(1) Hemp Creek Valley (45.0%)

Mainly valley bottom; creek, flat grasslands and meadows dominating. Several extensive swampy areas comprised chiefly of willows and alder in the south, and cedar in the north. Often extensive flood pools in the fields or exposed mud after the run-off.

(2) Moose Pen Area (26.0%)

The area lying east of Clearwater Road near the Hemp Creek Bridge. Mainly hillside of mixed growth. Dominant deciduous growth of Trembling Aspen and White Birch. Coniferous growth of Douglas Fir, Spruce (White or Engelmann's), Lodgepole Pine, and Alpine Fir. The eastern slope of Green Mountain is also included in this area. Although separated by the farmland of the valley floor, the vegetation type is similar to that of the lower slopes of the above area. It is, however, mainly Trembling Aspen with less coniferous growth.

(It should be noted that a large part of the above two areas "officially" lay outside the park boundary. However, after exploring more distant parts, I believe that the species found here may be considered as quite typical of many other parts of the park.)

(3) Ranger Station to the Murtle River (8.0%)

Road edge and a fairly dense growth of large timber in many places. Some small swampy areas, but no large ponds suitable for waterbirds.

(4) Murtle River to Ray Farm (4.1%)

Road edge and mostly smaller timber than area No. 3. Several spots at which the road passes close to the Clearwater River.

(5) Ray Farm to Clearwater Lake (2.4%)

Road edge with some large stands of timber; many fairly open roadside areas. Several points of observation of the Clearwater River; several creeks, marshes, and lakes suitable for waterbirds and shorebirds. This area includes the falls and the south end of Clearwater lake.

(6) Ray Farm (0.8%)

Farmland - many open fields and brushy clearings. Some small lake border and cattail marsh.

(7) McLeod Hill (2.5%)

Bordering the "jeep road". Much burned area with many small willows. Also dry upland area covered by dense forest with much mixed growth. Hemp Creek crossed in several places.

(8) Placid Lake (1.6%)

Trail from Clearwater Road to Placid lake. Mainly large timber along the trail. Lake border of open swampy ground with several scattered stands of Black Spruce.

(9) Clearwater Lake (5.6%)

Area from south to north and the extreme west end of Azure Lake included.

(10) Murtle River (1.6%)

River edge: trail through some large timber and mixed river's edge forest between Dawson and Helmcken Falls.

(11) Pyramid Mountain Trail (1.6%)

Pyramid Mountain: extensive burns; small and large timber stands; some low-lying, water-filled areas surrounded with alder and aspen.

(12) Mike's Place (0.8%)

Bordering on the Murtle River. Some open, grassy fields; some fairly open ground covered with small shrubs and spruces; some marshy terrain.

Weather

The only weather records available were those made at the Ranger Station. They consisted of measured precipitation and maximum and minimum temperatures.

During the period spent in the park, the average maximum temperature was 61°, and the average minimum was 37°. The highest temperature was 71° and occurred on May 27. The lowest temperature was 24° and occurred on May 9. The only prolonged warm spell was between May 21 and May 29.

There was rain of varying amounts on every day except May 16 and June 6. The total rainfall was 2.78 inches. The average daily rainfall was 0.10 inches with a high of 0.43 inches on May 29.

Migration

There was no evidence of any strong migration among most species. Some species, such as Empidonax Flycatchers, Robin, Swainson's Thrush, Water Pipit, Orange-crowned Warbler, Audubon's Warbler, White-crowned Sparrow, and Golden-crowned Sparrow, were obviously migrating upon my arrival on May 8. It was interesting to note that while many Orange-crowned Warblers, Audubon's Warblers, and Robins were still occurring in small flocks, individuals of the

same species were showing signs of territorial behaviour, and in fact, several Robins were nesting. The same thing was noted in Oregon Juncos. While some were still migrating, others were incubating eggs.

Swainson's Thrushes and Veerys were still occurring in small flocks between May 28 and May 31 when a fairly heavy migration may have taken place.

The largest concentration of Empidonax Flycatchers in the Hemp Creek area was noted on May 16 and May 17. An Eastern Phoebe was collected on May 12, while the first Eastern Kingbirds were noted on May 27 and the last on May 30. The Traill's Flycatcher was first heard singing on May 22. The Western Wood Pewee was first noted on May 19 when one individual was seen. The most striking migration was observed in this species with 8 on June 3, 31 on June 4, 15 on June 5, and 2 on June 6. All of these were observed along the same stretch of Hemp Creek. Apparently, the Olive-sided Flycatcher was migrating at the same time; first noted on May 18, and a peak flight of seven observed on June 4. Vaux Swifts were also observed in larger numbers than usual at this time.

The Solitary Vireo appeared to be in migration between May 12 and May 18. The Warbling Vireo was first noted on May 12 and the Red-eyed Vireo on May 27. Neither of these occurred in large numbers.

The earlier warblers such as the Orange-crowned and the Audubon's were migrating on my arrival and migration peaks occurred between May 13 - 22 and May 10 - 18 respectively. Myrtle Warblers were observed only on May 14 and 15 at the height of the Audubon's Warbler migration. Most of the warblers made their appearance between May 11 and 17, while the American Redstart arrived on May 24 and the Blackpoll Warbler on May 29. A singing male Tennessee Warbler was collected by Hettie Miller on May 28, and I observed another on May 31.

Both the White-crowned and Golden-crowned Sparrows were migrating upon my arrival. A peak date of May 6 - 8 was noted in the White-crowned Sparrow. The last White-crowned Sparrow was observed on May 31 and the last Golden-crowned Sparrow on May 18. One White-throated Sparrow was heard singing on May 19. The first Savannah Sparrow was noted on May 12 and the first Chipping Sparrow on May 13 with largest numbers between May 31 and June 3. A male Leconte's Sparrow was collected on May 25 by H. Miller.

Weather and Migration

No significant correlation can be drawn between weather and migration. Due to the relatively small numbers of birds it was often difficult, if not impossible, to know whether or not they were actually migrating.

There may be some significance attached to the warm spell between May 21 and 29. During this time Eastern Kingbirds arrived and departed, and the Traill's Flycatcher first came into evidence.

On the other hand, it was during a relatively cold spell that the Western Wood Pewee, Olive-sided Flycatcher, and Vaux Swift appeared in larger concentrations. Perhaps this concentration was due to a larger number of insects in the valley than on the higher slopes.

Daily Lists of Bird Observed

The following lists are extracted directly from my field notes. As mentioned earlier, the numbers in parentheses are careful estimates rather than actual counts. Figures appearing in red refer to numbers that have actually been counted in the field.

Several abbreviations have been used. These are as follows:

S Singing

D Displaying - usually courtship display

F Fighting

Cop. Copulation

N Nesting

NB Nest-building or carrying nesting material

NE Nest containing eggs

NY Nest containing young

FY Adult bird feeding young out of the nest

F? Adult(s) carrying food, but nest or fledglings not seen

JP Bird in juvenal plumage but not necessarily being fed

Fl. Flocking

May 9, 1962

Weather: sunny and warm. Brisk wind from the south. Rain in evening and at night. Temp. 24° -62°.

Locality: Hemp Creek to Ray Farm.

Species observed:

Barrow's Goldeneye (2), Bufflehead (2), Harlequin (4), Common Merganser (2), Red-tailed Hawk (1) (N), Bald Eagle (1), Marsh Hawk (1), Osprey (1) (N), Ruffed Grouse (10) (D), Killdeer (7), Common Snipe (3) (D), Solitary Sandpiper (1), Rufous Hummingbird (1), Belted Kingfisher (1), Red-shafted Flicker (5), Pileated Woodpecker (2), Black-backed Three-toed Woodpecker (1), Northern Three-toed Woodpecker (2) (N), Empidonax Flycatcher (1), Tree Swallow (4), Roughwinged Swallow (10), Cliff Swallow (5), Gray Jay (2) (NY), Steller's Jay (4), Common Raven (2) (NY), Common Crow (4), Black-capped Chickadee (3), Red-breasted Nuthatch (5), Winter Wren (6) (S), Robin (30) (S-NB), Varied Thrush (2) (S), Mountain Bluebird (2), Golden-crowned Kinglet (2), Ruby-crowned Kinglet (10) (S), Water Pipit (30) (Fl.), Starling (18) (Fl.), Orange-crowned Warbler (4) (S), Audubon's Warbler (12) (S), Western Meadowlark (1), Red-winged

Blackbird (2), Brewer's Blackbird (16) (NB), Pine Siskin (65) (Fl.), Oregon Junco (16) (S-NE), White-crowned Sparrow (1), Song Sparrow (6) (S).

Total species - 45

May 10, 1962

Weather: Sunny and warm with two hours of heavy rain in late p.m. Temp. 39° - 59°.

Locality: Hemp Creek; moose pen area; to end of jeep road; cross country to cabin on Hemp Creek.

Species observed:

Red-tailed Hawk (1), Ruffed Grouse (6) (D), Blue Grouse (1) (D), Killdeer (2), Common Snipe (2) (D), Belted Kingfisher (1), Red-shafted Flicker (2), Pileated Woodpecker (1), Yellow-bellied Sapsucker (1), Hairy Woodpecker (1), Downy Woodpecker (1), Dusky Flycatcher (1)*, Hammond's Flycatcher (2)*, Empidonax Flycatcher (15)*, Cliff Swallow (8) (NB), Common Raven (2), Common Crow (4), Black-capped Chickadee (3), Red-breasted Nuthatch (4), Winter Wren (6) (S), Robin (15) (S-NB), Hermit Thrush (1), Swainson's Thrush (3) (S), Ruby-crowned Kinglet (4) (S), Water Pipit (4), Solitary Vireo (1) (S), Orange-crowned Warbler (6) (S), Audubon's Warbler (20) (S), Brewer's Blackbird (25) (NB), Purple Finch (1) (S), Evening Grosbeak (4), Oregon Junco (13) (S), White-crowned Sparrow (2), Song Sparrow (6) (S).

* Several Empidonax Flycatchers were heard singing along the jeep road. Three were collected; one Dusky and two Hammond's.

Total Species - 33

May 11, 1962

Weather: Sunny all morning. Rain with sunny intervals all p.m. Temp. 38° - 63°.

Locality: Hemp Creek and moose pen area.

Species observed:

Red-tailed Hawk (1), Ruffed Grouse (1) (D), Killdeer (2), Common Snipe (1) (D), (Unidentified gulls)*, Vaux Swift (11), Red-shafted Flicker (1), Pileated Woodpecker (1), Tree Swallow (15), Rough-winged Swallow (3), Cliff Swallow (8) (NB), Common Raven (2), Common Crow (5), Black-capped Chickadee (6) (S), Red-breasted Nuthatch (4) (S), Robin (15) (S-NB), Swainson's Thrush (4) (S), Ruby-crowned Kinglet (2) (S), Empidonax Flycatcher (12), Dusky Flycatcher (2)**, Water Pipit (100) (Fl.), Solitary Vireo (1) (S), Orange-crowned Warbler (8) (S), Audubon's Warbler (18) (S-Fl.), Wilson's Warbler (2), Western Meadowlark (1) (S), Red-winged Blackbird (1), Brewer's Blackbird (28) (NB), Evening Grosbeak (2), Pine Siskin (22), Oregon Junco (17) (S-NB), Tree Sparrow (1), Song Sparrow (8) (S).

- * The gulls were heard as they flew over the moose pen. However, they were not seen. The species and numbers were undetermined.
- ** Two of the Empidonax were collected and identified later as this species.

Total species - 33

May 12, 1962

Weather: Continuous downpour until 0900. Sunny and rainy periods in afternoon, clearing by evening. Temp. 38° - 55°.

Locality: Hemp Creek; Clearwater Lake Road to Deer Creek.

Species observed:

Common Goldeneye (1), Harlequin Duck (4), Common Merganser (5), Red-tailed Hawk (1), Ruffed Grouse (6) (S), Killdeer (2), Spotted Sandpiper (2), Common Snipe (4) (D), Vaux Swift (8), Rufous Hummingbird (1), Red-shafted Flicker (6) (S), Pileated Woodpecker (1) (S), Eastern Phoebe (1)*, Empidonax Flycatcher (10), Hammond's Flycatcher (1)**, Tree Swallow (20), Rough-winged Swallow (10), Cliff Swallow (12) (NB), Gray Jay (2), Steller's Jay (1), Common Raven (1), Common Crow (5), Black-capped Chickadee (8), Red-breasted Nuthatch (6), Winter Wren (2) (S), Robin (25) (S-NB), Varied Thrush (1), Swainson's Thrush (5) (S), Ruby-crowned Kinglet (8) (S), Starling (3), Solitary Vireo (4), Warbling Vireo (1), Orange-crowned Warbler (10) (S), Nashville Warbler (1), Audubon's Warbler (40) (S), Wilson's Warbler (2), Western Meadowlark (1) (S), Red-winged Blackbird (1), Brewer's Blackbird (30) (NBE), Evening Grosbeak (4), Pine Siskin (50) (Fl.), Savannah Sparrow (3), Oregon Junco (23) (S), White-crowned Sparrow (1), Golden-crowned Sparrow (2), Song Sparrow (8) (S).

- * The phoebe was first found by Nick Verbeek. I verified his identification, and Ralph Ritcey collected the bird.
- ** I collected one bird at Deer Creek which I identified as this species.

Total species - 45

May 13, 1962

Weather: Mostly sunny and dry with rainy intervals in the evening. Temp. 28° - 57°.

Locality: Hemp Creek and moose pen area.

Species observed:

Mallard (1), Ruffed Grouse (4) (D), Killdeer (3), Common Snipe (2) (D), Red-shafted Flicker (4) (Cop.), Pileated Woodpecker (1), Hairy Woodpecker (1), Yellow-bellied Sapsucker (1), Empidonax Flycatcher (12), Tree Swallow (8), Cliff Swallow (10), Common Crow (4), Common Raven (1), Black-capped Chickadee (8), Red-breasted Nuthatch (3), Swainson's Thrush (2) (S), Townsend's Solitaire (1), Ruby-crowned Kinglet (6) (S), Water Pipit (40) (Fl.), Starling (8) (Fl.),

Solitary Vireo (4) (S), Orange-crowned Warbler (25) (S), Audubon Warbler (25) (S), Brewer's Blackbird (20) (NE), Brown-headed Cowbird (1), Evening Grosbeak (4), Pine Siskin (40) (Fl.), Oregon Junco (12) (S), Chipping Sparrow (1), White-crowned Sparrow (6), Song Sparrow (4) (S), Robin (10) (S-NB).

Total Species - 32

May 14, 1962

Weather: Rain most of the day with some sunny intervals in p.m. Temp. 39° - 65°.

Locality: Hemp Creek and moose pen area later in the day.

Species observed:

Ruffed Grouse (4) (D), Killdeer (2), Common Snipe (2) (D), Red-shafted Flicker (4), Pileated Woodpecker (1), Empidonax Flycatcher (10), Tree Swallow (4), Cliff Swallow (6) (NB), Common Raven (1), Common Crow (4), Black-capped Chickadee (6), Red-breasted Nuthatch (4), Robin (10) (NE), Swainson's Thrush (4) (S), Ruby-crowned Kinglet (4), Water Pipit (40) (Fl.), Starling (12) (Fl.), Orange-crowned Warbler (30) (S), Nashville Warbler (1) (S), Myrtle Warbler (10), Audubon's Warbler (40) (S), Brewer's Blackbird (15) (NE), Brown-headed Cowbird (1), Evening Grosbeak (6), Pine Siskin (40), Savannah Sparrow (2), Oregon Junco (21) (SNB), White-crowned Sparrow (10), Golden-crowned Sparrow (1), Song Sparrow (4) (S).

Total species - 30

May 15, 1962

Weather: Overcast in the morning, sunny in the afternoon. Temp. 36° - 55°.

Locality: Hemp Creek area.

Species observed:

American Bittern (1) (S), Canada Goose (2), Sparrow Hawk (1), Ruffed Grouse (3) (D), Killdeer (2), Common Snipe (2) (D), Rufous Hummingbird (1), Belted Kingfisher (1), Red-shafted Flicker (4), Empidonax Flycatcher (12), Cliff Swallow (6), Gray Jay (1), Common Raven (2), Common Crow (3), Black-capped Chickadee (7), Red-breasted Nuthatch (3), Winter Wren (3) (S), Robin (6) (S-NBE), Hermit Thrush (1), Swainson's Thrush (2) (S), Townsend's Solitaire (2) (S-D), Golden-crowned Kinglet (5), Ruby-crowned Kinglet (6) (S), Water Pipit (10) (Fl.), Starling (12) (Fl.), Solitary Vireo (1) (S), Orange-crowned Warbler (30) (S), Yellow Warbler (1) (S), Myrtle Warbler (4), Audubon's Warbler (25) (S), Townsend's Warbler (3) (S), Wilson's Warbler (1), Brewer's Blackbird (15) (NE), Brown-headed Cowbird (2), Evening Grosbeak (6), Pine Siskin (20), Savannah Sparrow (12), Oregon Junco (20) (S), Chipping Sparrow (4), White-crowned Sparrow (8), Song Sparrow (2) (S).

Total Species - 42

May 16, 1962

Weather: Sunny and warm all day. Temp. 26° - 62°.

Locality: Census; from Ludtke Road along Clearwater Road to Placid Lake trail.

Species observed:

Mallard (1), Ruffed Grouse (2), Killdeer (1), Spotted Sandpiper (1), Common Snipe (1), Rufous Hummingbird (4), Belted Kingfisher (1), Red-shafted Flicker (6), Pileated Woodpecker (1), Hairy Woodpecker (3), Empidonax Flycatchers (26), Rough-winged Swallow (4), Cliff Swallow (6), Gray Jay (3), Common Crow (4), Black-capped Chickadee (10), Red-breasted Nuthatch (3), Winter Wren (6), Robin (14), Hermit Thrush (1), Veery (2), Golden-crowned Kinglet (6), Ruby-crowned Kinglet (1), Water Pipit (20), Warbling Vireo (3), Orange-crowned Warbler (39), Yellow Warbler (3), Audubon's Warbler (18), Townsend's Warbler (3), MacGillivray's Warbler (1), Brewer's Blackbird (12), Brown-headed Cowbird (1), Western Tanager (2), Pine Siskin (55), Red Crossbill (2), Oregon Junco (34), White-crowned Sparrow (1), Lincoln's Sparrow (3), Song Sparrow (12).

Total species - 39 Total individuals - 316

May 17, 1962

Weather: Cloudy all day with light showers in the afternoon. Temp. 32° - 70°.

Locality: Hemp Creek; moose pen area; Clearwater Road to Clearwater Lake and return.

Species observed:

Mallard (8), Ring-necked Duck (1), Common Goldeneye (2), Barrow's Goldeneye (3) (D), Bufflehead (11), Oldsquaw (1) (S), Common Merganser (2), Harlequin (6), Red-tailed Hawk (1), Osprey (3) (N), Spruce Grouse (4), Ruffed Grouse (4), Killdeer (2), Common Snipe (2) (D), Spotted Sandpiper (1), Solitary Sandpiper (1), Pectoral Sandpiper (3), Vaux Swift (10), Rufous Hummingbird (1), Belted Kingfisher (1), Red-shafted Flicker (4), Pileated Woodpecker (1), Hairy Woodpecker (1), Empidonax Flycatcher (30), Tree Swallow (25), Rough-winged Swallow (15), Cliff Swallow (8), Steller's Jay (1), Common Raven (2), Common Crow (4), Black-capped Chickadee (7) (N), Red-breasted Nuthatch (8) (N), Winter Wren (5) (S), Robin (20) (S-NE), Varied Thrush (4) (S), Veery (2), Townsend Solitaire (1) (S), Ruby-crowned Kinglet (12) (S), Water Pipit (25) (Fl.), Starling (6), Solitary Vireo (2) (S), Warbling Vireo (2) (S), Orange-crowned Warbler (25) (S), Yellow Warbler (4) (S), Audubon's Warbler (15) (S), Yellowthroat (6) (S), Western Meadowlark (1) (S), Red-winged Blackbird (6) (S), Brewer's Blackbird (20), Brown-headed Cowbird (3), Western Tanager (3), Evening Grosbeak (5), Pine Siskin (100), Red Crossbill (3), Savannah Sparrow (1) (S), Oregon Junco (25) (S-NEY), Chipping Sparrow (15) (S), Golden-crowned Sparrow (3), Lincoln's Sparrow (1) (S), Song Sparrow (8) (S-NB).

- * The Oldsquaw was observed on Zeller Lake and the Pectoral Sandpiper on Five Finger Lake.
- ** Seven Bufflehead in female plumage were seen in a flock on Clearwater rapids. No adult males were present.

One pair of Blue-winged Teal were observed on Five-Finger Lake by Nick Verbeek.

Total Species - 60

May 18, 1962

Weather: Cloudy in the morning with rain until 06:00. Sunny in the afternoon with light showers. Temp. 38° - 58°.

Locality: Hemp Creek and the moose pen area all day.

Species observed:

Golden Eagle (1), Ruffed Grouse (2) (S), Killdeer (1), Common Snipe (1) (D), Vaux Swift (2), Rufous Hummingbird (1), Red-shafted Flicker (4), Yellow-bellied Sapsucker (1), Hairy Woodpecker (1), Empidonax Flycatcher (10), Cliff Swallow (3), Common Raven (3), Common Crow (2), Black-capped Chickadee (6) (S-NE), Red-breasted Nuthatch (4), Robin (8) (S-NE), Hermit Thrush (1), Veery (1), Townsend's Solitaire (1) (S), Ruby-crowned Kinglet (2) (S), Solitary Vireo (1), Warbling Vireo (2) (S), Orange-crowned Warbler (18) (S), Yellow Warbler (2), Audubon's Warbler (15) (S), Townsend's Warbler (2) (S), Yellowthroat (1), Wilson's Warbler (2) (S), Brewer's Blackbird (18) (NE), Brown-headed Cowbird (1), Western Tanager (1), Evening Grosbeak (2), Purple Finch (1) (S), Pine Siskin (15), Savannah Sparrow (1) (S), Oregon Junco (29) (S-NEY), Chipping Sparrow (8) (S), White-crowned Sparrow (1), Golden-crowned Sparrow (1), Lincoln's Sparrow (1), Song Sparrow (4) (S), Water Pipit (30) (Fl.).

One Olive-sided Flycatcher observed by N. Verbeek.

Total Species - 42

May 19, 1962

Weather: Raining constantly most of the day with some sunny intervals in the afternoon. Temp. 38° - 59°.

Locality: Hemp Creek; moose pen area; north on Wells Gray Road but not as far as Ray Farm.

Species observed:

Harlequin Duck (5), Common Merganser (3), Ruffed Grouse (4) (D), Killdeer (1), Spotted Sandpiper (2), Common Snipe (2) (D), Vaux Swift (15), Rufous Hummingbird (3), Red-shafted Flicker (2), Northern Three-toed Woodpecker (1) (N)*, Empidonax Flycatcher (12), Western Wood Pewee (1) (S), Violet-green Swallow (1), Tree Swallow (6), Rough-winged Swallow (6),

Cliff Swallow (3), Common Crow (2), Black-capped Chickadee (4), Red-breasted Nuthatch (2), Robin (10) (S-NE), Hermit Thrush (2) (S), Swainson's Thrush (2) (S), Ruby-crowned Kinglet (2) (S), Orange-crowned Warbler (12) (S), Yellow Warbler (1) (S), Audubon's Warbler (8) (S), Yellowthroat (1), Red-winged Blackbird (1) (S), Brewer's Blackbird (18), Evening Grosbeak (3), Pine Siskin (15), Oregon Junco (25) (S-NBEY), Chipping Sparrow (6) (S), White-throated Sparrow (1) (S), Song Sparrow (6) (S-NB).

* When the tree was scraped, the bird flew from the nesting hole. The bright yellow on the head led us to assume that the male was incubating.

Total Species - 35

May 20, 1962

Weather: Sunny most of the day with some showers. Temp. 41° - 53°.

Locality: Hemp Creek; moose pen area; north on Wells Gray Road to Deer Creek.

Species observed:

Common Loon (1), Mallard (3), Surf Scoter (4), Common Merganser (1), Ruffed Grouse (4) (D), Killdeer (1), Common Snipe (2), Spotted Sandpiper (3), Rufous Hummingbird (2), Red-shafted Flicker (3), Hairy Woodpecker (1), Empidonax Flycatcher (12), Rough-winged Swallow (4), Cliff Swallow (3), Common Raven (4), Common Crow (3), Black-capped Chickadee (5) (N), Red-breasted Nuthatch (2), Winter Wren (1) (S), Robin (10) (S-NE), Hermit Thrush (1), Swainson's Thrush (6) (S), Ruby-crowned Kinglet (3) (S), Golden-crowned Kinglet (4), Water Pipit (1), Solitary Vireo (2) (S), Warbling Vireo (2) (S), Orange-crowned Warbler (18) (S), Yellow Warbler (3) (S), Audubon's Warbler (12) (S), Townsend's Warbler (1) (S), Wilson's Warbler (4) (S), Brewer's Blackbird (20) (NE), Brown-headed Cowbird (1), Western Tanager (1), Evening Grosbeak (5), Pine Siskin (12), Oregon Junco (25) (S-NEY), Chipping Sparrow (10) (S), Song Sparrow (6) (S-NB).

Calliope Hummingbird (1), Blue-winged Teal (1), Golden Eagle (1) observed by N. Verbeek.

Nighthawk and Catbird observed by R. Ritcey.

Total Species - 40

May 21, 1962

Weather: Sunny all morning. Cloudy with a few showers in the afternoon. Temp. 29° - 66°.

Locality: Hemp Creek; moose pen area; to summit of Green Mountain.

Species observed:

Mallard (1), Blue-winged Teal (1), Red-tailed Hawk (1), Sparrow Hawk (1), Ruffed Grouse (2) (D), Killdeer (2), Common Snipe (2) (D), Spotted Sandpiper (1) (S), Rufous Hummingbird (5), Red-shafted Flicker (3), Hairy Woodpecker (3), Empidonax Flycatcher (15), Tree Swallow (1), Rough-winged Swallow (2), Cliff Swallow (10) (NB), Common Raven (1), Common Crow (2), Black-capped Chickadee (4) (NE), Red-breasted Nuthatch (2), Robin (20) (NE), Swainson's Thrush (4) (S), Starling (2), Orange-crowned Warbler (12) (S), Nashville Warbler (2), Yellow Warbler (4) (S), Audubon's Warbler (10) (S), Yellowthroat (1) (S), Wilson's Warbler (6) (S), Yellow-headed Blackbird (1), Brewer's Blackbird (20) (NE), Brown-headed Cowbird (2), Evening Grosbeak (3), Pine Siskin (8), Goldfinch (1) (S), Savannah Sparrow (2) (S), Oregon Junco (16) (S-NEY), Chipping Sparrow (6) (S), Song Sparrow (6) (S-NB).

Total Species - 37

May 22, 1962

Weather: Sunny in the morning. Cloudy with showers in the afternoon. Temp. 43° - 66°.

Locality: Hemp Creek; Placid Lake.

Species observed:

Canada Goose (2), Barrow's Goldeneye (2), Mallard (1), Sharp-shinned Hawk (1), Sparrow Hawk (1), Ruffed Grouse (4), Killdeer (2), Common Snipe (2) (D), Greater Yellowlegs (1), Vaux Swift (1), Rufous Hummingbird (20), Red-shafted Flicker (2), Pileated Woodpecker (1), Yellow-bellied Sapsucker (1), Hairy Woodpecker (1), Traill's Flycatcher (1) (S), Empidonax Flycatcher (16), Cliff Swallow (8) (NB), Rough-winged Swallow (4), Steller's Jay (1), Common Raven (2), Common Crow (4), Black-capped Chickadee (4) (S-NY), Winter Wren (8) (S), Robin (20) (S-NE), Swainson's Thrush (5) (S), Veery (1) (S), Golden-crowned Kinglet (5) (S), Ruby-crowned Kinglet (3) (S), Water Pipit (6) (Fl.), Starling (3), Orange-crowned Warbler (25) (S), Yellow Warbler (8) (S), Audubon's Warbler (6) (S), Townsend's Warbler (1) (S), MacGillivray's Warbler (3) (S), Yellowthroat (3) (S), Northern Waterthrush (8) (S), Brewer's Blackbird (20) (NBE), Brown-headed Cowbird (8), Bobolink (1), Western Tanager (5) (S), Pine Siskin (9), Savannah Sparrow (4) (S), Oregon Junco (15) (S-NBEY), Chipping Sparrow (10), Song Sparrow (12) (S-NB).

Marsh Hawk (1), Bittern (1), Harlequin (2) observed by N. Verbeek.

Total Species - 47

May 23, 1962

Weather: Cloudy in the morning, showers at noon, sunny in the afternoon. Temp. 40° - 65°.

Locality: Hemp Creek; by jeep to Clearwater Lake, by boat to the north end of Clearwater Lake.

Species observed:

Common Loon (4) (S), Red-necked Grebe (2), Mallard (1), Pintail (1), Shoveller (3), Bufflehead (3), Harlequin (2), Surf Scoter (18), Common Merganser (7), Red-tailed Hawk (1), Ruffed Grouse (3) (D), Killdeer (3), Common Snipe (3) (D), Spotted Sandpiper (12), Vaux Swift (3), Rufous Hummingbird (10), Empidonax Flycatcher (15), Rough-winged Swallow (8), Cliff Swallow (10) (NB), Common Raven (4), Common Crow (10), Mourning Dove (1), Black-capped Chickadee (4) (NY), Winter Wren (2) (S), Robin (12) (S-NY), Ruby-crowned Kinglet (2), Starling (3), Orange-crowned Warbler (12) (S), Swainson's Thrush (4) (S), Hermit Thrush (2) (S), Yellow Warbler (4) (S), Northern Waterthrush (6) (S), Yellowthroat (1) (S), Brewer's Blackbird (20) (NBE), Brownheaded Cowbird (2), Pine Siskin (10), Savannah Sparrow (2), Oregon Junco (14), Chipping Sparrow (3) (S), Fox Sparrow (2) (S), Song Sparrow (6) (S).

Total Species - 41

May 24, 1962

Weather: Light rain in morning stopping about noon. Strong north wind and heavy rain starting about 1600. Temp. 46° - 67°.

Locality: North end of Clearwater Lake; up the river to the canoe portage; hiked through to Azure Lake.

Species observed:

Common Loon (4) (S), Red-necked Grebe (2), Mallard (1), Common Merganser (4), Bald Eagle (1), Ruffed Grouse (3) (D), Spotted Sandpiper (10), Gull (one heard calling), Vaux Swift (3), Pileated Woodpecker (2) (S), Yellow-bellied Sapsucker (2), Hairy Woodpecker (1), Empidonax Flycatcher (6), Tree Swallow (1), Rough-winged Swallow (10), Common Raven (2), Common Crow (2), Black-capped Chickadee (2), Red-breasted Nuthatch (4), Winter Wren (12) (S), Robin (2), Varied Thrush (3) (S), Hermit Thrush (2) (S), Swainson's Thrush (1), Golden-crowned Kinglet (5), Ruby-crowned Kinglet (4) (S), Water Pipit (2), Warbling Vireo (1) (S), Orange-crowned Warbler (8) (S), Yellow Warbler (1) (S), Audubon's Warbler (10) (S), Northern Waterthrush (6) (S), Yellowthroat (6) (S), Wilson's Warbler (2), American Redstart (1) (S), Evening Grosbeak (3), Pine Siskin (35), Savannah Sparrow (2), Oregon Junco (15) (S), Lincoln's Sparrow (2) (S), Song Sparrow (4) (S).

Total Species - 41

May 25, 1962

Weather: Cloudy all day with some sunny periods and some rain showers. Temp. 49° - 65°.

Locality: From the north end of Clearwater Lake by boat to the falls; by car to Zellar Lake; from Zellar Lake to Hemp Creek on foot.

Species observed:

Common Loon (5), Red-necked Grebe (2), Lesser Scaup (5), Harlequin Duck (8), Surf Scoter (6), Common Merganser (5), Ruffed Grouse (1), Common Snipe (2), Spotted Sandpiper (7), Rufous Hummingbird (8), Pileated Woodpecker (2), Yellow-bellied Sapsucker (1), Empidonax Flycatcher (15), Rough-winged Swallow (10), Cliff Swallow (6), Common Crow (2), Black-capped Chickadee (2), Winter Wren (4), Robin (10), Swainson's Thrush (4), Veery (4), Orange-crowned Warbler (6), Yellow Warbler (1), Audubon's Warbler (6), Townsend's Warbler (1), Brewer's Blackbird (16), Brown-headed Cowbird (2), Pine Siskin (10), Savannah Sparrow (2), Oregon Junco (20), Chipping Sparrow (5), Fox Sparrow (1), Song Sparrow (8).

One Leconte's Sparrow was collected on the Ray Farm by H. Miller.

Total Species - 33

May 26, 1962

Weather: Sunny and warm with a few very light showers. Temp. 43° - 67°.

Locality: Hemp Creek; moose pen area.

Species Observed:

Canada Goose (1), Blue-winged Teal (4), Ruffed Grouse (2) (D), Sparrow Hawk (1), Killdeer (2), Common Snipe (2) (D), Spotted Sandpiper (4), Rufous Hummingbird (8), Pileated Woodpecker (2), Empidonax Flycatcher (8), Rough-winged Swallow (4), Cliff Swallow (8), Common Raven (2), Common Crow (2), Black-capped Chickadee (4) (NY), Red-breasted Nuthatch (2), Catbird (3) (S), Robin (8) (S-NE), Swainson's Thrush (5) (S), Veery (2), Warbling Vireo (1) (S), Orange-crowned Warbler (10) (S), Yellow Warbler (2) (S), Audubon's Warbler (6) (S), Townsend's Warbler (1) (S), Northern Waterthrush (1) (S), MacGillivray's Warbler (3), Bobolink (1) (S), Yellow-headed Blackbird (1), Brewer's Blackbird (16), Brown-headed Cowbird (3), Pine Siskin (8), Savannah Sparrow (2) (S), Oregon Junco (13) (S-NY), Chipping Sparrow (6) (S), Song Sparrow (4) (S).

Total Species - 36

May 27, 1962

Weather: Cloudy with rain most of the day; some sunny periods in the afternoon. Temp. 32° - 71°.

Locality: Hemp Creek; Dawson Falls; Helmcken Falls.

Species Observed:

Blue-winged Teal (3), Pigeon Hawk (2), Ruffed Grouse (3) (D), Killdeer (2), Common Snipe (2)

(D), Spotted Sandpiper (2), Vaux Swift (5), Rufous Hummingbird (7), Red-shafted Flicker (1), Downy Woodpecker (1), Eastern Kingbird (1), Empidonax Flycatcher (10) (S), Tree Swallow (6), Rough-winged Swallow (6), Cliff Swallow (10), Steller's Jay (1), Common Raven (1), Common Crow (8), Black-capped Chickadee (3), Winter Wren (4) (S), Robin (12) (S-NE), Varied Thrush (3) (S-F?), Swainson's Thrush (6) (S), Veery (4) (S), Golden-crowned Kinglet (2) (S), Ruby-crowned Kinglet (2) (S), Starling (1), Solitary Vireo (1) (S), Red-eyed Vireo (3) (S), Orange-crowned Warbler (10) (S), Yellow Warbler (4) (S), Audubon's Warbler (8) (S), Townsend's Warbler (1) (S), Northern Waterthrush (5) (S), MacGillivray's Warbler (3) (S), Yellowthroat (4) (S), Wilson's Warbler (2) (S), Brewer's Blackbird (18) (NE), Brown-headed Cowbird (3), Western Tanager (2), Purple Finch (1), Pine Siskin (12), Red Crossbill (1), Oregon Junco (16) (S-NB), Chipping Sparrow (5) (S), Song Sparrow (4) (S), Olive-sided Flycatcher (1) (S).

Total Species - 47

May 28, 1962

Weather: Sunny and warm with a heavy rain shower in the late afternoon. Temp. 45° - 62°.

Locality: Hemp Creek.

Species Observed:

Blue-winged Teal (4), Sparrow Hawk (1), Ruffed Grouse (2) (D), Killdeer (1), Common Snipe (3) (D), Spotted Sandpiper (1), Rufous Hummingbird (8), Calliope Hummingbird (1), Red-shafted Flicker (1), Eastern Kingbird (1), Western Wood Pewee (1), Olive-sided Flycatcher (1), Empidonax Flycatcher (10) (S-Probably all Dusky), Violet-green Swallow (1), Rough-winged Swallow (2), Cliff Swallow (10), Common Raven (2), Common Crow (6), Black-capped Chickadee (4) (NY), Catbird (3) (S), Robin (12) (S-NE), Swainson's Thrush (10) (S), Veery (6) (S), Cedar Waxwing (8) (Fl.), Starling (1), Red-eyed Vireo (6) (S), Orange-crowned Warbler (15) (S), Yellow Warbler (3) (S), Audubon's Warbler (8) (S), Northern Waterthrush (3) (S), Yellowthroat (4) (S), Red-winged Blackbird (1), Brewer's Blackbird (20) (NEY), Brown-headed Cowbird (5), Evening Grosbeak (8) (Fl.), Pine Siskin (6), Savannah Sparrow (2) (S), Oregon Junco (16) (SN), Chipping Sparrow (8) (S), Song Sparrow (4) (S), American Redstart (2) (S).

A singing male Tennessee Warbler was collected by H. Miller.

Total Species – 42

May 29, 1962

Weather: Heavy rain all day with very few sunny intervals. Temp. 46° - 66°.

Locality: Hemp Creek.

Species Observed:

Canada Goose (4), Mallard (5), Blue-winged Teal (5), Marsh Hawk (1), Ruffed Grouse (1) (D), Killdeer (1), Common Snipe (2) (D), Spotted Sandpiper (2), Vaux Swift (4), Rufous Hummingbird (10) (D), Eastern Kingbird (1), Empidonax Flycatcher (6), Violet-green Swallow (3), Rough-winged Swallow (3), Cliff Swallow (6) (N), Common Raven (2), Common Crow (3), Black-capped Chickadee (2) (NY), Catbird (3) (S), Robin (10) (S-NEY), Swainson's Thrush (2) (S), Veery (8) (S), Mountain Bluebird (1), Red-eyed Vireo (3) (S), Orange-crowned Warbler (5) (S), Yellow Warbler (5) (S), Audubon's Warbler (2), Northern Waterthrush (4) (S), MacGillivray's Warbler (3) (S), Yellowthroat (5) (S), Wilson's Warbler (2) (S), American Redstart (2) (S), Yellow-headed Blackbird (3), Red-winged Blackbird (5) (S), Brewer's Blackbird (18) (N), Brown-headed Cowbird (4), Pine Siskin (8), Savannah Sparrow (2), Oregon Junco (2) (S), Chipping Sparrow (4) (S), Song Sparrow (6) (S), Olive-sided Flycatcher (1) (S).

Total Species - 42

May 30, 1962

Weather: Rainy in the morning; mostly sunny in the afternoon. Temp. 38° - 56°.

Locality: Hemp Creek.

Species observed:

Mallard (2), Blue-winged Teal (3), Sparrow Hawk (1), Ruffed Grouse (2), Killdeer (1), Common Snipe (2), Spotted Sandpiper (2), Rufous Hummingbird (6), Red-shafted Flicker (1), Downy Woodpecker (1), Eastern Kingbird (1), Empidonax Flycatcher (8) (S), Olive-sided Flycatcher (1) (S), Western Wood Pewee (1), Rough-winged Swallow (6), Tree Swallow (2), Cliff Swallow (8) (N), Common Raven (2), Common Crow (10), Black-capped Chickadee (3) (NY), Winter Wren (1) (S), Catbird (4) (S), Robin (10) (S-NEY), Swainson's Thrush (8) (S), Veery (8) (S), Common Nighthawk (1) (S), Starling (1), Red-eyed Vireo (4) (S), Orange-crowned Warbler (6) (S), Yellow Warbler (4) (S), Northern Waterthrush (2) (S), MacGillivray's Warbler (2) (S), Yellowthroat (4) (S), American Redstart (4) (S), Yellow-headed Blackbird (1), Red-winged Blackbird (2) (S), Brewer's Blackbird (16) (N), Brown-headed Cowbird (4), Western Tanager (3) (S), Evening Grosbeak (3), Purple Finch (5) (Fl.), Pine Siskin (5) (Fl.), Savannah Sparrow (1) (S), Oregon Junco (9) (S), Chipping Sparrow (8) (S), Song Sparrow (5) (S).

Total Species - 46

May 31, 1962

Weather: Raining most of the day with one dry period in the morning. Temp 33° - 62°.

Locality: Hemp Creek; moose pen area; south of Ludtke Ranch.

Species observed:

Blue-winged Teal (2), Mallard (2), Ruffed Grouse (3) (D), Killdeer (1), Common Snipe (2),

Spotted Sandpiper (2), Rufous Hummingbird (2), Red-shafted Flicker (2), Pileated Woodpecker (4) (NY), Hairy Woodpecker (1), Downy Woodpecker (1), Yellow-bellied Sapsucker (1), Traill's Flycatcher (1) (S), Empidonax Flycatcher (14) (S), Rough-winged Swallow (3), Cliff Swallow (8) (N), Common Raven (2), Common Crow (8), Black-capped Chickadee (6) (S-NY), Red-breasted Nuthatch (2), Catbird (1) (S), Robin (8) (S-NEY), Hermit Thrush (1), Swainson's Thrush (10) (S), Veery (8) (S), Townsend's Solitaire (1) (S), Ruby-crowned Kinglet (6) (S), Water Pipit (1), Red-eyed Vireo (5) (S), Warbling Vireo (1) (S), Tennessee Warbler (1) (S), Orange-crowned Warbler (12) (S), Nashville Warbler (1) (S), Yellow Warbler (1) (S), Audubon's Warbler (10) (S), Magnolia Warbler (1) (S), Northern Waterthrush (2) (S), Yellowthroat (8) (S), American Redstart (3) (S), Brown-headed Cowbird (2), Western Tanager (5) (S), Brewer's Blackbird (16), Evening Grosbeak (4) (Fl.), Purple Finch (11) (Fl.), Pine Siskin (12) (Fl.), Savannah Sparrow (2) (S), Oregon Junco (14) (S-2JP), Chipping Sparrow (20) (S-NB), White-crowned Sparrow (1), Song Sparrow (4) (S).

Total Species 50

June 1, 1962

Weather: Mostly sunny all day, with a strong south wind. Temp. 30° - 59°.

Locality: Hemp Creek.

Species observed:

Canada Goose (2), Blue-winged Teal (2), Sparrow Hawk (1), Ruffed Grouse (1), Killdeer (1), Common Snipe (2), Spotted Sandpiper (2), Nighthawk (2), Rufous Hummingbird (5), Red-shafted Flicker (2), Yellow-bellied Sapsucker (1), Hairy Woodpecker (1), Pileated Woodpecker (1) (NY), Empidonax Flycatcher (10), Rough-winged Swallow (4), Cliff Swallow (8) (N), Common Raven (1), Common Crow (8), Black-capped Chickadee (9) (1NY), Red-breasted Nuthatch (4), Catbird (5) (S), Robin (12) (S-NEY), Hermit Thrush (3) (S), Swainson's Thrush (6) (S), Veery (6) (S), Ruby-crowned Kinglet (2) (S), Red-eyed Vireo (5) (S), Orange-crowned Warbler (12) (S), Yellow Warbler (2), Audubon's Warbler (6) (S), Yellowthroat (2) (S), American Redstart (4) (S), Brewer's Blackbird (16) (NE), Brown-headed Cowbird (3), Western Tanager (1) (S), Pine Siskin (10) (Fl.), Red Crossbill (8) (Fl.), Savannah Sparrow (1) (S), Oregon Junco (10) (S-F?), Chipping Sparrow (20) (S-NE), Song Sparrow (2).

Total Species – 41

June 2, 1962

Weather: Cloudy with frequent periods of drizzling rain. Temp. 41° - 63°.

Locality: Hemp Creek; Wells Gray Road to the Murtle River; along Pyramid Mountain Trail; and the summit of Pyramid Mountain.

Species observed:

Canada Goose (2), Sharp-shinned Hawk (1), Ruffed Grouse (1) (D), Killdeer (1), Rufous Hummingbird (7), Calliope Hummingbird (1), Red-shafted Flicker (2), Hairy Woodpecker (1), Empidonax Flycatcher (9) (S), Tree Swallow (5), Rough-winged Swallow (8), Cliff Swallow (8) (N), Gray Jay (2), Common Raven (3), Common Crow (3), Red-breasted Nuthatch (6), Brown Creeper (1) (S), Winter Wren (5) (S), Catbird (2) (S), Robin (10) (S-NY), Varied Thrush (1), Swainson's Thrush (14) (S), Veery (3) (S), Golden-crowned Kinglet (6) (S), Ruby-crowned Kinglet (2) (S), Water Pipit (2), Solitary Vireo (3) (S), Red-eyed Vireo (4) (S), Orange-crowned Warbler (12) (S), Yellow Warbler (2) (S), Audubon's Warbler (3) (S), Townsend's Warbler (1) (S), Blackpoll Warbler (1) (S), Northern Waterthrush (2) (S), MacGillivray's Warbler (4) (S), Wilson's Warbler (6) (S), American Redstart (2) (S), Brewer's Blackbird (18) (N), Western Tanager (8) (S), Evening Grosbeak (4) (Fl.), Pine Siskin (16) (Fl.), Red Crossbill (4) (Fl.), Oregon Junco (20) (S), Chipping Sparrow (25) (S), Song Sparrow (8) (S), Common Snipe (2).

Total Species - 46

June 3, 1962

Weather: Strong wind from the south all day. Mostly cloudy with some sunny intervals in the morning; rain shower about noon. Temp. 39° - 55°.

Locality: Hemp Creek; moose pen area.

Species observed:

Ruffed Grouse (2) (D), Killdeer (1), Common Snipe (2) (D), Spotted Sandpiper (2), Rufous Hummingbird (6), Red-shafted Flicker (2), Traill's Flycatcher (1) (S), Empidonax Flycatcher (6) (S), Western Wood Pewee (8) (S), Cliff Swallow (6) (N), Tree Swallow (20), Rough-winged Swallow (5), Vaux Swift (4), Nighthawk (1) (S), Black-capped Chickadee (2), Catbird (4) (S), Robin (12) (S-NY), Swainson's Thrush (7) (S), Veery (4) (S), Starling (10) (Fl.), Warbling Vireo (3) (S), Red-eyed Vireo (4) (S), Orange-crowned Warbler (6) (S), Yellow Warbler (2) (S), Audubon's Warbler (3) (S), Northern Waterthrush (2) (S), MacGillivray's Warbler (2), Yellowthroat (1) (S), Wilson's Warbler (2) (S), American Redstart (4) (S), Brewer's Blackbird (18) (NEY), Brown-headed Cowbird (2), Pine Siskin (6), White-winged Crossbill (4) (Fl.), Savannah Sparrow (2) (S), Oregon Junco (10) (S), Chipping Sparrow (15) (S-NE), Fox Sparrow (2) (S), Song Sparrow (6) (S).

Total Species – 41

June 4, 1962

Weather: Mostly cloudy with hail showers in the morning and rain showers in the afternoon. Temp. 35° - 53°.

Locality: Hemp Creek.

Species observed:

Common Merganser (1), Sparrow Hawk (1), Ruffed Grouse (5) (D), Killdeer (3), Common Snipe (2) (D), Spotted Sandpiper (4), Greater Yellowlegs (1), Nighthawk (1), Vaux Swift (25) (Fl.), Rufous Hummingbird (6) (D), Traill's Flycatcher (2) (S), Empidonax Flycatcher (5), Western Wood Pewee (31) (S), Olive-sided Flycatcher (7) (S), Violet-green Swallow (3), Rough-winged Swallow (6), Cliff Swallow (8) (N), Common Raven (2), Common Crow (6), Red-breasted Nuthatch (1), Catbird (5) (S), Robin (20) (S-NY), Swainson's Thrush (6) (S), Veery (6) (S-NE), Water Pipit (1), Cedar Waxwing (2), Red-eyed Vireo (2) (S), Warbling Vireo (1) (S), Orange-crowned Warbler (10) (S), Nashville Warbler (2), Yellow Warbler (9) (S), Audubon's Warbler (2) (S), Townsend's Warbler (1) (S), Blackpoll Warbler (2) (S), Northern Waterthrush (4) (S), MacGillivray's Warbler (2), Yellowthroat (2) (S), Wilson's Warbler (8) (S), American Redstart (6) (S), Brewer's Blackbird (20), Purple Finch (2), Pine Siskin (20) (Fl.), Savannah Sparrow (2) (S), Oregon Junco (2) (S), Chipping Sparrow (10) (S), Song Sparrow (12) (S-FY).

Total Species - 46

June 5, 1962

Weather: Raining most of the day with some sunny intervals in the afternoon. Temp 31° - 54°.

Locality: Hemp Creek; "Mike's Place" on the Murtle River. After dark, by foot, along Wells Gray Road to one mile south of the school.

Species observed:

Ruffed Grouse (2) (D), Killdeer (1), Common Snipe (1), Spotted Sandpiper (3), Nighthawk (4), Saw-whet Owl (2) (S) (After dark.), Vaux Swift (20), Rufous Hummingbird (10 (D), Calliope Hummingbird (1) (D), Red-shafted Flicker (1), Traill's Flycatcher (1) (S), Empidonax Flycatcher (6) (S), Western Wood Pewee (15), Violet-green Swallow (2), Tree Swallow (6), Rough-winged Swallow (6), Cliff Swallow (15) (N), Steller's Jay (1), Common Raven (3), Common Crow (6), Black-capped Chickadee (2), Dipper (1), Catbird (3) (S), Robin (28) (S-NY), Varied Thrush (2), Swainson's Thrush (5), Veery (4) (S-NE), Golden-crowned Kinglet (1) (S), Ruby-crowned Kinglet (2) (S), Water Pipit (1), Cedar Waxwing (2), Red-eyed Vireo (3) (S), Warbling Vireo (1), Orange-crowned Warbler (6) (S), Nashville Warbler (1) (S), Yellow Warbler (6) (S), Audubon's Warbler (5) (S), Northern Waterthrush (1) (S), MacGillivray's Warbler (2), Yellowthroat (2) (S), Wilson's Warbler (8) (S), American Redstart (4) (S), Brewer's Blackbird (16), Brown-headed Cowbird (2), Western Tanager (1) (S), Pine Siskin (35) (Fl.), Oregon Junco (1), Chipping Sparrow (20) (S), Savannah Sparrow (1) (S), Song Sparrow (6) (S).

Goshawk seen by N. Verbeek.

Total Species - 50

June 6, 1962

Weather: Sunny and warm. No rain all day. Temp. 29° - 56°.

Locality: Census; same area as May 16.

Species observed:

Marsh Hawk (2), Pigeon Hawk (1), Sparrow Hawk (1), Ruffed Grouse (1), Killdeer (1), Common Snipe (1), Spotted Sandpiper (2), Black Swift (2), Vaux Swift (2), Unidentified Swifts (15), Rufous Hummingbird (9), Calliope Hummingbird (1), Hairy Woodpecker (1), Traill's Flycatcher (3), Empidonax Flycatcher (21), Western Wood Pewee (2), Olive-sided Flycatcher (2), Tree Swallow (2), Cliff Swallow (8), Common Raven (2), Common Crow (5), Black-capped Chickadee (3), Red-breasted Nuthatch (1), Winter Wren (1), Catbird (2), Robin (13), Swainson's Thrush (10), Veery (14), Red-eyed Vireo (6), Warbling Vireo (2), Orange-crowned Warbler (13), Yellow Warbler (4), Audubon's Warbler (3), Northern Waterthrush (2), MacGillivray's Warbler (4), Yellowthroat (3), Wilson's Warbler (6), American Redstart (9), Brewer's Blackbird (17), Brownheaded Cowbird (2), Western Tanager (2), Evening Grosbeak (2), Purple Finch (2), Pine Siskin (23), Red Crossbill (1), Savannah Sparrow (1), Oregon Junco (24), Chipping Sparrow (17), Song Sparrow (12).

Total Species - 48 Total Individuals - 283

List of Species Observed and Their Relative Abundance

Because of the difficulty involved in determining the status of a species through the use of terminology such as: "common", "abundant", "rare", etc., I have listed the species observed along with the average daily observations of each.

The number appearing in the first column is the total observations for each species from May 9 to June 6. The number appearing in the second column is the total number of days spent in the habitat in which that species may be expected. In determining this figure, only the time between the first arrival date and the date of the last observation was used, in the case of migrants. Some species will have no average observations. Most of these are probably accidental in that particular habitat at this time of year. The number appearing in the third column is the average number of individuals of a species seen per day, as calculated from the first two figures.

Although a system such as this involves a number of new difficulties, it is to be hoped that it will provide a workable indication of the relative abundance of these species at this time of the year.

^{*} Indicates species found to be breeding.

Species	Total	Days	Average
*Common Loon	15	5	3.00
Red-necked Grebe	6	5	1.20
American Bittern	6	28	0.20
*Canada Goose	33	29	1.14
*Mallard	26	29	0.89
Pintail	1	5	0.20
Blue-winged Teal	27	29	0.93
Shoveller	4	6	0.67
Ring-necked Duck	1	5	0.20
Lesser Scaup	5	5	1.00
Common Golden-eye	3	9	0.33
Barrow's Goldeneye	7	9	0.78
Bufflehead	16	9	1.78
Oldsquaw	2	9	0.22
Harlequin Duck	31	9	3.44
Surf Scoter	28	9	3.11
Common Merganser	32	9	3.56
Hooded Merganser	2	10	0.20
Goshawk	1	14	0.07
Sharp-shinned Hawk	2	10	0.20
*Red-tailed Hawk	7	28	0.25
Golden Eagle	4	29	0.14
Bald Eagle	2	29	0.07
Marsh Hawk	5	28	0.18
*Osprey	4	8	0.50

Species	Total	Days	Average
Pigeon Hawk	4	8	0.50
Sparrow Hawk	9	29	0.31
Blue Grouse	3	8	0.38
Spruce Grouse	8	7	1.14
*Ruffed Grouse	88	29	3.03
*Killdeer	49	29	1.69
Common Snipe	56	29	1.93
Spotted Sandpiper	65	26	2.50
Solitary Sandpiper	2	5	0.40
Greater Yellowlegs	13	29	0.45
Pectoral Sandpiper	3	3	1.00
Mourning Dove	2	14	0.14
Saw-whet Owl	2		
Nighthawk	10	18	0.56
Vaux Swift	113	29	3.90
Black Swift	8		
Rufous Hummingbird	141	29	4.86
Calliope Hummingbird	12	18	0.67
Belted Kingfisher	6	13	0.46
Red-shafted Flicker	62	29	2.14
Yellow-bellied Sapsucker	11	25	0.44
*Hairy Woodpecker	17	29	0.59
Downy Woodpecker	4	25	0.16
Black-backed Three-toed Woodpecker	1	20	0.05
*Northern Three-toed Woodpecker	4	7	0.57

Species	Total	Days	Average
Eastern Kingbird	4	11	0.36
Eastern Phoebe	1		
Traill's Flycatcher	9	15	0.60
Hammond's Flycatcher	3		
Dusky Flycatcher	3		
Empidonax Flycatcher	342	29	11.88
Western Wood Pewee	59	19	3.11
Olive-sided Flycatcher	14	20	0.70
Horned Lark	1	28	0.04
Violet-green Swallow	10	29	0.35
Tree Swallow	125	29	4.31
Rough-winged Swallow	139	29	4.79
*Cliff Swallow	212	28	7.57
*Gray Jay	12	12	1.00
Steller's Jay	10	12	0.85
*Common Raven	53	29	1.83
*Common Crow	133	29	6.31
*Black-capped Chickadee	122	29	4.33
*Red-breasted Nuthatch	70	29	2.41
Brown Creeper	1	12	0.23
Dipper	3	28	0.11
*Winter Wren	62	14	4.43
Catbird	36	17	2.12
*Robin	392	29	13.52
Varied Thrush	16	14	1.14

Species	Total	Days	Average
Hermit Thrush	15	29	0.50
Swainson's Thrush	135	29	4.66
*Veery	83	22	3.77
Mountain Bluebird	3	28	0.11
Townsend's Solitaire	6	20	0.30
Golden-crowned Kinglet	36	14	2.57
Ruby-crowned Kinglet	86	29	2.97
Water Pipit	313	28	11.18
Cedar Waxwing	12	10	1.20
Starling	80	29	2.76
Solitary Vireo	20	29	0.69
Red-eyed Vireo	45	11	4.09
Warbling Vireo	21	26	0.81
Tennessee Warbler	2	10	0.20
Orange-crowned Warbler	405	29	13.97
Nashville Warbler	8	29	0.27
Yellow Warbler	76	23	3.30
Magnolia Warbler	1		
Myrtle Warbler	14		
Audubon's Warbler	332	29	11.45
Townsend's Warbler	14	18	0.78
Blackpoll Warbler	3	5	0.60
Northern Waterthrush	48	16	3.00
MacGillivray's Warbler	29	22	1.32
Yellowthroat	54	21	2.57

Species	Total	Days	Average
Wilson's Warbler	53	27	1.96
American Redstart	53	15	3.53
Bobolink	2		
Western Meadowlark	4	28	0.14
Yellow-headed Blackbird	8	28	0.28
Red-winged Blackbird	19	28	0.68
*Brewer's Blackbird	522	28	18.64
Brown-headed Cowbird	54	24	2.25
Western Tanager	34	19	1.79
Evening Grosbeak	68	29	2.34
Purple Finch	23	29	0.79
Gray-crowned Rosy Finch	1		
Pine Siskin	667	29	23.00
American Goldfinch	1	28	0.04
Red Crossbill	19	29	0.66
White-winged Crossbill	4	29	0.14
Savannah Sparrow	47	25	1.88
Leconte's Sparrow	1		
Vesper Sparrow	1		
*Oregon Junco	477	29	16.45
Tree Sparrow	1		
*Chipping Sparrow	226	25	9.04
White-crowned Sparrow	32	23	1.39
Golden-crowned Sparrow	7	10	0.70
Fox Sparrow	3	15	0.20

Species	Total	Days	Average
Lincoln's Sparrow	7	22	0.32
*Song Sparrow	183	29	6.31
*Pileated Woodpecker	21	29	0.72
White-throated Sparrow	1		

Notes on Species Observed

Common Loon - Breeding - Common and to be expected on all the large lakes in the park. They were observed daily on Clearwater Lake during the time I spent there. Occasionally heard or seen flying over Hemp Creek valley. Nest with two eggs at Stillwater on June 1 (Verbeek and Ritcey).

Red-necked Grebe - Two birds were seen daily on Clearwater Lake between May 23 and May 25. However, they may not always have been the same pair. This was the only record obtained for this species.

American Bittern - First heard calling from the swamp on the south end of Helset's farm on May 14. The bird was frequently heard in late evening until May 22.

Canada Goose - Breeding - Frequently observed flying over Hemp Creek or resting in a muddy corner of a field at the south end of Helset's farm. A nest containing seven eggs was found at Stillwater on May 16 by T. Helset.

Mallard - Breeding - Frequently seen feeding or resting in open fields about Hemp Creek. Also observed in suitable habitat along the Clearwater Road. A female with five young was observed on Hemp Creek on June 3.

Pintail - One male bird of this species was observed with three male Shovellers at the north end of Clearwater Lake on May 23.

Blue-winged Teal - First observed on May 17. Observed regularly at Hemp Creek valley during high water which covered the fields. Not observed after June 1.

Shoveller - Three males were observed together at the north end of Clearwater Lake on May 23.

Ring-necked Duck - One male was observed feeding in a cattail marsh at the edge of the Clearwater Road north of the Ray Farm on May 17.

Lesser Scaup - A flock of three males and two females was seen on Clearwater Lake on May 25. The flock was flushed by the boat and the birds definitely identified as this species by the short wing stripe. No Greater Scaup were observed in Wells Gray Park.

Common Goldeneye - Only three birds of this species were observed. All were seen on the Clearwater River at a point where it runs close to the Clearwater Road between the Murtle River and Rays Farm. One on May 12; two on May 17.

Barrow's Goldeneye - More common than the preceding species. A regular bird on small lakes such as Placid, Alice, and Zellar. Also seen regularly on the Clearwater River.

Bufflehead - A regular bird of rivers and small lakes. Usually found in the same place as the Barrow's Goldeneye. Also seen above the Clearwater Falls at the south end of the lake. On May 17, eleven birds were observed.

Oldsquaw - On May 17 a male was heard "trumpeting" on Zellar Lake. The bird was in bright breeding plumage and no female was observed. On May 26, N. Verbeek observed a male on Alice Lake; possibly the same bird.

Harlequin Duck - Commonly observed in pairs on the Clearwater River, Hemp Creek, and the falls at the south end of Clearwater Lake.

Surf Scoter - On May 20, two pairs were observed on the Clearwater River south of Deer Creek. On May 23, I counted eighteen birds in one raft at the north end of Clearwater Lake. Most of these birds were males. On May 25, six were seen on Clearwater Lake.

Common Merganser - Commonly observed along the Clearwater River and on Clearwater Lake. Occasionally seen flying over Hemp Creek valley.

Hooded Merganser - Two were observed at Stillwater on May 23 by R. Ritcey and N. Verbeek.

Goshawk - One was found and identified by N. Verbeek on June 5. This bird was sitting on a dead snag in the large burn north of the Ranger Station. On May 31, I observed a large hawk sitting in a tree a few feet from the ground. The sighting was made during a heavy downpour and by the time I had my glasses out the bird had flown. Judging by the large size and the accipiter-like flight I am reasonable sure that the bird was of this species. This observation was made at the edge of a low swampy area south of the Ludtke Ranch.

Sharp-shinned Hawk - One was observed on May 22 flying above the burn north of the Ranger Station. Another was observed on June 2 in the burn near Pyramid Mountain.

Red-tailed Hawk - Breeding - This species was observed on seven different occasions. Most often seen while driving along the Clearwater Road south of the Murtle River. One was observed on the east slope of Green Mountain on May 19.

On May 9, N. Verbeek flushed a bird from its nest near Alice Lake. The contents of the nest were not determined.

Golden Eagle - Rather infrequently seen flying over the burn north of the Ranger Station. On May 15, I saw two being mobbed by Ravens in this area. N. Verbeek has a few records from the same area.

Bald Eagle - One was observed flying north over Hemp Creek on May 9. Another was observed on the bank of the river between Clearwater and Azure Lakes on May 24.

Marsh Hawk - Occasionally observed flying over the fields in Hemp Creek valley. On June 6, two were observed performing an aerial display in the same region.

Osprey - Breeding - Rather infrequently seen. One nest was located on the east side of the Clearwater Road just south of the Murtle River. The birds were seen quite regularly at the nest until the end of May.

Pigeon Hawk - A pair of Pigeon Hawks were observed quite regularly in a low-lying area just east of Helmcken Falls Lodge. The birds were often mobbed by crows at which times they would utter a call "ki-ki-ki" similar to that of the Sparrow Hawk. Their behaviour was certainly quite indicative of nesting birds. However, the nest was not located.

Sparrow Hawk - Observed quite regularly hunting over the open fields in Hemp Creek valley.

Blue Grouse - Occasionally seen or heard on the east slope of Green Mountain. Several were observed by R. Ritcey and N. Verbeek on their trips to Stillwater.

Spruce Grouse - Several were collected by R. Ritcey. Four were taken at the south end of Clearwater Lake on May 17. None of the females collected were ovulating.

Ruffed Grouse - Breeding - Common throughout most areas visited, with an average of three per day for the time spent in the park. A few nests were found by R. Ritcey before May 9. On May 15 a female was found dead by R. Ritcey and N. Verbeek. The bird was in an emaciated condition and upon dissection was found to have a hard-shelled egg in the oviduct. The cloaca was apparently too small or weak to pass the egg and faeces were packed tightly against it. This may possibly have been the cause of the bird's condition. The stomach and crop were both filled.

Killdeer - Breeding - A common bird of the fields in Hemp Creek Valley. Often the adult birds behaved as it they were nesting, but no nest was located in this area. A nest containing four eggs was found at "Mike's Place" on May 31 by Hettie Miller.

Common Snipe - Observed daily in the fields about Hemp Creek. One pair probably nested in this area as the birds were often observed in aerial display above the fields. Also observed on the Ray Farm.

Spotted Sandpiper - First noted on May 12. Commonly seen after that date mostly along Hemp Creek, Clearwater River, and around Clearwater Lake.

Solitary Sandpiper - One was observed on the Ray Farm in a low marshy area on May 9. Another was observed in a similar area near the Clearwater Road and Zellar Lake on May 17.

Greater Yellowlegs - Several were reported by N. Verbeek from the Stillwater area. He observed ten there on May 26. One was seen in a muddy field in Hemp Creek valley on June 4.

Pectoral Sandpiper - On May 17, three were observed at the edge of Five Finger Lake. The birds were feeding in the shallow water at the edge of the lake and flushed when we approached. This is the only record I have from the park.

Mourning Dove - The first was observed on May 23. Another was collected by H. Miller on May 25.

Saw-whet Owl - On June 5, I spent several hours after sunset walking along the Clearwater Road to a point about two miles south of the school-house. At approximately midnight, I heard two owls of this species calling. No other owls were heard. N. Verbeek reported two observations of larger owls, but he did not see them sufficiently well to identify them as to species.

Nighthawk - First arrival, May 20. After May 30, they were seen or heard quite frequently over Hemp Creek. On June 5, four were observed flying over the Murtle River at "Mike's Place".

Black Swift - On June 6, I observed two birds of this species. N. Verbeek independently identified six on the same afternoon. These were the only records. Later the same afternoon I counted fifteen swifts. However, they were too far off to identify as to species.

Vaux Swift - First observed on May 11. Commonly observed after this date. A peak in numbers occurred on June 4 and June 5 when 25 and 20 birds were observed respectively.

Rufous Hummingbird - A very common species around Hemp Creek valley. Twenty were observed on May 22 with an average of about five per day for the entire time. Almost constantly at the Helset's Hummingbird feeders but here counting was extremely difficult.

Calliope Hummingbird - A total of twelve observations. They were most frequently observed along the dry roadside in the moose pen area. One displaying male was observed at the edge of a marsh at "Mike's Place" on June 5.

Belted Kingfisher - Fairly regularly observed along the Clearwater River.

Red-shafted Flicker - The commonest woodpecker observed in the park. Six was the highest number observed in a single day. Although I found no nests in the park, they most certainly nest there. On several occasions I observed flickers examining old nest holes. Also a record of a pair copulating on a branch of a dead snag on May 13. No Yellow-shafted Flickers or hybrids were observed.

Pileated Woodpecker - Breeding - More frequently heard than seen, but observations of birds flying across Hemp Creek valley were fairly regular. On May 31, I found a nest containing young about forty feet above the ground in a dead tree near the moose pen area. I photographed the female feeding the young.

Yellow-bellied Sapsucker - Regularly observed. Often around the moose pen area, but also frequently along the Clearwater Road. No Red-breasted Sapsuckers were observed, and no nests were found.

Hairy Woodpecker - Breeding - More often observed than the Sapsucker. Usually in the moose pen area or low in Hemp Creek valley. N. Verbeek observed a young bird out of the nest and being fed by the adult on June 6.

Downy Woodpecker - Only four observations were made of this species. The habitat preference is probably similar to that of the Hairy Woodpecker.

Black-backed Three-toed Woodpecker - The only one observed was in the moose pen area on May 9. The bird was observed by D. Dow, R. Y. Edwards, R. Ritcey, and N. Verbeek.

Northern Three-toed Woodpecker - Breeding - A nest of this species was found at the edge of the Clearwater Road, north of the Murtle River on May 9 by Dow, Edwards, Ritcey and Verbeek. At this time a pair of birds were seen near the nest hole which they may have been in the process of excavating. On May 12, I found no sign of the birds. On May 19, I flushed the male from the nest by knocking on the trunk of the tree. This would lead us to believe that the male was incubating. On May 20, I flushed the female in the same manner.

Eastern Kingbird - First noted on May 27. Between May 27 and May 30, a single bird was observed about the cabin in Hemp Creek area. On June 1, N. Verbeek reported three from the Stillwater area.

Eastern Phoebe - One bird of this species was identified by N. Verbeek on May 12. He found the bird feeding from small alders and willows along the bank of Hemp Creek just south of the bridge near Helset's cabins. The bird was collected a few hours later by R. Ritcey. I prepared the specimen which is now in the collection at Wells Gray Park.

Empidonax Flycatchers - This group was well represented throughout my entire stay in the park. Three species, Traill's, Hammond's and Dusky, were definitely found to occur. Habitat was not used as a factor in their identification as many were migrating throughout May. The Traill's Flycatcher was readily identified on the basis of song. However, the Dusky Flycatcher and the Hammond's Flycatcher were not separated by song at all. Towards the beginning of May, neither of these species was singing a full song.

I believe that the only way these songs can be studied is through extensive collecting. In this study, I did not feel that this would be justified.

A small amount of collecting was carried out during the early part of May purely for the purpose of definite identifications. Of six birds collected in random locations (none were in full song), three were identified as Hammond's Flycatchers and three as Dusky Flycatchers.

In the daily lists of birds observed, the Dusky and Hammond's have been listed under Empidonax Flycatchers with no attempt at field identification. However, I believe that all birds observed around Hemp Creek valley towards the end of May and the beginning of June were Dusky Flycatchers. They were found usually along the roadside and on wooded hillsides.

On May 31, H. Miller collected an Empidonax Flycatcher at the Ray Farm. It would seem possible that this bird was a female Western Flycatcher. The bird will be sent to the National Museum for positive identification.

Traill's Flycatcher - First arrival on May 22. Observed regularly along Hemp Creek and in moist areas after May 31. The greatest number seen in one day was three on June 6.

Hammond's Flycatcher - Two were collected along the "jeep road" to Stillwater on May 12. They were calling from the riverbank in an area with many dead snags and live cottonwood. Another was collected near Deer Creek and the Clearwater Road on May 12. This bird was feeding in an area of Douglas Fir and Trembling Aspen.

Dusky Flycatcher - One was collected along the "jeep road" on May 10. The bird was taken from a wooded hillside; aspen being the dominant growth. Two others were collected from the moosepen area on May 11. Again aspen was the dominant growth, with some Douglas Fir, Alpine Fir, and spruce.

Western Wood Pewee - First arrival on May 19. Observed fairly regularly after May 28. A notable migration passed through between June 3 and June 6, with a peak on June 4 of 31 birds. This was in the Hemp Creek area.

Olive-sided Flycatcher - First arrival on May 18. Fairly regular after May 27. A peak, coinciding with that of the Western Wood Pewee, occurred on June 4, with seven birds counted in the Hemp Creek area.

Horned Lark - One was observed on May 14 by R. Ritcey and N. Verbeek. This is the only record available.

Violet-green Swallow - First arrival on May 19. Observed rather infrequently during my stay in the park. Observed only over the Clearwater River near Deer Creek, and in Hemp Creek area.

Tree Swallow - Regularly seen flying over all habitats. Maximum numbers observed were as follows: May 11, 15; May 12, 20; May 17, 25; June 3, 20.

Rough-winged Swallow - Observed almost daily and in larger numbers than the Tree Swallow. Towards the end of May, they were frequently observed in the vicinity of cut road-banks. Several were observed to be excavating tunnels, but no actual nests were found.

Cliff Swallow - Breeding - Approximately eight birds were observed daily around the buildings in Hemp Creek area. Several nests were started, but most eventually fell down. One nest was built on the east side of one of Helset's cabins and the bird was observed sitting in the nest. The bird was on the nest on June 6, and assumed to be incubating.

Gray Jay - Breeding - Pairs observed rather infrequently; usually in fairly dense coniferous growth such as that found along parts of the Placid Lake trail. One nest was found by H. Miller on March 26 when it was being built. The first egg was laid on April 2. A total of three eggs were laid. Two of the young died in the nest and it was assumed that the third was successful in leaving.

Steller's Jay - Infrequently observed. Several were observed on the Ray Farm on May 9, and two at the entrance to the Murtle River Trail from Clearwater Road on June 5. Not observed as often as the Gray Jay.

Common Raven - Breeding - One or two pairs observed almost daily about the Hemp Creek area. A nest was found by H. Miller on the east slope of Hemp Creek valley. The nest had young in it when I was shown it on May 9. N. Verbeek reported that it still had two large young in it on June 2.

Common Crow - Breeding - Seen daily in almost every habitat. Often seen in the Hemp Creek area. A nest containing three eggs in this area on May 12. On May 22 the eggs were "pipping".

Black-capped Chickadee - Breeding - Observed almost daily in a wide variety of habitats. One nest containing eight eggs was found in an aspen stump in the Hemp Creek area on May 16. The eggs hatched before May 22 and five young left the nest on the afternoon of June 1. Another bird was observed entering a cavity in a dead stump near Five Finger Lake Trail on May 17. This species was frequently encountered carrying food.

Red-breasted Nuthatch - Breeding - Observed almost daily. A bird was observed entering a hole in a live aspen on the Five Finger Lake Trail on May 17. The bird was carrying food and may have been feeding young or an incubating female.

Brown Creeper - One bird was heard singing and later sighted on a large Douglas Fir by the side of the Clearwater Road near the Murtle River on June 2. This was the only record.

Dipper - One was observed on May 27 on the Murtle River from the Helmcken Falls trail by N. Verbeek. Another was observed on Hemp Creek by N. Verbeek on June 2. I observed one on the Murtle River at "Mike's Place" on June 5.

Winter Wren - Breeding - Observed commonly in suitable habitat. Very frequently heard singing along the Clearwater Road north of the Ranger Station and south of the Murtle River. A nest containing six eggs was collected from this area on May 27 by H. Miller.

Catbird - First arrival on May 20. Observed daily after May 28, in numbers up to five in the Hemp Creek area.

Robin - Breeding - A common species throughout the Hemp Creek area. First record of nest building on May 8. First eggs on May 13. Several nesting records on hand. During the earlier part of May several birds were noted in flocks.

Varied Thrush - Regularly observed in suitable habitat along the Clearwater Road. Several birds were observed carrying food, but no nests or young were located.

Hermit Thrush - Observed regularly but not in large numbers throughout the period of my stay. Occasionally heard singing at dusk in the moose pen area.

Swainson's Thrush - the most common of the smaller thrushes. Frequently observed throughout most suitable habitats. Birds in small flocks were observed on June 2.

Veery - Breeding - First arrival on May 16. Seen or heard daily after May 25. One nest was located in the Hemp Creek area on June 4. At this time the nest contained only one egg.

Mountain Bluebird - Two were observed on the Ray Farm on May 9. One was observed at the Ranger Station in Hemp Creek on May 29.

Townsend's Solitaire - Occasionally observed in the moose-pen area, and on the east slope of Green Mountain. Birds frequently observed in aerial song-display, but no nests located.

Golden-crowned Kinglet - Frequently heard singing along the Clearwater Road wherever fairly large timber occurred.

Ruby-crowned Kinglet - Very common throughout most habitats visited. Observed almost daily.

Water Pipit - Observed in large flocks at the beginning of May. Approximately 100 observed in one flock at the Ranger Station on May 11. Single birds were frequently observed throughout the remaining time. One on June 5.

Cedar Waxwing - First noted, a flock of eight, on May 28. Two observed in Hemp Creek area on June 4 and June 5.

Starling - A small flock of about a dozen birds was in evidence about Hemp Creek between May 12 and May 16. Occasionally single birds were observed throughout the month. A flock of ten birds was observed in the same area on June 3. This species was also observed at the Ray Farm on May 9.

Solitary Vireo - First noted on May 10. This species was heard singing frequently through the first part of May. At this time it was quite common on the slopes of Green Mountain and the moose pen area. After May 20, it was observed on only two occasions. One in Hemp Creek area on May 27, and three near Pyramid Mountain on June 2.

Red-eyed Vireo - First arrival on May 27. Observed daily after this date. Frequent along road edges and in Trembling Aspen stands. The most abundant vireo in the areas visited.

Warbling Vireo - First arrival on May 12. Frequently observed throughout the remainder of my stay. Most frequently heard singing along Hemp Creek and in the moose pen area. This species should certainly be considered quite common and probably nests in the area.

Tennessee Warbler - A singing male was collected on the Ray Farm on May 28 by H. Miller. I observed another near the Ludtke property on May 31. This bird was singing in a stand of Trembling Aspen at the edge of an alder swamp. It would seem quite likely that this species may be of regular occurrence in the park. It has possibly been missed because of a certain amount of difficulty involved in identifying the bird, or the similarity in some plumages to the Orange-crowned Warbler.

Blackpoll Warbler - First arrival on May 29. One observed on June 2 and two along Hemp Creek on June 4. All were males, and most were singing.

Orange-crowned Warbler - The commonest warbler observed in the park. Occurring in flocks in early May, with a maximum of 39 birds observed on May 16. An average of almost 14 birds per day for the entire period. Although birds were frequently observed exhibiting nesting behaviour, no nests were found.

Nashville Warbler - First arrival on May 12. A total of eight observations of this species was made. No more than two birds were ever observed together. Usually they were found among Trembling Aspens on Green Mountain, Hemp Creek area, and the moose pen area.

Yellow Warbler - First arrival on May 15. Observed daily after this date with a maximum number of nine observed on June 4. No nests were located.

Magnolia Warbler - A singing male was found near the Ludtke property, north-east of the moose pen area on May 31. The bird was singing mostly from the tops of Douglas Fir and spruce. This was my only record of this species.

Myrtle Warbler - this species was recorded on only two days, May 14 and May 15 with ten and four individuals respectively. It was interesting to note that this was the peak of the Audubon's Warbler migration. Most of these were seen on the east slopes of Hemp Creek area and the moose pen area.

Audubon's Warbler - Observed almost daily during my stay. Most habitats seemed to be utilized by this species. Early in May they were found in flocks. The peak migration occurred between May 11 and May 16; 18 on May 11; 40 on May 12; 25 on May 13; 40 on May 14; 25 on May 15; and 18 on May 16. Although no nests were found within the park, this species undoubtedly nests there.

Townsend's Warbler - First arrival on May 15. Observed regularly after this date until June 4.

Northern Waterthrush - First arrival on May 22 with eight birds heard singing. Observed almost daily in the moist areas along the road just south of the Ranger Station.

MacGillivray's Warbler - First arrival on May 16. Observed very regularly after that date; mostly in moist areas along Hemp Creek. A pair was observed copulating on June 5. No nests were found.

Yellowthroat - First arrival on May 17 with six individuals seen. Heard or seen almost daily after this date. Common in marshy areas around small lakes and ponds. Also common in swampy areas along Hemp Creek and east of the Ranger Station.

Wilson's Warbler - First arrival on May 11. Observed regularly after that date. A maximum of eight birds was observed on both June 4 and 5. Mostly observed in the same habitat as MacGillivray's as well as in the more exposed alders along the creek.

American Redstart - First arrival on May 24. N. Verbeek reported twelve from the Stillwater area on May 26. I observed nine in the Hemp Creek area on June 6.

Bobolink - One bird in male plumage was observed about the fields on Helset's farm in Hemp Creek area on May 22. Another singing male was observed in the same area on May 26. These were the only two records of this species.

Western Meadowlark - One bird was observed on the Ray Farm on May 9. One was observed in Hemp Creek along the roadside fence-posts on both May 11 and 12. Another was observed in the same area on May 17.

Yellow-headed Blackbird - Occasionally seen about the barn and fields on Helset's farm in Hemp Creek area. Both males and females were observed at different times. The records are as follows: 1 on May 21; 1 on May 26; 2 on May 27; 3 on May 29; and 1 on May 30.

Red-winged Blackbird - Regularly observed along the Clearwater Road wherever suitable habitat occurred. Also regular at the Ray Farm. Observed occasionally in the open fields in the Hemp Creek area.

Brewer's Blackbird - Breeding - One of the commonest birds in the Hemp Creek area. Also observed in a variety of habitats throughout the park. There were several nests located about the Helset's property. N. Verbeek has all the nesting data for these. They will be sent to the U.B.C. Nest Record Scheme. The first date for eggs was May 11, and for young was May 27.

Brown-headed Cowbird - This species was first noted on May 13. It was observed regularly about the fields in the Hemp Creek area. A maximum of eight birds was observed on May 22. No evidence of breeding or nest parasitism was obtained.

Western Tanager - First arrival on May 16. Heard or seen quite regularly after this date.

Evening Grosbeak - Frequently observed in small flocks flying over the Hemp Creek or moose pen areas. The largest observed flock consisted of eight birds; May 28.

Purple Finch - This species was first noted on May 10, when a singing male was found. Several other sightings were obtained. Five were observed on May 30 and eleven on May 31. All birds examined were Purple Finches. No Cassin's Finches were noted.

Gray-crowned Rosy Finch - One bird of this species was observed at Mike's Place on June 5 by H. Miller. The bird was apparently attracted by salt near the cabin walls. No other records were obtained.

Pine Siskin - This was found to be the commonest bird observed in Wells Gray Park. They were observed daily and ranged in loose flocks up to June 6. They were found in or flying over every habitat type. The largest single flock, consisting of approximately 100 birds, was observed on May 17 about the cabin at the south end of Clearwater Lake.

American Goldfinch - A male bird of this species was observed about the fence-posts on the Helset's farm in the Hemp Creek area on May 21. This was the only record from the park.

Red Crossbill - Observed infrequently in a variety of habitats. Most observations were of individuals or small flocks flying over the area. First observed on May 16, last on June 6.

White-winged Crossbill - Four males were observed in the moose pen area on June 3. The birds landed at the top of a tall spruce and, after a few minutes, continued their flight westward.

Savannah Sparrow - First arrival on May 12. Observed quite regularly after this date. A maximum of twelve birds was observed in the Hemp Creek area on May 15. Most observations of this species were made around Hemp Creek and "Mike's Place".

Leconte's Sparrow - A male of this species was collected by H. Miller on May 25 from the Ray Farm. The bird was found in fairly open low grass. The bird is in the collection at Wells Gray Park.

Vesper Sparrow - The only record was obtained by R. and H. Miller on May 15. A single bird was observed feeding in the open field behind the Ranger Station.

Oregon Junco - Breeding - One of the commonest species found in the park. Frequently observed low in Hemp Creek valley, but more often higher on the slopes of the moose pen area and farther north on the Clearwater Road. Several nests were located. First record of eggs: May 9 (4 eggs). One nest on May 15 contained five well-feathered young which left the nest on the same day. Nest building, in this case, must have started before April 20. All specimens examined were of the type Junco oreganus montanus. One bird which was collected on May 15, appeared to be a hybrid between Junco oreganus and Junco hyemalis, possibly J. o. montanus and J. h. cismontanus. The specimen will be sent to A. H. Miller in California for positive identification.

Tree Sparrow - One was observed on May 11 in the fields on Helset's Farm. The bird was observed later by R. Ritcey and N. Verbeek. This constitutes my only record for this species.

Chipping Sparrow - Breeding - First arrival on May 13. Very common after this date, exceeding the Oregon Junco in numbers. First nest located in the moose pen area was being built on May 29. Contained one egg on June 1 and three on June 3. Another nest in the Hemp Creek area contained one egg on June 1, three on June 1[?], and four on June 6.

White-crowned Sparrow - Observed regularly until May 18. Only one was observed after this date; May 31. This bird was caught in a mouse trap which was set in the moose pen area. All birds of this species that I examined were of the type Zonotrichia leucophrys gambelii.

Golden-crowned Sparrow – First noted on May 12, two birds. One on May 14; three on May 17; and one on May 18. These were the only observations of this species.

White-throated Sparrow – One was heard singing in the low, swampy area east of the Ranger Station on May 19.

Fox Sparrow – Two were heard singing and one was observed near Hemp Creek at the south end of Helset's property on May 23. Another was seen north of the Ranger Station on May 25.

Lincoln's Sparrow – First arrival on May 16. One on May 17; one on May 18; and two on May 24. These were mostly found in low swampy or moist areas. Very little song was heard after May 18.

Song Sparrow - Breeding - Very common throughout most areas. Nesting or breeding behaviour observed in almost all areas visited. Nesting records as follow: five eggs on May 24; five eggs on June 3; four eggs on May 26; four eggs on June 3; fledglings being fed on June 4 and June 6.

This list is comprised of 128 species observed in Wells Gray Park. Of this number, there is definite breeding evidence for 23 species.

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