

SEVEN WARBLERS

In Riding Mountain National Park, Manitoba

by W. J. WALLEY*

Publications on the status of warblers in Riding Mountain National Park during the past 25 years are lacking. The latest complete report was given by J. D. Soper who studied the birds of the park at intervals from 1940 to 1946.⁶ In establishing the status of each species, he also included the observations of R. Sutton and A. H. Shortt in 1938 and those of Sutton in 1939 as well as additional information given by Taverner and Sutton.⁷

The north slope of the park provided an unusual opportunity for bird studies. Diverse habitats occurring at different elevations within a relatively short distance made comparative studies possible. This was especially true of the warblers because of their abundance. Furthermore, few, if any, published observations have been made on the birds of this area. None of the above investigators worked on the north slope of the park.

Study Area

Three habitat types were recognized on the north slope. These included:

1. Dense deciduous forest starting at 1,250 feet a.s.l. This habitat was dominated by trembling aspen (*Populus tremuloides*) with paper birch (*Betula papyrifera*) dominating in the gorges near the base of the main slope.
2. Mixed coniferous and deciduous forest in gorge terrain starting at 1,725 feet. In addition to the aforementioned species, balsam poplar (*P. balsamifera*), white spruce (*Picea glauca*) and alders (*Alnus* sp.) occurred in this habitat.
3. Mixed forest with some muskeg at 2,225 feet. In addition to all of the

above species, stands of tamarack (*Larix laricina*) and black spruce (*P. mariana*) occurred in and near the muskegs in this area.

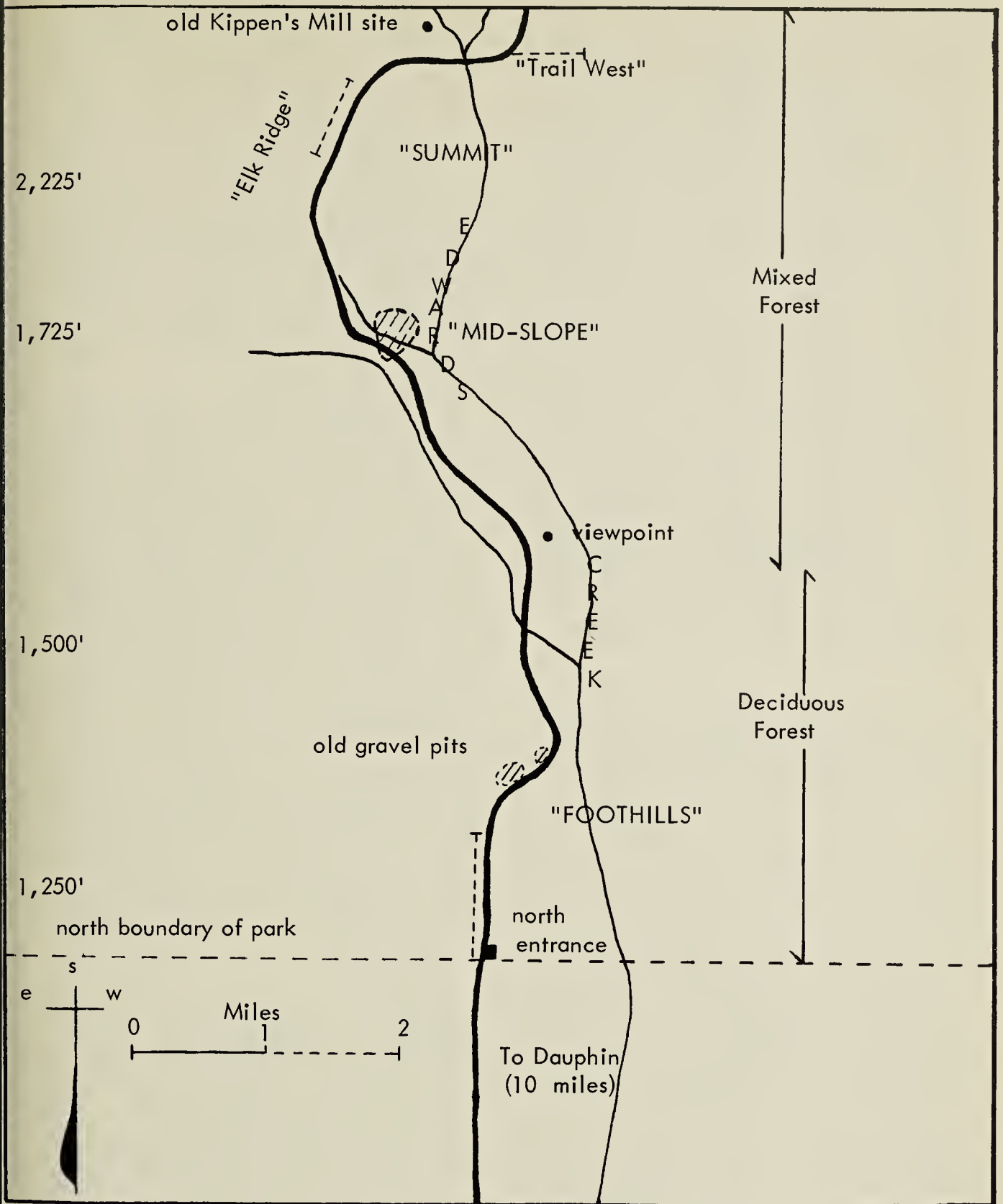
An important feature of the vegetation was the dense stands of hazelnut (*Corylus* sp.) which occurred in all habitats, but to a much lesser degree under the canopy of the deciduous forest. In the order listed above, the three habitats were approximately 300, 775 and 1,275 feet above the surrounding aspen parkland. For the purpose of this report, at times, these habitats will simply be referred to as the Foothills, Mid-slope and Summit habitats, respectively (Fig. 1).

The objectives were to determine the species of territorial warblers present and their relative abundances in the three habitats.

Methods

In the spring and summer of 1971 and 1972 the warblers of the north slope of the park, near No. 10 Highway, were studied. All three habitats were studied in 1970 and 1971 but the specific study areas each year were not the same in all cases. In the Foothills in 1971, a transect was run by foot, bicycle and automobile along the highway for 1 mile south of the north entrance of the park. In 1972, two large clearings located 1-3/4 to 2 miles south of this entrance and adjacent to the highway on the east side were selected. These were actually old gravel pits where willows (*Salix* sp.) and dense growths of grasses characterized the seral stage of succession. Edward's Creek passed within 75 yards of the highway on the west side. At Mid-slope, an area of approximately 15 acres was selected in

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Study areas along Highway 10, north slope, Riding Mountain National Park

the gorge terrain of that habitat. Trails established there were used both years. In the Summit habitat, two 1/2-mile transects were used in 1971. These included the assumed names "Elk Ridge" and "Trail West". In 1971, only the former transect was used, but observations were made in the forest near the site of the old Kippen's Mill area (Fig. 1).

In 1971 studies were carried out

weekly from late April when Myrtle Warblers began to arrive until July 1 and then at least bi-weekly until mid-July when the males stopped singing. In 1972 observations were made over the same period of time but more frequently. In the 2 years, 61 trips were made during these periods. In addition, irregular visits were made until late fall.

Territories were based on the con-

sistent occurrence of singing males during the breeding season. These birds were assumed to be breeding, but other indications were noted. These included actual observance of both sexes, alarm behaviour consistently displayed in response to my presence, food carrying and intra- and inter-specific conflicts. Adjacent territories were differentiated by listening to the respective males at the same time. Numbers of territories for all species of warblers were recorded for 1971. In 1972, the territories of all species covered in this paper except the Chestnut-sided Warbler were recorded, but percentages of total pairs could not be given. In some cases certain territories which may have actually been two adjacent territories were not differentiated. Such species are shown in Table 1 as having, e.g., (5-7) territories, meaning at least five and possibly as many as seven.

In 1972, a Sony cassette tape recorder was used to play back previously recorded songs of some species to further locate and define territories.

In addition to the observations made on the north slope, many trips were made to other parts of the park, particularly near the north shore of Clear Lake. Also, considerable data has been provided by Park Naturalist R. J. Walker who has kept records of birds since 1965 (to 1972), particularly in the Clear Lake area but also elsewhere in the park other than the north slope. Park Warden R. T. Dowhan has also provided data on his sightings since 1966. The results reported are only those which were found to be different from the previous known status of the warblers of the park.

Results and Discussion

Golden-Winged Warbler

This species was first recorded in the park on June 15, 1967, when the late J. L. Baillie of the Royal Ontario Museum and R. J. Walker identified it on the eastern boundary of the park about 4 miles southwest of McCreary.

On that date, a male was sighted in an aspen and a second bird, the sex of which was not determined, was identified by song in scrubby burr oak (*Quercus macrocarpa*). On June 7, 1968, in the same area, R. J. Walker and D. R. M. Hatch identified two males and a female in scrubby burr oak associated with a dense understory of shrubs (Walker, pers. comm.). R. T. Dowhan (pers. comm.) noted an individual of this species in a mixed flock in the eastern sector of the park on May 24, 1972.

In 1971, two pairs were located on the north slope. On June 27 a female foraged in a birch in a clearing at Mid-slope. The pair was seen on July 1 and 4, the female on July 3 and 10 and the male on July 9. At all times the birds appeared to be collecting food and were often seen carrying caterpillars. The male of the second pair was located on July 9 on the Elk Ridge transect in the Summit habitat. Although there was muskeg in this habitat, it did not occur in this particular area; this clearing in the forest contained dense stands of hazelnut. On July 13, the pair was seen flitting between the birches at the edge of the clearing and the hazelnut for about 5 minutes. Efforts to locate the nest were unsuccessful.

In 1972, the species was first identified by song on May 20 in the Foothills and Summit habitats. The following day a singing male, A, was located in the Foothills some 300 yards from where a singing bird was heard the previous day. This bird was perched in an aspen near a few burr oaks at the edge of the highway right-of-way clearing. When its song was played back, it immediately flew toward me, passing within 10 feet, and perched in some shrubs on the opposite side of the highway clearing. It then flew back across the highway and perched in an aspen. This behaviour continued for as long as its song was played. In all, approximately 20 flights were made across the highway clearing, sometimes passing within 4 feet of me.

On May 24 a male, presumably A,

Table 1. Summer status of certain warblers on the north slope, Riding Mountain National Park, 1971 and 1972

Species	Habitat Type								
	Deciduous Forest				Mixed Forest				
	Foothills (1250')		Mid-slope (1725')		Summit (2225')		Current Status		
	1971	1972 (Edges of Clearings)	1971	1972	1971	1972	1971	1972	
	Pairs	% ^a	Status or prs.	Pairs	% ^a	Status or prs.	Pairs	% ^a	Status or prs.
Golden-winged Warbler	0	0	2 Uncommon (at edges of clearings)	1	2.2	Absent	1	1.2	Absent
Cape May Warbler									
Black-throated Green Warbler	0	0	Absent	9	20.0	(4-7)	5	6.0	(6-8)
Chestnut-sided Warbler	4	18.2	Same ^b Status	9	20.0	Same ^b	21	25.0	Same ^b
Canada Warbler	0 ^c	0 ^c	2 Common in gorges above streams	3	6.7	2 Common at crests of gorges above streams	1	1.2	2 Uncommon to common

a - % = percent of total pairs of all warblers in this habitat.

b - same status as in 1971.

c - one pair occurred just outside the study area in 1971.

was seen singing in an aspen at the edge of the old gravel pit within 50 feet of where it was observed on May 21. Shortly after it was sighted, a second male appeared moving through a stand of shrubs. Immediately, A intercepted this intruder and a skirmish ensued near the ground among the shrubs. After several seconds, two birds emerged from the stand, one chasing the other. A third bird followed. All were Golden-winged Warblers but the sex of each was not determined as only two birds were seen at once during the skirmish; no female was identified. Ten minutes later a male, presumably A, was back on the aspen singing again. Other Golden-wings were not seen in this immediate area again.

On May 28, male A was singing in what was now believed to be its territory in the old gravel pit. A second male, B, which had established territory about 300 yards south of A, was also located in a gravel pit. In the early morning of June 5, a male Lazuli Bunting or possibly a Lazuli-Indigo Bunting hybrid (pale, thin band of chestnut on the upper part of the breast) was seen nearby. When B approached to within 25 feet the bunting attacked the warbler and a conflict ensued that lasted about 8 seconds. The bunting then withdrew and the warbler continued to sing from what appeared to be its main singing post — a dead birch. On June 11 this post was occupied at the same time by B and a male Indigo Bunting. Both males continued to sing from this dead tree for the remainder of the breeding season but no conflicts were observed.

On June 24 a male was seen and heard in a clearing some 250 yards east of A's territory, but outside the actual study area. Whether this was a third territorial male or part A's territory was never determined. Females were not positively identified in 1972 but on July 27 a female or juvenile was seen foraging in B's territory.

From the observations made on the north slope, especially those of 1971 when both sexes were seen together through the height of the warbler

breeding season, it is very probable that the Golden-winged Warbler is breeding in the park.

Cape May Warbler

Taverner and Sutton described this species as an uncommon migrant. Soper gave it the same status and noted the occurrence of three singing males near Swanson Creek in the eastern part of the park on June 3 and 4, 1941.⁶ R. T. Dowhan (pers. comm.) states that the Cape May is quite conspicuous in spring migration, often occurring in small flocks, but he has not recorded it in summer. R. J. Walker (pers. comm.) has noted it frequently in spring migration and sometimes in numbers. On May 28, 1967, he counted 11 males and 7 females between 9 a.m. and 12:50 p.m. as they moved along the isthmus between Clear and South lake in a westerly direction in a massive migration with 10 other species of warblers.

Recent observations indicate that the Cape May is becoming established as a summer resident in the park (Table 2). On June 3, 1972, the author and R. J. Walker located a singing male on the Maa-ee-gun nature trail near the north shore of Clear Lake. This habitat consisted of semi-open white spruce and balsam fir (*Abies balsamea*) forest. The spruce, at the tops of which the male was sighted, was taller than any known stand in the park and reached heights of over 90 feet. On June 18 when the area was revisited and the song of the Cape May was played back, the male appeared within 8 minutes and descended to within 10 feet of the ground and within 25 feet of the tape recorder. Its displacement behaviour strongly indicated territorialism. This is the only park record of a territorial male occurring in a particular area over an extended period of time. The juvenile identified by R. J. Walker in Wasagaming on July 26, 1972 (Table 2), further indicates that the species is probably breeding in the park. The observation of a male foraging in an aspen in deciduous forest (Table 2) on July 16, 1972, is unusual as it

generally associated with conifers. The closest stand of conifers to this male was over 2 miles away.

Black-Throated Green Warbler

There were few records of this species for the park prior to the present observations. Soper recorded a singing male at Swanson Creek on June 19, 1941, and three singing males and a female there in 1942.⁶ A single bird was seen near Moon Lake, located about 5 miles south of the Summit habitat, on August 30, 1946, by Bannard.¹ R. J. Walker (pers. comm.) did not positively identify this species until 1971, but R. T. Dowhan (pers. comm.) reports seeing or hearing this species in the park every year since he arrived in 1966. He states that it occurs as a summer resident. Both agree that this warbler occurs in scattered colonies in the southern and eastern parts of the park.

The current status of the Black-throated Green in the different habitats on the north slope is given in Table 1. In the gorge terrain of the mixed forest at Mid-slope in 1971, it was the most abundant species along with the Chestnut-sided Warbler. Its common to abundant status for both years in this habitat and its common status over this period in the Summit habitat is most striking in the light of its previous scarcity.

While a nest was not located, evidence strongly indicates breeding. Considerable alarm behaviour was consistently noted in different females at the height of the breeding season, especially in 1971. At such times, these females would often be carrying food (caterpillars) and would not proceed to the nest as long as I remained in the area. Displacement activity, including scolding, fidgeting (unusually quick movements) and abnormally close ap-

Table 2. Summer occurrence of the Cape May Warbler in Riding Mountain National Park¹

Date	Numbers	Sex	Location	Notes	Observer(s)
Summer Residents — observed only once					
July 9/68	1	male	Wasagaming	Hit office window then flew-off	R. J. Walker
July 16/72	1	male	Wasagaming	Singing in top of White Spruce	R. J. Walker
July 19/72	1	male	North boundary of park near Hwy. 10	Foraging in aspen forest	W. J. Walley
July 20/72	1	sex undetermined	Near Clear Lake	Captured and released	J. Saquet & R. J. Walker
July 26/72	1	juvenile	Wasagaming	Foraging in elms	R. J. Walker
Summer Residents — observed more than once in the same area					
June 3 & 4/41	3	males	Swanson Creek (eastern part of the park)	Singing in trees	J. D. Soper
June 3 & 18/72	1	male	Near Ma-ee-gun nature trail (near north shore of Clear Lake)	June 3: Singing in tall White Spruce June 18: Responded to taped song	W. J. Walley & R. J. Walker W. J. Walley

appearing after June 1 and before August 15

proaches to the ground, was noted. This behaviour always continued until I withdrew from the area. On one occasion it last for over 25 minutes. On August 8, 1972, a female was seen feeding an immature in a balsam poplar at Mid-slope.

Response to the play-back of its song on the tape recorder brought dramatic results. Normally occurring high up in conifers, males were often drawn down to the shrub layer near the ground to investigate the intruder.^{3 4} Usually they approached to within 10 feet of the tape recorder, but on one occasion the male perched on a small branch about 2 inches above the speaker and peered in!

Chestnut-Sided Warbler

Previous records indicate that this species was common only locally. Taverner and Sutton found it to be numerous south of Clear Lake but Soper states that only "a few breed locally on Riding Mountain" and it "cannot be regarded as generally common".^{6 7} However, R. J. Walker (pers. comm.) notes that it has occurred in abundance in most habitats in the park, at least since the mid-sixties.

On the north slope, territorial pairs indicated that it was abundant in the mixed forest types in both years (Table 1). Its success in this habitat was no doubt due to the dense shrub layer of hazelnut where it was often seen and where two nests were found at Mid-slope in 1971. The first nest was located on June 22 about 3-1/2 feet from the ground at the edge of a wild ungulate (Wapiti and Moose) path. It contained two young birds and two eggs. William Clark found the second nest. It had two eggs on June 27 and four on July 1.

In 1972 observations indicated that it was again abundant in the mixed forest types and common in deciduous forest. One nest, found in the Foothills habitat on June 11, contained five eggs. It was located in a black current (*Ribes americanum*) surrounded by other shrubs and ferns. It was 1-1/2 feet above the ground in the under-story of a nearly closed canopy forest.

Five young birds hatched and were last seen on June 26. The nest had been vacated by July 3.

The song of this species was also played back and the resulting displacement behaviour of the male was positive and vigorous.

Canada Warbler

Earlier workers reported this species only as a migrant. Traverne and Sutton found that it occurred as a regular spring migrant and possible breeder.⁷ Soper stated that "according to the records, this is a rare warbler in the park where it was seldom observed in migration and never in summer".⁶

R. T. Dowhan (pers. comm.) reports that he has never identified it in the park, but admits to not knowing its song. R. J. Walker (pers. comm.) has seen it only twice in the park after June 1; only one pair was observed more than once. On July 1, 1972, a male and female were seen in thick elms (*Ulmus americana*), ash (*Fraxinus pensylvanica*), aspen, balsam poplar and paper birch woods along the bank of the Dead Ox Creek on the Burls and Bittersweet nature trail in the southeastern part of the park. Attention was drawn to the birds by the scolding of Red-eyed Vireos. These warblers were again seen in this area on July 2 and 23. The other observation was made near McKinnon Creek, also located in the southeastern sector, when a territorial male was sighted on the edge of a gorge above Packhorse Creek on July 1, 1966.

Records of the Canada Warbler on the north slope are given in Table 1. In the summer of 1971, four pairs were located in the study areas and another pair just outside of them in the Foothills habitat. The following summer, six territorial pairs were found and four other isolated singing males were heard or seen, but only once.

Of the 10 pairs located in the years, seven were associated with gorges above streams, particularly the crests of these gorges. Vegetation was usually either sparsely spaced birch

ruce and aspen with dense stands of zelnut, or alders and willows closer, but not at the immediate edges of, streams. Of the four different males identified once in 1972, two occurred in this type of habitat. Two other pairs and two isolated males occurred in the summit habitat near small muskegs.

Both sexes were observed on territory more than any other species. They displayed extreme territorialism in response to the play-back of their singing. The birds appeared within seconds of starting the play-back and they would constantly dart from one song to another staying close to the ground and keeping up a constant series of distress calls. On one occasion one member of a pair dove at the tape recorder, passing within 3 or 4 inches of it; it was not determined whether this was the male or female.

The summer status of this species has changed in the park. Not only is it common in its preferred habitat, at least on the north slope, but its behaviour strongly indicates that it is breeding.

Notes on other species

Wilson's Warbler

Soper did not record this warbler during his years of study in the park, but Taverner and Sutton described it as a common migrant and possible breeder.^{6 7} In 1921, P. A. Taverner and Hoyes Lloyd stated that "Between August 13 and 23, singles were seen at Riding Mountain . . ."²

Wilson's Warbler was not recorded during the breeding season in the present study, but on August 7, 1972, approximately 1-1/2 miles up Edward's Creek from Mid-slope, between 8 and 10 individuals of this species were seen by the author. These birds were in a mixed flock of at least 10 other species of warblers. It was interesting to note that all 10 of the other species were known summer residents of the park and that the author did not record the arrival of the usual fall migrants on the north slope until Sep-

tember 2 when Myrtle and Blackpoll warblers appeared.

Black-Throated Blue Warbler

In mid-morning of September 17, two plain, unstreaked and greyish-olive-backed warblers were seen moving through the lower part of a stand of shrubs in the Foothills habitat. Both of these birds displayed distinct spots of white at the bases of the primaries. According to Peterson's *A Field Guide to the Birds*, the white spots are unique and, therefore, diagnostic for this species.⁵ As this warbler had never before been identified in the park, the author wrote to W. E. Godfrey of the National Museums in Ottawa. The following is an excerpt from his reply: "With regard to the small warblers you have seen which show a white spot at the base of the primaries, I think that it is quite likely that they were indeed Black-throated Blue Warblers. . . . I assume that the puzzling warblers you saw were females. They are plain, unstreaked and look a little bit like Tennessees and several others. However, the little wing spot at the base of the primaries readily identifies the Black-throated Blue Warbler. The males, of course, are unmistakable."

If these birds were indeed Black-throated Blue Warblers, it is the first record for the species in Riding Mountain National Park.

Acknowledgements

I am most grateful to R. J. Walker for the use of his data and for the use of the Taverner and Sutton manuscript as well as the Banfield field notes. Many thanks are also extended to R. T. Dowhan for the use of his data, to W. E. Godfrey for his opinion of the sighting of the Black-throated Blue Warbler and to Jim Ramsay for his assistance in reproducing the figure in the paper.

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⁶SOPER, J. D. 1953. *The birds of Riding Mountain National Park, Manitoba, Canada.* Can. Wildl. Serv., Wildl. Mgt. Bull. Series 2, No. 6. 54 p.

⁷TAVERNER, P. A., and R. SUTTON. 1940. *Preliminary annotated list of birds, Riding Mountain National Park, Manitoba.* Natl. Mus. Can. Mimeographed Manuscript.

CLARKE'S NUTCRACKER AT SASKATOON

by STAN SHADICK*

On November 18, 1972, Mr. Ben Simpkins who owns a farm at Beaver Creek, 8 miles south of Saskatoon, reported to us that there was a strange bird in his yard. He had looked it up in a birdbook and decided that it must be a Clarke's Nutcracker. Realizing this to be far from its normal range, John Shadick, Ron Bobowski and I went to have a look at it in the afternoon. Upon arrival, we saw the bird in a shelter belt some 10 yards from the farmhouse. The long pointed bill, white patches on otherwise black wings and tail, as well as the jay size enabled us to confirm the identification as a Clarke's Nutcracker, a species which my dad and I have seen several times in the Rockies. The bird was generally darker than that shown in pictures of adult birds, indicating it to be an immature.

While we watched, the bird appeared quite tame and allowed us to approach to within 15 feet. During this time it was feeding on a recently slaughtered pig's head as well as some sausage meat which had been set out for it.

Before leaving I reported the sighting to the local "Rare Bird Alert" and

several observers from Saskatoon were able to come out and view this rarity. Dr. Stuart Houston brought out a trap to band the bird but was unsuccessful. The nutcracker was able to steal the bait without getting caught. Alan Moulton reported that he had no trouble in approaching within 8 feet of the bird. The bird was last seen by the Simpkin family on November 23.

According to Salt and Wilk, the Clarke's Nutcracker is restricted to the sub-alpine coniferous forests of the mountains in summer, but descends to lower altitudes in late fall and winter. On these occasions it has been seen frequenting settlements and farmyards.

There have been several records of this species at great distances from its breeding range. In Alberta, it has been seen at Porcupine Hills, Beaver Lodge and Belvedere.¹ In Saskatchewan, it has been seen on several occasions in the Cypress Hills region as well as at Moos Jaw on March 24, 1968.²⁻⁴ There are in addition at least two records for Manitoba.¹ However, this sighting at Saskatoon represents a significant range extension of this straggler for Saskatchewan.

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