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Red-headed Woodpecker Habitat Preference in the Rainy River Area of Ontario

David H. Elder and John Van den Broeck

Introduction

The Red-headed Woodpecker (*Melanerpes erythrocephalus)* is a summer resident in the Rainy River area of northwestern Ontario (Figure 1). It occupies a breeding range west of the town of Fort Frances to the Lake of the Woods, south of the conifer-clad Precambrian Shield. The occupied area is coincident with the land area that has been cleared, or partly cleared, for agriculture. Elsewhere in Ontario, it is found as a breeding bird in the area north of Lakes Erie and Ontario, south of Georgian Bay (Cadman *et al.* 2007). In the United States it is found throughout the country east of the Great Plains (Sibley 2000). In Canada, Red-headed Woodpeckers are classified Federally as a Threatened species (Schedule 1) while at a provincial scale in Ontario they are classified as Special Concern (Endangered Species Act, 2007). Both status designations, and corresponding legislative context, reflect the downward trend in abundance and vulnerability to threats. This fly-catching woodpecker favours open to very open woodlands, woodland edges and riparian woods.In northwestern Ontario much of this habitat has been created or modified by the activities of man. In the Rainy River area, land clearing for agricultural development followed the initial logging that began in the late 1800s along the Rainy River west of the settlement of Fort Frances (Nute 1950). Capable agricultural lands were slowly cleared and cultivated, advancing north until the thinly-soiled, rocky Precambrian Shield was reached. Clearing and agricultural encroachment was somewhat haphazard and today the area is a mosaic of farmland and scattered aspen-dominated woodlands, interspersed with large, extensive peat lands. At present, clearing, while ongoing, is largely limited to small patches of woodland or the reclamation of previously cleared and then abandoned farmlands. The Ontario Ministry of Natural Resources (OMNR) land use plan for the area indicates an area of

Figure 1. Red-headed Woodpecker at the nest in the Harris Hill area north of Rainy River in June 2001.
Mark Peck

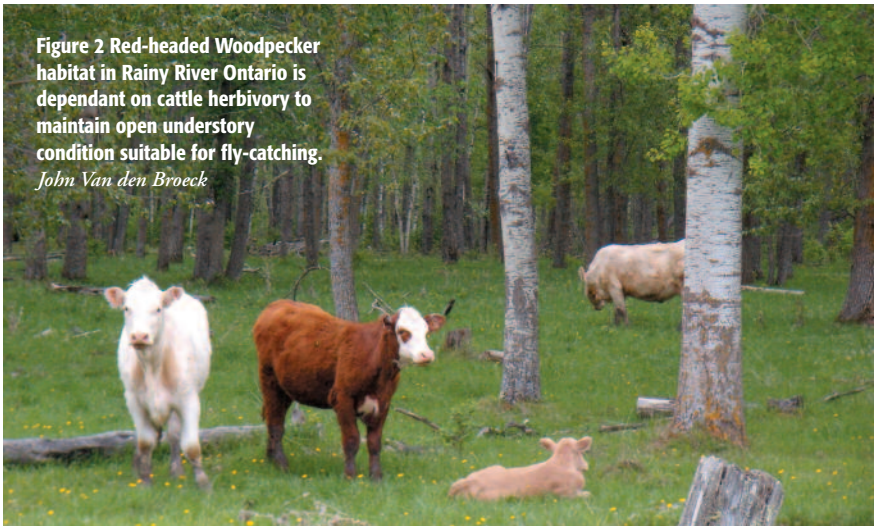

Figure 2 Red-headed Woodpecker habitat in Rainy River Ontario is dependant on cattle herbivory to maintain open understory condition suitable for fly-catching. *John Van den Broeck*

36,100 hectares (OMNR pers. comm.) of cleared agricultural land.

Just when the Red-headed Woodpecker arrived in this area is an open question that is difficult to answer with certainty. The current reliance on a human influenced landscape for habitat is in contrast with a historic forest composition that contained a higher prevalence of American Elm (*Ulmus americana*), a strong associate of the Red-headed Woodpecker. It is quite possible the Red-headed Woodpecker has always been a resident of the small, scattered patches of oak savannah that are still found along the banks of the Rainy River and the south-east shore of the Lake of the Woods, although their numbers and distribution would have been limited to the fringe of the river and the lake shoreline. Once land clearing by the settlers began, more suitable habitat was created and the Red-headed Woodpecker followed it inland from the river and the lake. A faunal study of the area conducted in 1929 by L.L. Snyder of the Royal Ontario Museum found the Red-headed Woodpecker in reasonable numbers. He notes: "We saw the Red-headed Woodpecker at all camps (four) but it was more regularly and commonly observed in districts where cultivated land was interspersed with woodland" (Snyder 1938). It is also possible the species moved into the area from northern Minnesota only after land clearing activities created suitable habitat.

Habitat Choice

In the Rainy River area, the Red-headed Woodpecker is extremely specific in its choice of breeding habitat. It uses exclusively relatively small stands of mature to over-mature deciduous woodlands consisting of Trembling Aspen (*Populus tremuloides)*, Balsam Poplar (*Populus balsamifer*) and/or Black Ash (*Fraxinus nigra)* that are largely devoid of any under storey trees and shrubs as a result of heavy

Figure 3. Typical Red-headed Woodpecker habitat in the Rainy River Ontario area, illustrating open understory and downed woody debris *John Van den Broeck*

grazing by cattle (Figure 2). These forested stands thus appear to be open to very open with a moderate to high composition of dead or dying trees. The under storey vegetation consists primarily of grasses in these stands to the exclusion of most other vegetation. In addition, fallen trees and limbs are conspicuously scattered on the ground throughout the stands (Figure 3). Such forested stands are often isolated or partly so, surrounded by farm fields, roads, fence lines and utility pole lines. Red-headed Woodpeckers often forage by fly-catching along these fence and pole lines, well away from their breeding sites.

Deciduous forested stands that are not mature, have a dense under storey of young trees and shrubs and have not been heavily grazed by cattle are not utilized by Red-headed Woodpeckers. The woodpeckers also avoid cutovers, mixed-species woodlands with a developed under storey and stands of conifers. During spring and fall migration periods, Red-headed Woodpeckers are sometimes seen away from their preferred habitat but usually as a passage bird flying overhead or an individual that has dropped into a cut-over area for rest.

The strict habitat preference of the Rainy River Red-headed Woodpeckers was confirmed by the results of an extensive habitat assessment and inventory carried out in the agricultural area west of Fort Frances during June and July, 2007 by the OMNR. A total of 155 randomly selected sites, of various forest compositions and under storey conditions was assessed for the presence of Red-headed Woodpeckers. At each site a tape recording of a calling Red-headed Woodpecker was played and any response noted. In this manner, a total of 36 individual woodpeckers occupying 20 apparent breeding sites was found. Approximately 70 sites appeared "suitable" given an open under storey, dead and dying trees and downed woody debris. Other sites such as mature aspen stands with a heavy under storey,

mixed wood stands, aspen and mixed wood cutovers and stands of conifer that were tested did not appear to be utilized (Van den Broeck 2008).

Discussion

The Red-headed Woodpecker appears to be declining in Ontario (Cadman *et al.* 2007). In the Rainy River area, based on 35 years of observation by Elder, their numbers appear to be limited but stable. However, the long-term viability of the species is closely tied to the continued availability of habitat that meets the stringent requirements of breeding pairs. In this case, continued cattle grazing of deciduous woodlands are a required landscape feature to support their occurrence in the Rainy River area. Some stands formerly used by a pair of woodpeckers for successive years (10 plus) were abandoned when the stand deterioration resulted in tree spacing that apparently was unacceptable for the birds. Other breeding stands have been harvested by land owners and thus rendered unusable.

Fortunately, the 2007 assessment work indicated there are still suitable-appearing stands as yet unutilized. In addition, cattle production in the area has remained rather consistent for the past 40 years (Van den Broeck 2008) and 35 years of observation by Elder indicate a relative stable availability of suitable breeding habitat in the area for the species. However, the creation of new habitat by cattle grazing under mature aspen stands may take a number of years, depending on the age of the stand and the intensity of the grazing, while the loss of a breeding stand through harvesting can happen in a few days. Fortunately, habitat creation/loss is apparently balanced and it would appear that Red-headed Woodpeckers will remain a notable feature of this unique area of Ontario.

Acknowledgements

The authors extend their appreciation to Ross James, Glenn Coady and Chip Weseloh for reviewing drafts of this article and the changes suggested. Mark Peck kindly provided the photograph of a Red-headed Woodpecker at a nest near Rainy River.

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Early nesting of Pine Siskin in Ontario

Antonio Salvadori, Sue Blue and Richard Frank

Introduction

The Pine Siskin (*Spinus pinus*) is a common bird with a very wide North American distribution (Dawson 1997). It occurs right across Canada (Godfrey 1986). During the winter of 2009 one of the greatest incursions of Pine Siskin into Southern Ontario occurred (Wilcox 2009, Cornell 2009). In this paper we report on early nesting of this species in Southern Ontario. Although March nesting has been reported in Ontario (Pittaway 2007), there are relatively few nesting records for Ontario, with most later than those reported here (Peck and James 1987).

Methods

Two of the authors (AS, RF) operate three banding sites in Wellington County near Guelph. The following table shows the numbers banded between 1998 and 2008.

Table 1. Number of Pine Siskins captured between 1998 and 2008.

98	99	00	01	02	03	04	05	06	07	08
19	11	6	93	0	2	24	3	9	122	36

In 2009, between 7 January and 31 May, 2,758 birds were trapped, processed, banded and released. On capture, birds were examined to determine their sex. In January and February the sex was determined by the brightness of the yellow and black in their flight feathers (Pyle 1997). If a bird had dull brownish wings and tail with very little yellow it was

deemed to be a female; if a bird had bright black wings and tail with a vivid yellow bar in the wing then it was deemed to be a male; birds that were deemed to have an in-between plumage were deemed to be males. Subsequent recapture of some of these birds (23.6%), and determining their sex by cloacal protuberance/brood patch, showed that the birds cannot be sexed reliably by plumage.

On 22 April, the first birds were caught showing cloacal protuberances and brood patches, thus positive sexual identification could be made. Starting on 5 May, fledged young birds were caught. The new fledglings were able to fly very well, with a sustained flight of at least half a kilometre. At least one young was seen on the same day being fed by a parent. By early May, females were regrowing their body feathers suggesting that they had finished breeding for the season and were not going to have a second brood. By 31 May, the last day Pine Siskins were seen at any of the banding sites, 46 young fledgling birds had been trapped.

Discussion

Pine Siskins are known to be early nesters (Dawson 1997). Some birds in Western North America, Pennsylvania and New York have nested as early as February. However, in Ontario they mainly nest after mid April (Peck and James 1987).

Our first young birds in 2009 were caught on 5 May. From personal experience, they must have fledged 4 to 7 days prior to our catching them, given the sustained flight that they seemed to have. Hence they fledged sometime from 24 April to 1 May. Using the data in Weaver and West (1943) the egg laying would have occurred 13 days earlier— i.e. 11-18 April. Assuming a small clutch of 3 eggs, the first egg would have been laid between the 8 and 15 April, with nest building occurring in late March or early April. This would mean nesting that occurred in the spring of 2009 near Guelph would have been among the earliest dates reported in Ontario.

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Ronald G. Tozer

Distinguished Ornithologist

Margaret Bain

It was my very great pleasure to present the 2009 OFO Distinguished Ornithologist Award to Ron Tozer at the October OFO convention at Point Pelee. The Distinguished Ornithologist Award is "granted to individuals who have made outstanding and authoritative contributions to the scientific study of birds in Ontario and Canada; who have been a resource to OFO and the Ontario birding community; and whose research on birds has resulted in many publications and a significant increase in new ornithological knowledge."

I first met Ron Tozer back in 1974. Suddenly, one May morning that year, I was astonished to find my backyard in Whitby taken over by a multitude of tiny, brightly-coloured birds, flitting from hedge to bush to tree and back again — a warbler fallout in retrospect. I had never realized such birds existed, rushed

Photo: Eleanor Beagan

out to buy a North American bird book, and phoned the public library to see if there was a local natural history club that could help me sort all of this out. There was, of course, and at the first fall meeting of the Oshawa Naturalists' Club that September, there were Ron Tozer and Jim Richards, signing their just published book, *Birds of the Oshawa-Lake Scugog Region*.

This splendid book gave me and many other beginning, and more experienced birders, specific information on the best birding areas in the Region and the best times and locations for finding specific birds, but it was much more than this. It analyzed changes in the status of species over time, documented habitat change, and gave an extensive overview of previous ornithological work in the Region. Special detailed emphasis was placed on the breeding biology of the birds of the area: A magnum opus. Not surprisingly, it garnered rave reviews as the best regional ornithological account of its day. The copy I bought that night is now battered and tattered, the text massively underlined, notes scribbled in the margins, the spine held together with duct tape — and even the duct tape is splitting. Sadly, the book is out of print, and the very occasional copy that turns up on the market can now command a formidable price!

Ron has gone on to contribute many articles and papers to numerous publications, including the *Ontario Field Biologist, Ontario Birds*, *OFO News*, the *Durham Region Annual Bird Report* and others. In 1990, he put together the *Checklist and Seasonal Status of the Birds of Algonquin Provincial Park,* and this checklist has been revised and reprinted four times since then. He is currently at work on another major publication, the much-anticipated *Birds of Algonquin Park*, due out in 2011, and certain to be a valued addition to every Ontario birder's bookcase.

As well as these publishing achievements, Ron is a great field-birder, with the huge advantage that he has been birding more or less since his days in the cradle. Family tradition has it that with his first steps he chased robins across the lawn. His father, a botanist and photographer, loved the outdoors, and Ron was always glad to accompany him. By the age of eleven, Ron was making notes of his observations, but it was when the Oshawa Naturalists' Club was formed in 1955, that he first met other like-minded people and his interest in birds really took off. One of his earliest mentors was the brilliant but irascible George Scott, the finder of the first breeding Little Gulls in North America, in Oshawa Second Marsh in 1962. At the University of Toronto, Ron majored in biology and philosophy, graduating in 1965, and spending much of his time at the Royal Ontario Museum, where James L. Baillie encouraged his now serious interest in ornithology. In 1966, he began graduate work at the University of Michigan, while finding summer employment as an interpretive naturalist in Ontario, mainly in Algonquin Provincial Park. Ron served as a

Teaching Fellow and Lecturer in Natural Resources Ecology at the University of Michigan, but in 1972 accepted the full-time post of Park Naturalist in Algonquin, which he held until 1996. During this time, he amassed a mountain of data and a deep understanding of the birdlife of Algonquin, and has been a wonderful educator to countless summer students and visitors. And it's not over yet — from 1996 to the present he has held the title of Natural and Human History Interpretation Consultant at Algonquin Park, making him almost busier in retirement than he was before.

Ron is a charter member of OFO. One of his major contributions to the organization was co-editing, with Ron Pittaway and Bill Crins, the OFO journal *Ontario Birds* for a mind-boggling 16 years, from 1991 to 2006, during which time the journal grew and prospered. Ron has led countless trips for OFO and other birding organizations; he has been an OFO Trip leader at Algonquin Park since 1990, at the Carden Alvar (with Ron Pittaway) since 1992, and at the Niagara River (with Jean Iron) since the year 2000.

Ron has contributed hugely to the work of OFO's Ontario Bird Records Committee, as a voting member for 13 years between 1988 and the present, and as Chair of the Committee for five of these years. His clear-headed common sense and integrity is often invaluable in the somewhat heated "discussions" (let's call them that politely) that not infrequently arise in the OBRC!

In both the first and second Ontario Breeding Bird Atlases, Ron was Regional Coordinator for Algonquin, a huge region, much of it difficult of access and attracting only a limited number of atlassers. A daunting task, but one very well accomplished. For the second Breeding Bird Atlas, he was a member of the Atlas Volunteer Committee and Scientific Editor of 26 species accounts, from Common Nighthawk to Eastern Kingbird. He has also been the subregional editor for Algonquin Park observations in *North American Birds* and its predecessors for 35 years. Ron's involvement in Marsh surveys and Urban Bird surveys in Ontario County, for Dr. J. Murray Speirs in the late 1960s, was followed by years of Forest Bird Monitoring, Marsh Monitoring, Nocturnal Owl Monitoring and many other important data-gathering projects.

The foundation for all this data gathering is, of course, Ron's superlative ability in the field. As well as being very experienced, Ron is a very careful birder, as anyone who has been with him looking for a Le Conte's Sparrow in Algonquin Park or 'scoping an Acadian Flycatcher at Pelee will attest — every minute field mark has to be meticulously confirmed before the ID is given the Tozer seal of approval. Ron does have a competitive side to his character too, though he will strenuously deny this — Christmas Counts and Big Days may be his secret vice. Ron has an unbroken record of an unprecedented 53 years participation in the Oshawa CBC, in the Algonquin

Count for 34 years, and the Huntsville Count for a mere 14 years.

Big Days may not qualify as "authoritative contributions to the scientific study of birds," but they are most certainly a great deal of fun with Ron Tozer in the team. Ron, as most of you reading this already know, is the master of the quirky quip, the truly horrible pun, the wicked one-liner, and a Big Day with him can lead to complete exhaustion, as much from laughing so hard most of the time as to the inherent manic craziness of the 24-hour enterprise. In the early 1990s, Ron and his team-mates, with their combination of identification skills and in-depth knowledge of what could be found when and where, hit one-day species totals in the 180s entirely within Durham Region — sadly, unlikely to be repeated since the subsequent unbridled residential and industrial development there.

Last, but not at all least, I must mention Ron's mainstay, his family. They all go birding together! Amazing, but true. They are the envy of most of the rest of us, whose spouses and offspring often regard birding as an inexplicable mental aberration. Ron's wonderful wife of 40 years, Pat, and his cheerful son and daughter, Doug and Laura, have accompanied Ron on camping trips across Canada, a yearly pilgrimage to Point Pelee, and to several of the United States, including Florida, Texas, Arizona and Maine — all to see birds, of course. As Pat has said, "While most fathers were taking their kids to hockey practices and snowmobiling on weekends, our kids went birding in Algonquin with their Dad." May this continue for many more years to come.

This long list of achievements confirms that Ron has fulfilled all the criteria for OFO's Distinguished Ornithologist Award, and then some. He has made outstanding contributions to our knowledge of the birdlife of Ontario, has been a huge resource to OFO and the Ontario birding community, has produced many authoritative and useful publications, and has done all this while remaining a much-respected and well-loved friend of so many of us in the birding world.

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Apparent hybrid White-rumped Sandpiper x Dunlin at Rock Point Provincial Park

James Pawlicki

On 19 August 2008, Bill Watson and I travelled to Rock Point Provincial Park on the north Lake Erie shore near Dunnville, in Haldimand County, to follow-up on a mystery *Calidris* sandpiper first identified as such on 17 August by David Gordon, Holly Sweeny and Bill Watson. We found the sandpiper on the rocky shore among several Sanderlings (*Calidris alba)*, Semipalmated (*C. pusilla*), Least (*C. minutilla*) and White-rumped Sandpipers (*C. fuscicollis*). Structurally, its plump body shape, short-neck, and fairly long, drooped bill suggested a Dunlin (*C. alpina*). Our tentative identification was a juvenile Dunlin, due to the dark-centred, pale-edged upperpart feathers, and weak breast band of streaks continuing down the flanks. Unusual was the lack of black streaking on the belly typical of juvenile Dunlins (Sibley 2000, O'Brien *et al.* 2006). As the bird flew around, we assessed its size as slightly larger than the White-rumped Sandpipers, while also noting its dark-centred uppertail coverts. Not considering a hybrid at the time, we identified the bird as a Dunlin in near full juvenal plumage, speculating that it had molted its black belly feathers into first basic plumage.

Since juvenile Dunlins are very rare in mid August this far south of their Arctic breeding grounds, photos were placed on the internet and a request for comments was made to the internet's ID-Frontiers bird identification discussion group. The most detailed responses came from Kevin McLaughlin of Hamilton, Ontario and Kevin Karlson of Cape May, New Jersey.

Figure 1. Apparent definitive alternate/first alternate White-rumped Sandpiper x Dunlin. Visible are the heavily-worn brownish wing coverts and tertials contrasting with the black-centred, rufous-edged mantle and scapular feathers. Rock Point Provincial Park, *Haldimand County*, 23 August 2008. *Photo: Tom Thomas*

Each noted that the sandpiper was clearly not a juvenile, but rather an adult, or in its second-calendar year due to the presence of worn brownish wing coverts retained from a previous basic molt, making it at least a year old. It was not possible to age the bird as being in either first alternate or definitive alternate plumage. At this point, I suspected that it was a hybrid because its features did not fit any known species of shorebird. The bird remained at Rock Point until at least 23 August, when it was last observed and photographed (Figures 1 and 2) by Tom Thomas of Hamilton, Ontario. Summarized below is a description of the bird highlighting the features that suggest a hybrid between White-rumped Sandpiper and Dunlin.

Description

Size: The size was similar to that of a Dunlin, being just noticeably larger than the White-rumped Sandpipers, and slightly smaller and less chunky than the Sanderlings.

Figure 2. Apparent definitive alternate/first alternate White-rumped Sandpiper x Dunlin. Visible are the black legs, white wing stripe and dark centre to the rump and uppertail coverts. Rock Point Provincial Park, *Haldimand County*, 23 August 2008. *Photo: Tom Thomas.*

Body Structure: Overall the body structure was rather short-necked and full-chested, giving it a plump appearance that was very Dunlin-like. The rear end appeared attenuated due to the fairly long primary projection, more than is typical for adult Dunlins, suggesting the influence of a long-winged *Calidris* species such as White-rumped or Baird's Sandpiper (*C. bairdii*).

Bill: The bill was all black and fairly long with a slight droop at the tip. It appeared noticeably longer than any White-rumped Sandpiper present, and perhaps slightly shorter than typical for a Dunlin, although within the range of variation.

Legs and Toes: The legs were black and of typical length for a medium-sized *Calidris* sandpiper, being fairly short and not extending past the tail tip when in flight. The black legs should rule out possible influence from pale-legged *Calidris* species such as Pectoral (*C. melanotos*) and Sharp-tailed Sandpipers (*C. acuminata*). The toes also appeared blackish and lacked semipalmations.

Plumage: The head was patterned with fine black streaks that were rusty-based on the auriculars and crown, setting off a prominent whitish supercilium that extended to the nape. The underparts were white, with a weak band of blackish and rather thick arrow-like markings across the breast, which continued as longer, pencil-thin, streaks down to the rear flanks. As previously stated, the individual feathers on the upperparts, including the mantle and scapulars, contained blackish centres with fairly broadly-rufous edges. All of the wing coverts, tertials, and a few of the lower scapulars were brownish with slightly-paler and faded edges, indicating worn basic feathers retained from the previous fall. In flight, the bird showed an obvious dark centre to the uppertail and rump, although looking closely at Figure 2, it is apparent that the dark centre was thinner, and consisted of white-edged dark grey feathers, as compared to the more extensive solidly-black uppertail coverts found on Dunlins. Also apparent in flight, and illustrated in Figure 2, was a white wing stripe comparable to that of both Dunlin and White-rumped Sandpiper. The obvious lack of a black belly patch clearly eliminates all subspecies of Dunlin in alternate plumage, while the bird's larger size and lack of rufous bases to the upperpart feathers rule out Western Sandpiper (*C. mauri*). Additionally, Baird's Sandpiper influence can be eliminated based on the combination of a whitish-based breast and streaking on the flanks, while the lack of both rufous feathers on the underparts and rufous bases to the scapulars eliminates influence from Curlew Sandpiper (*C. ferruginea*). Figure 3 illustrates a molting first-cycle Dunlin (*C.a. hudsonia*) to compare with the hybrid

Conclusion

McLaughlin and Wormington (2000) documented the first Ontario occurrence of an apparent hybrid White-rumped Sandpiper x Dunlin present at Hillman

Figure 3. Dunlin undergoing its first prebasic molt for comparison. Note the brightly-edged juvenal wing coverts, tertials, and primaries, and newer first basic grey scapulars among the brighter juvenal scapulars. Also note the sparse black belly streaking, much of which has been molted into basic plumage by mid September, but would be present in mid August. Ontario Beach Park, Monroe County, New York, USA, 20 September 2008. *Photo: James Pawlicki.*

Marsh, *Essex,* from 18-20 May 1994. The Rock Point individual is the second documented provincial record of this presumed hybrid combination. Although hybrid shorebirds are very rare, several apparent hybrids have been documented over the last 10 years, especially between members of the genus *Calidris* (O'Brien *et al.* 2006). A small number of these hybrids have been between White-rumped Sandpiper and Dunlin, with the majority occurring on the east coast of North America (Wilson 2005, Nikula 2007, Bonomo 2008). It is noteworthy that nearly all of these apparent hybrids show a combination of Dunlin-like size and structure, and have a plumage pattern nearly identical to White-rumped Sandpiper except for a dark centre to the uppertail coverts.

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Presumed Defense of Hunting Territory by a Cooper's Hawk

Randy Horvath

Long ago, Alexander Bent compared the Cooper's Hawk (*Accipiter cooperii)* to its relative, the Sharp-shinned Hawk (*Accipiter striatus)*, describing it as a "larger edition of feathered ferocity" (Bent 1937). Anecdotal records in Bent indicate that this species can be extremely aggressive when defending its nest. Indeed, research has established that adult Cooper's Hawks, chiefly males, "direct threat postures, alarm calls, attacks, or chases at potential predators near [the] nest" (Rosenfield and Bielefeldt 1993). However, there does not seem to be any documented evidence of Cooper's Hawks defending a hunting territory.

At 1515 h on 3 February 2009, I was birding along the Ganatchio Trail in east Windsor. It was cold, windy, and mostly overcast, with patches of clear sky to the west. I had just reached the northern end of the trail, where the path is bordered on both sides by residential housing and a small woodlot is present.

Suddenly, I saw a beautiful adult female Cooper's Hawk launch out from a treetop in the woodlot just ahead of me. I quickly raised my binoculars to enjoy the bird and see what she would do. Her bright red eyes were focused intently on a target some distance away, and her flight was powerful and direct at a height of ten to twelve metres. I was very curious to observe what would happen next.

To my surprise, the Cooper's Hawk attacked an adult Peregrine Falcon (*Falco peregrinus)* that was perched high in a tree about one hundred metres away. As the hawk approached, the falcon flew from the tree just as the accipiter lunged at it with its talons. The falcon continued to fly off leisurely to the northwest, and the Cooper's Hawk made no attempt to pursue it.

My immediate impression was that this was an instance of territorial defense. While Cooper's Hawks do occasionally attack larger birds, it was difficult to

believe that this accipiter could successfully surprise and kill a large, alert falcon perched so openly. Moreover, the upper limit of a prey item for a female is 22% of the bird's own mass (Rosenfield and Bielefeldt 1993), and an average Peregrine Falcon outweighs a female Cooper's Hawk by more than 50% (Sibley 2000). There were plenty of more typical prey items in the area, such as European Starlings (*Sturnus vulgaris*), Rock Pigeons (*Columba livia)*, Mourning Doves (*Zenaida macroura*), Dark-eyed Juncos (*Junco hyemalis*), and Northern Cardinals (*Cardinalis cardinalis*). I surmised that the hawk was not happy to have this possible competitor loafing so near "her" hunting ground. Her failure to give chase seemed to confirm that she only wished to drive the falcon away.

I had never seen or heard of any interaction between these raptors, so I was eager to read the species account for Cooper's Hawk in *The Birds of North America.* However, the authors make no mention of these accipiters attacking falcons under any circumstances. They say nothing concerning defense of hunting territories, and my attempts to find information from other sources have not been successful. Indeed, even the extremely aggressive Northern Goshawk (*Accipiter gentilis)* is not known to attack birds of this size, except in defense of the nest (Squires and Reynolds 1997).

Peregrine Falcons are not known to prey on Cooper's Hawks, so it is doubtful that this female accipiter was concerned for her safety and sought to drive it away for that reason. Since it is equally doubtful that the hawk hoped to make the peregrine its next meal, the incident I witnessed raises interesting questions as to what the behavior signified.

Incidentally, an immature, resident Sharp-shinned Hawk, a probable male, was also perched close by, much nearer to the tree where the Cooper's Hawk had been. It appeared conspicuous to me. Had the Cooper's Hawk failed to notice it? That seems unlikely. Was it simply tolerant of its younger and smaller relative for some unknown reason? That is possible. But perhaps the Cooper's Hawk, aware of the falcon's larger size, considered it more of a competitor for food than

the almost diminutive Sharp-shinned, Hawk which would feed on much smaller birds anyway. While Peregrine Falcons hunt in the open and not in woodland habitats, Cooper's Hawks sometimes hunt by soaring over fields, which are prevalent at this site. The falcon I saw may have been regarded as a legitimate competitor.

Summary

This note documents what seems best interpreted as an instance of a Cooper's Hawk defending a winter hunting territory. The apparent lack of recorded observations to support this conclusion shows that further study of Cooper's Hawk behaviour is warranted, especially in the context of aggression.

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Two novel behaviours in a **Northern Saw-whet Owl** (*Aegolius acadicus*)

Mike Boyd

On 31 October 2005, during a walk along the north shore near the Tip of Long Point, Ontario, a Northern Saw-whet Owl (*Aegolius acadicus*) was noticed sitting on the head of a dead Surf Scoter (*Melanitta perspicillata)* that was on the beach. The owl was watched for a minute, and when it was approached it flushed onto a nearby downed tree. It was suspected that the owl might have been feeding on the carcass of the scoter, a novel behaviour, so the owl was left in hopes that it might return to feed on the scoter and provide another opportunity to observe it.

An hour later the owl was again found on the head of the scoter, but this time it was observed feeding and continued to do so for several minutes. When the owl became alerted to my presence it ceased feeding and watched me intensely. Only when it was approached did it flush. However, when it did, it flew into a hole in the bank along the shoreline. The owl was left for a few minutes to see if it would emerge. At this time the scoter's head was inspected and this revealed a previously unopened wound and a small portion of flesh missing. The owl remained in the hole and did not appear to want to leave. It was subsequently caught to determine if there was a reason that would cause it to scavenge. The owl was found to have a band on and records indicate it was originally banded on 29 October 2005 at the Tip Station of the Long Point Bird Observatory. Its file indicated that it dropped 5.9g from its original weight of 88.1g to 82.2g.

Figure 1. Northern Saw-whet Owl at the head of a dead Surf Scoter, 31 October 2005, near the tip of Long Point, Lake Erie, Ontario. *Photo: Mike Boyd*

Discussion

A literature review indicated that few of the North American owls have been known to scavenge, with confirmed records for only Northern Hawk Owl (*Surnia ulula)*, Great Horned Owl (*Bubo virginianus*), Snowy Owl (*Bubo scandiacus*) and Northern Pygmy-Owl (*Glaucidium gnoma*) (Lynch 2007, Patterson 2007). However, it is suspected that several other species may scavenge including Boreal (*Aegolius funereus*), Great Gray (*Strix nebulosa)*, Barred (*Strix varia*), and Northern Saw-whet Owls (Bent 1938, Nero 1987). The Northern Saw-whet Owl record was of a second hand report of a bird feeding on a Snowshoe Hare (*Lepus americanus*) that was never confirmed (Bent 1938). Wild owls are known to cache food on nearby branches, and retrieve them at a later time, and are additionally suspected to feed on bait on traps set for furbearing animals (Nero 1987). Owls in captivity will readily accept dead prey. This may be because food is in similar condition to food cached in the wild. Owl behaviour usually precludes studying the frequency of this behaviour and

thus would make the likelihood of recording such an event unlikely.

Northern Saw-whet Owls are not known to feed upon prey much larger than themselves, and they have not been confirmed to scavenge (Cannings 1993). This is, therefore, the first confirmed record of scavenging for this species. A likely reason for scavenging was due to the weight loss that occurred during days between banding and recapture. Weather during this period had been cool and wet. This would have impeded its migration, reduced foraging opportunities and increased its metabolic needs, possibly resulting in the weight loss that occurred. From this perspective it appears that the owl was opportunistically using the Surf Scoter as an alternative food source due to an immediate need to replenish its energy stores for survival and migration.

The use of an underground roost or hiding location is also novel behaviour. The only North American owl known to use underground cavities is the Burrowing Owl (*Athene cunicularia*) (Haug *et al.* 1993). This is the first report of a Northern Saw-whet Owl using an underground cavity to hide. It may have been the owl's need for food that forced it to make use of such an unusual hiding location. The owl was reluctant to leave the scoter on both flushing incidents, and when it did flush it remained in the vicinity. The lack of dense vegetation within the vicinity of the scoter may have made the hole appear more attractive as a hiding location.

These observations indicate that many gaps may still exist in our knowledge of owl behaviour and that new behaviours may still be observed. Whether owls routinely use scavenging as an alternative foraging method is still unknown. Further research and reporting of novel behaviours are hence thoroughly encouraged.

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In Memoriam

Jon Charles Barlow
(1935-2009)

Cathy Dutton

Curator, researcher, professor, editor, administrator — just a few of the words used to describe Dr. Jon Charles Barlow, an eminent ornithologist whose lengthy careers at the Royal Ontario Museum (ROM) and the University of Toronto (U. of T.) left a lasting impression on the colleagues, students and organizations he was involved with. Jon passed away after succumbing to Alzheimer's disease on 9 February 2009, and left behind significant contributions to the study of ornithology and the museum community.

Jon was born in Jacksonville, Illinois in 1935. Growing up in a rural setting instilled in young Jon an interest in all things natural, and his choice of profession reflected that early interest. He attended Knox College in Galesburg, Illinois, for his undergraduate studies, majoring in Biology and Chemistry. He then migrated west to the University of Kansas for his Master's degree, where his thesis dealt with the "Natural History of the Bell Vireo (*Vireo bellii* Audubon)." His Ph.D. dissertation at U. Kansas was on the "Ecology and Zoogeography of Uruguayan Mammals." Upon completion of his Ph.D. in 1965, Jon left the US and came to Canada to take up a position as Curator-in-Charge in the Ornithology Department at the Royal Ontario Museum.

Under Jon's headship, the Ornithology Department grew in both size and scope. He was a steadfast promoter and supporter of departmental initiatives, and

was not hesitant to push for the resources he felt the Department or the Museum needed to raise the collections and research to international prominence and standards.

Departmental staff increased from four to ten people, and the collections expanded significantly as a result of a worldwide fieldwork program he instituted to broaden the geographical representation in the collections. He initiated the alcohol/formaldehyde and skeleton collections, and largely through his initiatives the skeleton collection is ranked today as one of the largest in the world. He was instrumental in modernizing collections curation, and established a laboratory for bird-song analyses that included a real-time sound spectrograph system. He also started a collection of recorded bird songs to which he personally added many species.

Jon held the Ornithology Headship position until 1976, and remained a Curator of Ornithology at the ROM until his retirement in 2001. He became a Canadian citizen, and during his tenure at the ROM, served on more than 20 committees. He was a key player in the development of the Ornithology Gallery, which opened in 1991. Jon also instituted the annual Royal Ontario Museum Research Colloquium in 1979 and served as Colloquium Coordinator and Chair until 2000. The Colloquium continues to this day.

Jon's research interests focused on the evolution of song birds — both native and introduced — in the Western Hemisphere, with a special focus on the Vireonidae. He studied 35 of the 47 Vireonidae species in the field (most extensively in Texas, the West Indies, Mexico, and Ontario), recording their vocalizations and interpreting the message content of various songs and calls. Jon also studied the ecology and behaviour of Emberizine sparrows (*Spizella)*, and conducted research on Eurasian Tree Sparrows (*Passer montanus*), comparing song, morphometric and genetic changes. However, it was his work on the Vireonidae for which he is most remembered, and he was one of the world's foremost authorities on this family.

Since the ROM was still part of the University of Toronto when Jon arrived in 1965, he was also hired as an Assistant Professor in the Zoology Department at U. of T. He became a full Professor in 1980, a position he held until 2001. Throughout the course of his tenure, he taught undergraduate courses in avian biology, bird diversity and systematic ornithology. He also supervised 28 Zoology graduate students. In 1982, he was cross-appointed to the Graduate Faculty in the Museum Studies Program at U. of T., serving as Director and Graduate Student Coordinator at various times, and supervising 15 graduate students in the program until his retirement.

In addition to his numerous contributions to the ROM and U. of T., Jon was active in a number of ornithological societies, including: The Wilson Ornithological Society, for which he served two terms as President and a six-year term as

Editor of *The Wilson Bulletin;* The Society of Canadian Ornithologists, for which he also served two terms as President; The Cooper Ornithological Society as a member of the Executive Board; and the American Ornithologists' Union, of which he was a Fellow and served on numerous committees (Animal Care and Research, Membership, Research, etc). Jon was also actively involved with the Chihuahuan Desert Research Institute, serving as Chairman of the Board of Scientists for several terms, and the Metro Toronto Zoo, where he served on a number of boards and committees, including the Animal Care Committee and the Board of Directors.

In recognition of Jon's contributions to ornithology and the museum community, he received the Award of Merit from the Ontario Museum Association in 1993 for "outstanding contributions to the museum community," and the Bruce Naylor Award from the Alliance of Natural History Museums of Canada in 2008, for "exceptional contributions to the study of museum-based natural history in Canada."

Though Jon is remembered for his extensive involvement in research, teaching, museology, and professional organizations, those who knew him well remember him for so much more. During the memorial service for Jon, he was described by many as a "larger-than-life" personality. His sharp wit, wide range of interests and uncanny memory for details meant he could begin a conversation talking about vireo behavior and vocalizations and end with the latest baseball statistics, or some obscure garage band that only ever recorded one album. He amassed a large collection of vintage records and was also an avid movie buff, the Wizard of Oz being one of his favourites. Ornithology colleagues at the ROM remember movie sound bites ("we're not in Kansas anymore Toto") issuing from his office as his computer booted up.

Jon was not only a colleague and mentor, he was a family man. He was proud of his five children and frequently spoke of their accomplishments. Though none of the children followed in Dad's footsteps, he encouraged them in whatever paths they chose to follow, and he relished their successes.

If you spent any significant amount of time in Jon's company, you invariably ended up with a nick-name. Those fortunate (?) individuals included "Smooter", "Ayley-Meister", "Murph the Smurf", "Dickie J.", "Rossini", "Jimmy Duck", "Aegis", "Tommy turtle-nose", "Wingy" and "Ruddy-Bumpkin" (you folks know who you are) to name a few. Jon even gave himself his own nick-name — "Jonny Cool". Though Alzheimer's robbed Jon of his memories, the contributions he made to the study of ornithology, the knowledge he passed on to his students, the shared experiences with colleagues in the field, and the many and wide-ranging conversations he engaged in with others, will not be forgotten.

Rest in peace Jonny Cool.

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