



Reports of rare birds (those for which the OBRC requires documentation—see supplement to *Ontario Birds* 5(3)) should be sent to: Secretary, Ontario Bird Records Committee

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Ontario Birds

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Sutherland, Alan Wormington

Material should be double-spaced and typewritten if possible.

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Editorial Policy

Ontario Birds is the journal of the Ontario Field Ornithologists. Its aim is to provide a vehicle for the documentation of the birds of Ontario. We encourage the submission of full length articles or short notes on the status of bird species in Ontario, significant provincial or county distributional records, tips on bird identification, behavioural observations of birds in Ontario, location guides to significant birdwatching areas in Ontario, book reviews and similar material of interest on Ontario birds. We do not accept submissions dealing with "listing" and we discourage Seasonal Reports of bird sightings as these are covered by *Bird Finding in Canada* and *American Birds*, respectively. Distributional records of species for which the Ontario Bird Records Committee (OBRC) requires documentation must be accepted by them before they can be published in Ontario Birds.

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Letters to the Editor

The following are excerpts of letters written by OFO members in response to the article by Outdoor Editor Bob Rife, published in a recent edition of *The Globe and Mail* and reprinted in *OFO Newsletter* #12 (July 1987). This article, entitled "Birders: as culpable as poachers", is critical of the actions of some birders and raises important questions about the ethics involved in our ornithological pursuits. Thanks to all the respondents for expressing their views on this highly controversial subject.

> D. M. Fraser Editor

OFO members courteous

I have only been a member of OFO for a year, and have been on many outings with them. Always the greatest care and courtesy has been entrusted upon the birds we have observed and their habitat. The OFO members that I have "birded" with have maintained the ABA Code of Ethics to the utmost consideration, and are not "bird hunters"... It is the good reputation of OFO that attracts other birders (like myself) to join and promote not only birding, but the conservation and preservation of the environment and (subsequently) habitat.

> Wendie Vipond Toronto, Ontario

Shrikes disturbed by photographers

One point that has bothered me for a long time is the need for photogra-

phers to use a close up flash, particularly in the case of owls and nesting birds. Several years ago we had Loggerhead Shrikes nesting on our property. We came home from a few days at Pelee to find branches cut off the tree, others tied back and left that way, just to get a "good picture"!

Possibly too much emphasis in birding circles in general has been placed on numbers—whether it be getting that 400th, 500th or 700th bird—rather than enjoying the birds and doing our best to hope a few of them survive for future generations.

Bouquets to the considerate, genuine bird watcher, but unfortunately there are a few of the other kind!

Darlene Dalke Oshawa, Ontario

Birding — a non-consumptive resource use

As an avid birder, I have never considered bird watching to harm the species I am observing in any way. Rather, it is a totally non-consumptive use of the resource, leaving the observed species available for the enjoyment of others.

However, I believe that the occurrence of a "group" of birders, attempting to sight a rare species can cause problems. There seems to be something about a "gathering" of birders in one spot which causes *some* of the birders to become overly eager, pushy and overbearing. I suppose it could be compared to a gathering of fans at a rock concert, where some tend to get the same desire to try and get close.

I do not *personally* know any birding "slobs". I believe that the overwhelming majority of birders exercise restraint and common sense when birding.

> Manson Fleguel Pembroke, Ontario

Code of ethics or social conscience?

In reading the ABA code of ethics again I find many laudable features. but I find a few things difficult to accept without qualification. Firstly, despite all the good that it does, we will always be left with the slobs who won't read it or won't care even if they do. It should be the responsibility of each and every conscientious birder to kindly shame the slobs into being more considerate of others. For it is the birders, and not just the wildlife that will suffer. We wouldn't need a code of ethics if people had a social conscience.

Secondly, under the fourth and fifth items of the code, no nest record program could exist if nobody approached nests, and those who do participate in nest record keeping do not, or at least have no need to handle eggs or young birds. A great deal of good comes from nest records and they are frequently consulted even by the Ministry of Natural Resources (or their equivalents elsewhere).

If Mr. Rife really wants to do some good he could campaign for legislation to ban ATVs and trail bikes, that not only significantly disturb wildlife of interest to birders, photographers or hunters, but also

tear up the habitat of the wildlife and destroy rare or sensitive vegetation, and perhaps worst of all disturb a great many people in serious ways. Or he might worry about the ever increasing proliferation of chemicals polluting the environment, or the industrial pollution of lakes, rivers and forests, or the continuing encroachment of human activity on the few remaining Carolinian forests, or the constantly increasing population of this country that is steadily "eroding" the fields we need for agriculture and the forests and prairies etc., that are needed by the wildlife we are trying to protect. Some politicians and economists feel it is essential to have continued population growth, but I prefer to think of that as people pollution, slowly and steadily destroying the quality of life we have in this country by continually destroying our environment. While Mr. Rife has a point about birders and photographers it seems to me there are worse and more insidious problems for the Ministry of Natural Resources to deal with. If we protect the habitat we have in this country (and the rest of the world) from the ever increasing demands of human population, there will always be some wildlife that could readily withstand the disturbance of birders, and even of photographers.

Ross James Associate Curator of Ornithology Royal Ontario Museum Toronto, Ontario

Birders should pay their way From my own point of view, I believe that there is a most unfortu-

nate *lessening* of interest in general natural history as more and more people become interested in birding only, from the competitive point of view. The art of observation of what is *happening* among a group of birds, and what interactions are taking place between birds and other animals, and their use of the habitat. is apparently being pushed aside for laser-intense concentration only on points of identification. I can't abide the "birding boredom" that flares up in a group of birders when there are temporarily no birds in sight! Nor do I take kindly to remarks such as "oh that ---- I've seen one of them (got it on my list) - not interested in trash birds nothing interesting/good here..."!!!!

About the "licensing" idea for birdwatchers...I think we *should pay our way*. The "hunting licence" is somewhat ridiculous — but we should pay an annual amount to help maintain habitat, to "police" some too-heavily used areas (i.e, *fine* people for using tape recorders to pull birds out of the undergrowth during breeding season, etc).

Quite apart from the general control aspect, I think birders should put some more money towards the fight to protect vital habitat areas. One so often comes across instances of people grumbling about entrance fees to parks and conservation areas — but spending money right, left and centre to use gasoline and pay motel fees, etc. in order to dash half way across the Province — and further — to add a rarity to their lists.

Somehow, we have to stress ecology more, and breeding biology — of course, the new-to-birdwatching person just gets a field guide, and finds practically nothing in it about behaviour, nesting, etc., so they don't get the general picture *from the beginning*. And without that general picture, it is too easy to zero in on identification alone, in all its aspects.

All this, of course, has to be put into perspective — there is a large majority of birdwatchers that behaves well, does its part in conservation funding, is interested in other aspects of biology than just birds, etc. But as numbers grow, the minority is becoming far too obvious — not only to the majority, but more seriously damaging, to the general public. And I deeply resent that minority.

> Rosemary Gaymer Oakville, Ontario

A West German viewpoint

So far we do not have in Germany a "birder-fraternity", only individuals or small groups of two or three persons are going out for serious birdwatching. The general public interested in birds will follow local guided tours, organized by the "Volkshochschule" or the local chapter of the German equivalent of the RSPB. These activities are normally harmless.

Only two weeks ago I heard for the first time that a hot-line was established in Western Germany recently. We therefore are at the very beginning of this problem. David Lack came to the conclusion that birdwatching is a substitute for hunting, that it is a civilized way of hunting. He maybe couldn't imagine the crowds approaching a rare bird today. I personally feel the same: birdwatching is a civilized way of hunting. It gives surely the same joy and pleasure to the serious birdwatcher as gives the hunt for a hunter.

How now to stop a dangerous development as described in the article of Bob Rife? Isn't it fact that by installing hot-lines the problem arises? Shouldn't we introduce a new article in the Code of Ethics saying that the establishment and running of a hot-line is contrary to the welfare of the birds? Nobody is forced by this new article not to call an experienced friend or peer to confirm his/her observation. But we would stop the avalanche otherwise arriving at the site, offending the bird and harming the environment.

Another aspect worth considering is the introduction of a licence (and lectures, and examinations to get it) for the photographing of birds, and the compulsory membership in a bird or wildlife photographer society which would have to be established.

I do feel that something has to be done from the birdwatcher community. I would be very unhappy if others, or the government, would force on us restrictions.

> Dr. Walter Thiede Cologne, West Germany

Notion of "licensing" birders assailed

I read Bob Rife's article with a mixture of derision and annoyance. Derision, because Mr. Rife's thesis that birdwatchers have somehow become a menace to the environment, and need to be licensed like some species of Pit Bull Terrier—obviously invites derision; and annoyance, because Mr. Rife writes with such apparent, albeit illusory authority that I suspect a large number of readers might actually belive him.

However, responsible birdwatchers will also recognize that, among the dross of hyperbole and exaggeration that in Mr. Rife's case substitutes for serious journalism, there are a few grains of truth. It is indeed true that there do exist birders who behave in an irresponsible manner, either occasionally or habitually. I do not believe that it is a serious problem-certainly not serious enough to warrant Mr. Rife's insulting and inflammatory headline -but we should recognize it before it becomes one. Undesirable behaviour among birdwatchers falls into three categories; behaviour damaging to the bird itself, such as excessive disturbance, especially in the breeding season; behaviour annoving to landowners, principally trespass and damage to crops and/or fences: and behaviour inconsiderate to other birders, such as scaring away rare birds by too close an approach. Precisely how the bulk of the birdwatching community can discourage these activities, other than by moral suasion, is admittedly not an easy problem. However, what is especially fatuous about Mr. Rife's self-serving diatribe is the suggestion that a license would somehow miraculously eliminate those problems that do occur. One has only to look at the activities of Mr. Rife's own constituency, the hunters (presumably all duly licenced according to his fondest

desires) to recognize the nonsensical nature of his arguments.

David Brewer Puslinch, Ontario

Photographers are main culprits I both agree and disagree with Mr. Rife's assessment of birders' activities these days. I agree that birders are more and more often disturbing birds and this alarms me, however, I do not feel that birders are "as culpable as poachers". I have yet to see birders intentionally kill birds.

The introduction of cameras to birding has probably been the worst thing that has happened to this hobby. Too many amateur photographers have to get a photograph of every bird they see. They don't realize that the incredibly glossy photos that they see in books are taken by dedicated photographers who sometimes work for weeks to get a single roll of film. These amateur photographers still have to get within ten feet of a warbler or sparrow to get a good shot. There was a time at Point Pelee when you could talk to other birders and find out that there was a Le Conte's Sparrow in this bush by the point, or that there was a Whip-poor-will in this stand of trees by the Nature Centre. These days, when a rare or attractive bird is spotted, the amateur photographers are usually the first ones there and the last to see the bird. Last spring at Point Pelee I had one of these people say to me, "There was a Scarlet Tanager over here a minute ago but I had to chase it away over to the other side of the point to get a good shot of it". These people aren't doing the hobby

any good and by the number of cameras you see under the arms of birders, the potential for real harm is great.

The hobby of birding is not nearly as bad as the acts of poachers or hunters. The act of the poacher or hunter is *always* permanent. The actions of birders are not so. It seems to me that the best birders are still the best birders and these people, who are well known to the birding community, have the ability to combine a love for the hobby with a love for the birds. It would appear that the over-eager and just plain obnoxious birders are going to ruin it for everyone.

I, myself, am not one of the best birders, but I would rather put down a bird as unidentified than chase it away. I tried photography about ten years ago but as soon as I realized what was happening I stopped and haven't tried it since. I am disturbed by what is happening to birding, both through the sheer numbers of new enthusiasts and the inconsiderate activities of some others. The latter can be remedied, the former is an unfortunate tribute to just how enjoyable this hobby is.

Mr. Rife is sounding like a hunter who is as frustrated as I am that the increased numbers of people in the woods, and the negligent behaviour of some, is scaring away both animals and birds. However, it seems that he wants to blame this on the birders alone. The incremental damage done by one more birder is still less than the incremental damage done by one more hunter.

> Doug Hanna Fergus, Ontario

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Photographs in last issue The only other photographs that come close to the quality of those found in the August issue of Ontario Birds [Vol. 5(2)] are in Social Studies by Fran Lebowitz. Her photographs, however, are meant to be funny. Since Ontario Birds is "serious stuff", why are the photographs so nauseating to look at? Photography is our most exacting visual medium, especially well suited for social and scientific documentation. Birds may be more difficult to photograph than other subjects, but the majority of photographs which appear in this journal, should not. Poor photographs are not "better than nothing".

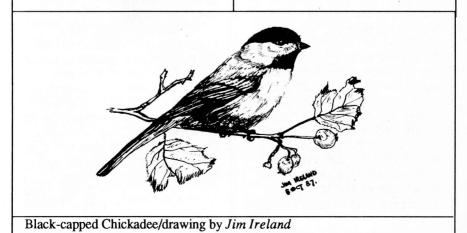
Tom Reaume Ballinafad, Ontario

Ed. Note: I'm glad that someone wrote a letter about the photographs in the last issue, because this gives me an opportunity to provide both an explanation and an apology.

I agree with your letter for the most part, although I assure you that the original photographs were anything but "nauseating" — most were from good to excellent quality. Their poor appearance is solely due to poor reproduction during printing and I apologize to the photographers.

Since the spring, I have made a number of production changes in an attempt to meet budgetary restraints. Some worked out well. Others didn't. No one feels worse than I do about the results. I would like nothing better than to blame everything on the printer but, as editor, I am the one who is responsible for ensuring that Ontario Birds remains a quality periodical. Therefore, I can only add that I have now found a more reliable printer and can give my solemn promise that the poor quality of the last issue will not occur again during my tenure as editor.

D. M. Fraser Editor



Sulphur-bellied Flycatcher: New to Ontario and Canada

by Mark Gawn

September 28, 1986 was one of those wet, grey days which seem to rain birds. The morning saw Presqu'ile Provincial Park. Northumberland County, Ontario, awash with birds. However, it was not until afternoon that Tony Beck. Tom Plath and the author ventured into Calf Pasture. While the other two chased after a flock of passerines in what turned out to be the wrong direction. Beck wandered along the edge of Presqu'ile Bay, looking for "photographic opportunities". He was not to be disappointed.

At approximately 1400h, Beck discovered a large "streaked" flycatcher which he tentatively identified as a Sulphur-bellied Flycatcher (Myiodynastes luteiventris). He took several pictures, then ran to fetch the author and Plath. Unfortunately the bird had disappeared before the other two members of the party arrived. After a frustrating one and a half hour search the three of us left to put out an alert on the bird as a "streaked" flycatcher. Within minutes of our return, a half hour later, the author rediscovered the bird as it flitted from one hiding place to another.

For the following two hours a small group of birders observed the

bird from various angles and distances, and were able to take detailed notes on plumage and behaviour characteristics. At the same time. Beck was able to obtain several diagnostic photographs of the bird. Although the sun was obscured by clouds, we were able to discern many fine details of the bird's plumage in neutral lighting conditions. Despite its ability to stay out of sight, 150 to 200 people were able to observe the bird over the next three days. It was last reported on the morning of 1 October (R. D. McRae, pers. comm.).

Description

Throughout most of our observation, the flycatcher selected inconspicuous perches well hidden in the middle story of tall eastern cottonwoods (Populus deltoides). It was often nearly obscured from view by thick tangles of Virginia creeper (Parthenocissus vitacea) or wild grape (Vitis riparia). Occasionally it perched in the open, usually fairly high in the trees. When perched, it generally maintained an upright posture. Its infrequent flights consisted of a quick swoop to an equally well hidden spot. We did not see it do any flycatching sorties.

Mark Gawn 1045 Alenmede Crescent, Ottawa, Ontario K2B 8H2





Figure 1: Sulphur-bellied Flycatcher, 28 Sept. to l Oct. 1986, Presqu'ile Provincial Park, Northumberland. Photo (28 Sept.) by *Tony Beck*.

although it did pluck insects from leaves near its perch. While the bird did not flick or pump its tail, it did raise the feathers of its forecrown several times, giving it a "peaked" effect over the eyes. Several times it perched with drooped wings, with the outermost primaries splayed out.

The bird's gestalt was that of a heavy-headed "kingbird" (Tyrannus sp.), a conclusion immediately contradicted by its streaked breast, head, and back, and its strikingly rufous tail (Figure 1). Direct comparisons allowed us to ascertain that it was slightly larger than a Yellow-bellied Sapsucker (Sphyrapicus varius). The bird had a large black bill similar to that of a Gray Kingbird (*Tyrannus dominicensis*). The bill was slightly "hooked" at the tip and was flanked by long bristles at the base (Figure 2). At close range the gape was noted to be pinkish. When seen from below, the lower mandible was proximally one third pinkish, the rest being black. The legs were dark grey or black.

The crown and nape were greyish-brown with faint darker streakings; there was no contrast between the crown and the nape. On the day following the discovery of the bird, observers were able to note the yellow median stripe (Ian Jones, pers.

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Provincial Park, Northumberland. Photo (28 Sept.) by Tony Beck.

comm.), but this was not apparent during my study. Above the eye there was a broad greyish-white superciliary, faintly marked with fine grey streaks, that ended behind the auricular area and did not continue through the nape (Figure 3).

The dark eye was set in a dark blackish "mask" that extended through the lores and covered the auricular area (Figure 3), much like the mask of a Gray Kingbird. This mask was a solid dusky-black, not marked with a whitish area as depicted in the National Geographic Society Guide (1983). The malar

stripe was off-white, having a similar tone to that of the superciliary. The submalar region was marked by a poorly defined convergence of the greyish-brown chest streaks, which continued into the chin to form a dark chin strap. The throat was greyish-white, marked with fine, grevish streaks (Figure 4).

The breast was marked by poorly-defined, "blurry", greyish-brown stripes. These gradually became finer and more distinct in the lower breast region, but gradually faded out in the upper belly (Figure 2). The breast, belly and crissum were otherwise pale yellow, most intensely in the belly. The exact tone varied according to lighting conditions.

The plumage of the mantle and lower back was composed of brownish feathers edged pale grey. Because this edging did not continue around the tips, the bird's back had a "streaked", not scaled look (Figure 3). At rest, the bird appeared to have reddish "shoulders", due to reddish emarginations to the otherwise grevish-brown lesser coverts. The outermost median coverts were also edged reddish. with the remaining median coverts having pale off-white emarginations. The greater primary coverts. secondaries and tertials were greyish-brown with broad, pale yellowish-white edgings. These edgings were particularly broad in the secondaries and tertials, accounting for about one half of each feather (Figure 1). As in the back feathers, the pale edgings did not extend around the tips. Accordingly, they formed yellowish-white streaks in the wings. The primaries and ter-

Figure 2: Sulphur-bellied Flycatcher, 28 Sept. to 1 Oct. 1986, Presqu'ile

tials were dark greyish-brown, with no hint of rufous. They had slightly paler emarginations, but this was almost unnoticeable. The wing linings were not seen well but appeared to be a pale off-white.

Perhaps the most striking feature of the bird was the flashy, rufous rump and tail. The upper tail covert feathers were bright rufous, marked with very fine, almost indiscernible shaft streaks. These streaks grew broader further up the rump. The upper surface of each tail feather was bright rufous, but marked with a dark, chocolate-brown streak. These streaks were fairly broad in the innermost tail feathers (accounting for about one-third of the feather surface) but rapidly diminished with each successive feather, with only a fine streak discernible in the outer-



Figure 3: Sulphur-bellied Flycatcher, 28 Sept.-l Oct. 1986, Presqu'ile Provincial Park, Northumberland. Photo (29 Sept.) by *Alan Wormington*.



Figure 4: Sulphur-bellied Flycatcher, 28 Sept.-1 Oct. 1986, Presqu'ile Provincial Park, Northumberland. Photo (28 Sept.) by *Tony Beck*.

most ones. The undersurface of the tail was the same bright rufous as the top, but was unmarked. The tail was only slightly notched (Figure 2). Overall, the tail appeared broader but shorter than that of an Eastern Kingbird (*Tyrannus tyrannus*).

None of the wing or tail feathers appeared to be at all abraded. Overall, the bird had the neat, tidy look of a freshly moulted immature.

Similar Species

As we watched the bird we were very much aware of the potential difficulty in reaching a final identification. Although there are no North American species remotely similar to the Sulphur-bellied Flycatcher, there are several neotropical lookalikes. Accordingly, we took extensive notes and attempted to obtain as many photographs as possible. In subsequent weeks we reviewed the literature, consulted the skin collection at the National Museum of Canada (NMC), and communicated with authorities, notably Dr. J. Van Remsen of Louisiana State University (Baton Rouge).

Two of the lookalikes, the Piratic Flycatcher (Legatus leucophaius) and Variegated Flycatcher (Empidonomus varius), can be readilv discarded as possibilities based on their small size (phoebe-sized), more petite bill, and predominantly dark tail and rump. A good discussion on the separation of Variegated from Sulphur-bellied is presented in Abbott and Finch (1978) and need not be reproduced here. Most of the remaining members of the genus Myiodynastes are quite dissimilar. Golden-crowned (M. chrvsocephalus), Golden-bellied (M. hemichrysus) and Baird's Flycatchers (M. bairdi) are blackcrowned, green-backed, and lack pronounced streaking on the chest.

The only remaining similar species is the Streaked Flycatcher (M. maculatus). Streaked Flycatcher is widely distributed in the Neotropics, and includes several distinctively marked subspecies. M. m. solitarius breeds in southern South America, migrates north, and could "overshoot" into North America. This subspecies has dark brown tail feathers with rufous edgings; not rufous with dark centres as in our bird (Hilty and Brown 1986: 516). Furthermore, the undersurface of the tails of solitarius specimens in the NMC collection are pale grey, not bright rufous.

The Streaked Flycatcher found in Central America (*M. m. insolens*) is very similar to the Sulphur-bellied Flycatcher, but has a yellow superciliary, white breast, and predominantly pale (pink/flesh coloured) lower mandible. This is compared to the whitish superciliary, yellow

breast and mostly black bill of the Sulphur-bellied. Furthermore, the Streaked Flycatcher has more extensive rufous in the wings than is the case for the Sulphur-bellied Flycatcher (J. V. Remsen, pers. comm.). However, these features are variable and subject to interpretation. The only fully reliable "field mark" for separating the two is the presence of a dark bar through the chin in Sulphur-bellied (Ridgway 1907; Remsen, pers. comm.). This distinction was particularly obvious in the specimens examined by the author in the NMC collection. Photographs of the Presqu'ile bird clearly show this mark (Figure 4). confirming its identification as a Sulphur-bellied Flycatcher.

Discussion

In summary, the Presqu'ile bird appears to be almost identical to the Sulphur-bellied Flycatchers contained in the NMC collection. The similar Streaked Flycatcher is ruled out by the dark bar through the chin, predominantly black bill, whitish superciliary, yellow breast, restriction of the rufous in the wings to the median coverts, and predominantly rufous tail feathers.

This sighting represents the first record of Sulphur-bellied Flycatcher for Ontario and Canada (Wormington 1987). Furthermore, it is the first member of its genus ever recorded in Canada (Godfrey 1986). The Sulphur-bellied Flycatcher normally summers in Central America, with its breeding range extending into southern Arizona, and winters in northern South America (American

Ornithologists' Union 1983:470). Extralimital records of Sulphur-bellied Flycatcher for North America. excluding northern Arizona, southwestern New Mexico and Texas, are listed in Table I. Half of these records are from California, relatively close to the limited North American breeding range of the species. Most extralimital records. including all of the California sightings, are from September or early October, bracketing the timing of the Presqu'ile bird. An exception to this early fall pattern was one reported on a Christmas Bird Count in Mississippi on 31 December 1979. In Texas, the Sulphur-bellied Flycatcher, listed as "hypothetical" as recently as 1974 (Oberholser 1974:542), occurs very rarely in the spring (e.g., Webster 1983) and has been known to breed (Webster 1977). The only extralimital spring record from further afield was obtained in Louisiana in 1984. There is one previous record of this species for northeastern North America, one seen and photographed 12-13 November 1983, on Martha's Vineyard, Massachusetts.

The late September timing of the Ontario sighting fits well with an emerging pattern for vagrant Sulphur-bellied Flycatchers. It is apparent that, instead of migrating south to northern South America, a few Sulphur-bellied Flycatchers head north, with this one ending up in Ontario instead of Peru! It should be noted however, that late September would also be the time of vear when a disoriented post-breeding Streaked Flycatcher might appear, only to be called a Sulphurbellied! Unfortunately, most field guides, including those dealing with the Neotropics, fail to adequately discuss those differences between Sulphur-bellied and Streaked Flycatchers. The situation is further confused by the several subspecies of the Streaked Flycatcher. The best treatment of the complex in a standard field guide is found in Hilty and Brown (1986), which describes M.m. insolens and M.m. solitarius.

Table 1: Extralimital records of Sulphur-bellied Flycatcher (*Myiodynastes luteiventris*) in North America (excluding southern Arizona, southwestern New Mexico and Texas).

STATE	DATE	SOURCE
Alabama	6-9 Sept. 1985	Purrington (1983)
California	16-20 Sept. 1983	McCaskie (1984)
	22 Sept5 Oct. 1974	McCaskie (1975)
	6-9 Oct. 1978	McCaskie (1979)
	7 Oct. 1979	McCaskie (1980)
	8 Oct. 1983	McCaskie (1984)
Louisiana	28-29 April 1984	Imhof (1984)
	30 Sept. 1956	Newman (1957)
Massachusetts	12-13 Nov. 1983	Nikula (1984)
Mississippi	31 Dec. 1979	Hamilton (1980)

as well as noting the importance of the dark chin as a field mark of Sulphur-bellied.

The fact that this Sulphur-bellied Flycatcher was found at Presqu'ile Provincial Park was not entirely an accident. Presqu'ile, which projects into the western end of Lake Ontario, is fast gaining a reputation as one of Ontario's premier vagrant traps; just two years earlier Canada's first ever Mongolian Plover (Charadrius mongolus) was discovered there (McRae 1985). With increased coverage, Presqu'ile and nearby Prince Edward Point. Prince Edward County, can be expected to produce further outstanding vagrants.

Acknowledgments

I would like to thank R. D. McRae, for promoting birding at Presqu'ile, and Roy John, for fielding some highly agitated phone calls. Further thanks must go to Dr. J. Van Remsen for his exhaustive critique of the record, and to both Remsen and Ian Jones for their thoughtful comments on earlier versions of this manuscript. The assistance of Michel Gosselin at the National Museum of Canada is also gratefully acknowledged.

Literature Cited

- Abbott, D.J. and D.W. Finch. 1978. First Variegated Flycatcher (Empidonomus varius) record for the United States. American Birds 32: 161-163.
- American Ornithologists' Union. 1983. Checklist of North American Birds. 6th edition. Lawrence, Kansas.
- Godfrey, W.E. 1986. The Birds of Canada. Revised edition. National Museums of Canada, Ottawa.

Hamilton, R.B. 1980. Central southern

region. American Birds 34:281.

Hilty, S.L. and W.L. Brown. 1986. A Guide to the Birds of Columbia. Princeton University Press, New Jersey.

- Imhof, T.A. 1984. Central southern region. American Birds 38:923.
- McCaskie, G. 1975. Southern pacific region. American Birds 29:120.
- McCaskie, G. 1979. Southern pacific region. American Birds 33:216.
- McCaskie, G. 1980. Southern pacific region. American Birds 34:202.
- McCaskie, G. 1984. Southern pacific region. American Birds 38:247.
- McRae, D. 1985. Mongolian Plover: new to Canada. Ontario Birds 3:18-23.

National Geographic Society. 1983. Field Guide to the Birds of North America. Washington, D.C.

- Newman, R.J. 1957. Central south region. Audubon Field Notes 11:30.
- Nikula, B. 1983. Northeastern maritime region. American Birds 37:887.
- Oberholser, H.C. 1974. The Bird Life of Texas, Vol. 2. University of Texas Press, Austin, Texas.
- Purrington, R.D. 1984. Central south region. American Birds 38:213.
- Ridgway, R. 1907. The Birds of North and Middle America. Bulletin U. S. National Museum No. 50. Part IV.
- Webster, F.S. 1977. South Texas region. American Birds 31:116.
- Webster, F.S. 1983. South Texas region. American Birds 37:890.
- Wormington, A. 1987. Ontario Bird Records Committee, Report for 1986. Ontario Birds 5:42-63.

Breeding Bird Observations in Northwestern Ontario

by Frederick M. Helleiner Mary Anne McGeachy-Currie Katie Thomas

Introduction

This paper reports on bird observations made during two visits to the headwaters of the Severn River drainage basin. Kenora District, in northwestern Ontario in the early summers of 1984 and 1985, as part of the field work for the Atlas of the Breeding Birds of Ontario (Cadman et al. 1987). During a four-week period spanning late June and early July, 1984, McGeachy-Currie, with three other individuals, collected data at Big Trout Lake, Garret Lake and Bearskin Lake, all of which are situated at about 54°N, and between 89° and 92°W. From 6 to 13 June 1985. Helleiner and Thomas collected data at North Caribou Lake, at 52°45'N and 90°40'W (Figure 1). A number of significant observations, representing range extensions, are reported here. In addition, at North Caribou Lake, abundance indices were derived, based on the number of locations at which species were observed.

All of the areas in which observations were made occur in the northern boreal forest region on the

Canadian Shield. North Caribou Lake lies about 150 km south of the Hudson Bay lowland, while Big Trout, Garret, and Bearskin Lakes are approximately 70 km from the lowland. The Precambrian rock underlying the region is largely covered by glacial till. Sandy ground moraine dominates the North Caribou Lake area, both in the water, where many drumlins and a few rock outcrops appear as islands. and on the land, which has a relief of about 25 m. In the Big Trout. Garret, and Bearskin Lakes area. eskers provide additional relief to the nearly flat and poorly drained landscape.

The areas in which most of the field work was done can be categorized primarily as freshwater and littoral environments. The lakes have irregular shorelines and are often marshy in small bays. Beavers (*Castor canadensis*) are very active in the area, creating additional opportunities for the growth of marshes and bogs. *Sphagnum* sp. and Labrador tea (*Ledum groenlandicum*) occur not only at shore-

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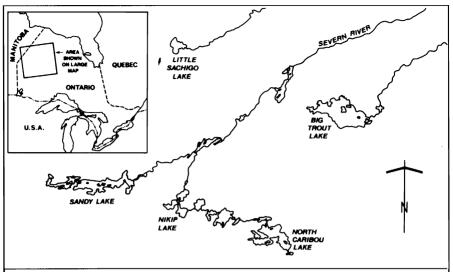


Figure 1: Severn River drainage basin, Kenora District

lines, but also inland in areas of excessively poor drainage. Most of the land is covered by a forest that is strongly dominated by 10 m high black spruce (Picea mariana), often in pure stands, with an undergrowth of Sphagnum sp., Labrador tea, and caribou moss (Cladonia sp.). Other tree species found in lesser numbers among the spruces are white birch (Betula papyrifera), balsam fir (Abies balsamea), jack pine (Pinus banksiana), trembling aspen (Populus tremuloides), balsam poplar (P. balsamifera), and tamarack (Larix laricina). Alder thickets (Alnus sp.) also occur in poorly drained areas. In the vicinities of Doubtful and Big Trout Lakes extensive areas of forest which were burned by recent forest fires had regrown to pure deciduous forest of varying heights. Apart from the town site of Big Trout Lake (about 1 square km, including the airstrip), newly burned areas, and the very limited areas of rock

outcrop, the largest clearings extend for only about 0.5 ha, in the vicinity of present or former seasonal human habitations.

Prior to this study, only limited published information existed on the bird life of this portion of Ontario. Annotated lists exist for Pickle Lake, Kenora District, situated 160 km to the south of North Caribou Lake (James 1980) and for Big Trout Lake (Lee 1978). Unpublished information is available for the Nikip Lake area. Kenora District. 80 km to the west of North Caribou Lake (Cringan 1950) and for a corridor that passes directly through the study area (McLaren and McLaren 1978). In addition, the Atlas of the Breeding Birds of Ontario (Cadman et al. 1987) reports, in somewhat less detail, on bird distribution data that were collected throughout northwestern Ontario during the period 1981-1985.

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Unusual Species

Several species were observed whose northern or southern range limits have previously been poorly known. Since all of these sightings were made during the breeding season, there is at least the possibility that these species breed in the area, and some of them constitute range extensions, according to published information.

Perhaps the most significant discovery was of two colonies of Ringbilled Gulls (Larus delawarensis). The first colony, located on a small rock island in Bearskin Lake, contained approximately 70 pairs of birds, about 80 percent of which were Ring-billed Gulls and the rest Herring Gulls (L. argentatus) and Common Terns (Sterna hirundo). Several groups of young gulls of various ages were floating in the water near the island. An island in North Caribou Lake contained about 30 Ring-billed Gull nests with eggs on 7 June 1985. Except for occasional reports of this species on the James Bay and Hudson Bay coasts (Manning 1952; Schueler et al. 1974; Speirs 1985), the only other observation north of Pickle Lake which has been reported in the literature is of a single bird observed at Little Sachigo Lake, Kenora District, on 24 June 1985 (Peterson 1985).

Five other species were found in surprising numbers for such a northerly location. Pied-billed Grebes (*Podilymbus podiceps*) were heard calling at both Garret Lake and Bearskin Lake, confirming an earlier report from the same latitude at Big Trout Lake (Lee 1978). A pair of Red-necked Grebes (*Podiceps grisegena*) was observed in a marshy bay of Garret Lake. It is doubtful that the birds were nesting, for no young were present, and if they were incubating, they would not likely be together on open water in mid-June. A search for a nest proved fruitless. The species is known to breed only as far north as Sioux Lookout and Sandy Lake (Godfrey 1986).

Three male Common Goldeneyes (*Bucephala clangula*) were seen on North Caribou Lake on 11 June 1985 and an apparently mated pair were observed at the outlet of nearby Doubtful Lake on the following day. Prior to the surveys for the *Atlas of the Breeding Birds of Ontario*, during which Common Goldeneye was confirmed as breeding in several parts of the area, the only confirmed breeding record in that part of northwestern Ontario was of a brood on the North Caribou River (Cringan 1950).

Common Grackles (*Quiscalus quiscula*) were found at each of the study locations, including two pairs at North Caribou Lake on 11 June 1985, whereas others have found the species scarce or absent in the area (e.g., Lee 1978).

Four Red Crossbills (Loxia curvirostra) flew overhead, calling repeatedly, near the north end of Doubtful Lake on 12 June 1985. Although this sighting is far to the north of where this erratic species is normally found breeding, Cadman *et al.* (1987) contains a few similar records. Large numbers of Red Crossbills had been prevalent throughout much of Ontario during the preceding few months, and hence this record is not altogether unexpected, especially in an area where Table 1: Species observed singly near the northern limit of their known breeding ranges, northwestern Ontario, 1984-1985

SPECIES

Double-crested Cormorant (Phalacrocorax auritus) Broad-winged Hawk (Buteo platypterus) Boreal Owl (Aegolius funereus) Pileated Woodpecker (Dryocopus pileatus) Blue Jay (Cyanocitta cristata) Sedge Wren (Cistothorus platensis)

Solitary Vireo (Vireo solitarius) Northern Parula (Parula americana)

Blackburnian Warbler (Dendroica fusca)

American Redstart (Setophaga ruticilla)

Connecticut Warbler (Oporornis agilis) Canada Warbler (Wilsonia canadensis)

REMARKS

Observed twice at North Caribou Lake Observed on a tall black spruce at Garret Lake Heard singing at night at North Caribou Lake Garret Lake Big Trout Lake Indian Reserve Singing male in a spruce-tamarack bog, eastern shore of Bearskin Lake Near Doubtful Lake on 12 June 1985 Observed in a black spruce covered with Usnea sp. lichen adjacent to the shore of Garret Lake Singing male on 9 June 1985 at North Caribou Lake UTM grid block 15XK (see Eagles and Cadman 1983) **Bearskin Lake** Singing male near the shore of Garret Lake

pine trees (albeit not their preferred species) are abundant.

A dozen additional species, observed only as single birds, are listed in Table 1, because they appear to be at or near the limits of their ranges, according to published information. It seems likely that most, perhaps all, of these species breed in the area, although we were able to obtain only circumstantial evidence, at best.

Abundance Estimates

An additional facet of our 1985 study at North Caribou Lake was the determination of an abundance index for each species, based on the proportion of our 49 study locations where a species was observed. The derived index is less subjective than the standard abundance estimates prescribed for the *Atlas of the Breeding Birds of Ontario* (Eagles and Cadman 1983). It clearly has local usefulness for the study area, as an indication of the likelihood of finding the species, but perhaps should not be used as a comparative tool, with the results being extrapolated to more far-ranging locations. It also ignores the actual number of individual birds which may have been present at any one place, such as a colony of gulls.

The 49 sites chosen for study in this manner (Figure 2) were selected to include the greatest variety of habitats which were easily accessible in the 10,000 square km block of land under study. This process was not done at random. An attempt was made to cover each habitat type on a regular basis. Because our mode of transport to the sites was primarily by a cance equipped with an outboard motor, the most common sites visited, as already indicated, were the shoreline and "on water" environments. Consequently, these habitats had the greatest relative frequency of coverage. Inland sites were

covered on foot. On each visit to a site, we remained until it appeared that no additional species were in evidence. The duration of the visit varied from a few minutes to almost an hour.

The attempt to provide regularity of coverage had importance as well for controlling the influence of weather on our findings. It was vital that, as much as possible, each site type was studied under different weather conditions. The presence of high winds or rain forced birds to seek shelter, while in the absence of these elements, bird song, foraging and other breeding activity were more evident. Thus the audibility and visibility of birds varied within the same habitats from one day to another. Moreover, on windy days wave conditions on the lake made it impossible for us to leave the base camp. Since birds can be identified audibly as well as visually, observations were made over a 24-hour period. However, the bulk of the observations were noted between 0500

and 1800h. Between 1800 and 0500h, bird identification was restricted to the area of the base camp and its island.

None of the species observed in the North Caribou Lake area could be termed ubiquitous in the region, since all of them were found at fewer than 50 per cent of the sites. The three which were the most widespread were Ruby-crowned Kinglet (Regulus calendula) and Northern Waterthrush (Seiurus noveboracensis), each of which were found at 21 of the 49 locations, and Yellow-rumped Warbler (Dendroica coronata), which occurred at 19 locations (Table 2). The 12 most abundant species. according to this criterion, were all passerines. The four most abundant non-passerines were Common Loon (Gavia immer), Herring Gull, Common Tern, and Red-breasted Merganser (Mergus servator), which were found at eight, seven, seven and six of the sites, respectively. Seventeen species were found at

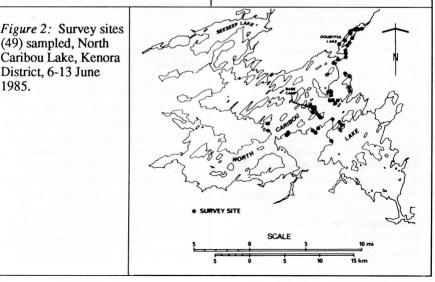


Table 2: Abundance indices for species observed at North Caribou Lake, June 1985 (number of study sites where species found; n=49).

ABUNDANCE INDEX	SPECIES
21	Ruby-crowned Kinglet, Northern Waterthrush
19	Yellow-rumped Warbler
17	Yellow Warbler, White-throated Sparrow
15	Gray Jay
11	Swainson's Thrush, Magnolia Warbler
10	Least Flycatcher, Common Raven, Winter Wren
9	Fox Sparrow
	Common Loon, Red-eyed Vireo
8 7	Herring Gull, Common Tern, Alder Flycatcher
6	Red-breasted Merganser, Philadelphia Vireo
5	Mallard, Common Merganser, Spotted Sandpiper, Black-backed Woodpecker,
	Northern Flicker
4	Common Nighthawk, Red-breasted Nuthatch, Wilson's Warbler, Song
	Sparrow, Dark-eyed Junco
3	Great Blue Heron, Ring-necked Duck, Osprey, Bald Eagle, Ruffed Grouse,
	Boreal Chickadee, Tennessee Warbler, Swamp Sparrow
2	Common Goldeneye, Bonaparte's Gull, Hairy Woodpecker, Tree Swallow,
	American Crow, Golden-crowned Kinglet, Cedar Waxwing, Chipping
	Sparrow, Common Grackle
1	Double-crested Cormorant, Green-winged Teal, White-winged Scoter,
	Common Snipe, Ring-billed Gull, Boreal Owl, Olive-sided Flycatcher,
	Solitary Vireo, Cape May Warbler, Blackburnian Warbler, Blackpoll Warbler,
	Black-and-white Warbler, Ovenbird, Red-winged Blackbird, Rusty Blackbird,
	Purple Finch, Red Crossbill
	Purple Finch, Red Crossbill

Abundance Index for Species Confirmed as Breeding (Eagles and Cadman 1983)

- 2 Herring Gull, Gray Jay
- 1 Mallard, Osprey, Ring-billed Gull, Hairy Woodpecker, Red-winged Blackbird

Abundance Index for Species Probably Breeding (Eagles and Cadman 1983)

- 6 Yellow Warbler
- 3 Mallard, Red-breasted Merganser, Red-eyed Vireo
- 2 Ring-necked Duck, Philadelphia Vireo, Common Grackle
- 1 Common Loon, Common Goldeneye, Common Merganser, Least Flycatcher, Swainson's Thrush, Chipping Sparrow

only one location. In terms of	locations, Mallards (Anas platyrhyn-
"probable" and "confirmed" breed-	chos) at four, and Red-breasted
ing evidence, as defined by Eagles	Mergansers and Red-eyed Vireos
and Cadman (1983), the same abun-	(Vireo olivaceus) at three. No other
dance index can be applied, but with	species was found breeding, with
even less confidence as to how	that level of certainty, at more than
meaningful it is. Yellow Warblers	two of the 49 sites investigated.
(<i>Dendroica petechia</i>) were found to	In the light of previously pub-
be at least "probable" breeders at six	lished literature, the abundance of

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certain species deserves further comment. Small groups of Common Mergansers (Mergus merganser), including an apparently mated pair, were seen on most days at North Caribou Lake, and, on the same lake, flocks of 20 or more Red-breasted Mergansers, as well as several apparently mated pairs, were regularly seen. The former species has bred at Nikip Lake (Cringan 1950), was described as "uncommon" on Little Sachigo Lake (Peterson 1985), but was not reported at Pickle Lake by James (1980) and only in small numbers by Lee (1978) at Big Trout Lake. Cringan (1950) is the only observer to have reported it as more common than the latter species.

We observed three adult and one immature Bald Eagles (*Haliaeetus leucocephalus*) at North Caribou Lake on 7 and 8 June 1985. According to several people familiar with the large lakes in the area, a number of occupied nests of this species have been found in previous years in the area, as recently as 1984 on Eyapamikama Lake, Kenora District. Perhaps surprisingly, neither James (1980) nor Lee (1978) saw Bald Eagles during their surveys, and Cringan (1950) saw only one.

Ruffed Grouse (Bonasa umbellus) were heard drumming at three different locations in the North Caribou Lake area, and one was seen by others several times on a wooded island in the lake. The fact that we found no Spruce Grouse (Dendragapus canadensis) in that area may simply reflect the fact that this species is not known to drum. It may well be that there are actually more of the latter than of the former in the area. Similar numbers of Ruffed Grouse have been reported from the Nikip Lake (Cringan 1950) and Little Sachigo Lake (Peterson 1985) areas, but none from Big Trout Lake (Lee 1978). James (1980) found several nests or broods near Pickle Lake, and McLaren and McLaren (1978) found a nest on an island in Little Sachigo Lake, but none north of Echoing Lake. This limited evidence, together with its scarcity further north (Cadman et al. 1987), suggests that the Ruffed Grouse is approaching the northern limit of its range at North Caribou Lake, although breeding has been confirmed at an isolated location at least 200 km further north.

The Swainson's Thrush (*Catharus ustulatus*) was the only thrush found in the North Caribou Lake area, but it was very widespread, occurring at 11 of the sites and on every day of the survey. One individual indicated by its behaviour that it had a nest nearby. Although Cringan (1950) found this thrush "much less common that the Hermit [*C. guttatus*]", other observers in that part of northwestern Ontario agree that it is one of the most common species in the area (e.g., Peterson 1985).

Philadelphia Vireos (Vireo philadelphicus) were almost as common as Red-eyed Vireos at North Caribou Lake, where two apparently mated pairs were found. The former is also known from the Big Trout Lake, Pickle Lake and Sachigo River areas (Lee 1978; James 1980; Peterson 1985), but the relative abundance of Red-eyed and Philadelphia Vireos is always difficult to determine because of the similarity between the songs of the two species. It is not inconceivable that some of the vireos which Cringan (1950) thought to be "presumably" Red-eyed might have been Philadelphia.

The Clay-colored Sparrow (*Spizella pallida*) was frequently heard in shrubs on the shores of Bearskin Lake. Until recently, this species was scarcely known to visit northwestern Ontario (James *et al.* 1976), but several records within the past decade (e.g., McLaren and McLaren 1981; Peterson 1985) suggest that this area is indeed within its breeding range.

Fox Sparrows (Passerella iliaca) were found singing at nine of the 49 locations in the North Caribou Lake area, making it the twelfth commonest species there. Its abundance at Big Trout Lake (Lee 1978) and its absence from Nikip Lake (Cringan 1950) and Pickle Lake (James 1980), as well as the pattern of records compiled for the Atlas of the Breeding Birds of Ontario, suggest that the population at North Caribou Lake is near the southern limit of its breeding range, except near James Bay. There is some discrepancy between the report by McLaren and McLaren (1978) which states, "The southernmost record was of a singing male near Lysander Lake" and their report (1981) which mentions, "Seven recorded in the Pickle Lake area (including singing males), " since Pickle Lake is slightly farther south than Lysander Lake.

Acknowledgments

The authors are indebted to a number of agencies whose financial support and logistical assistance made the survey possible. The Atlas of the Breeding Birds of Ontario, a project of the Federation of Ontario Naturalists and the Long Point Bird Observatory, was the rubric under which the study was carried out. Its Provincial Coordinator, Michael Cadman, was instrumental in making all of the preliminary arrangements. The Ontario Ministry of Natural Resources, particularly through the Ontario Geological Survey, whose base camp we shared at North Caribou Lake, proved cheerful hospitality, both en route to the study area and while there. as well as providing the absolutely indispensable ground transportation in the area and invaluable information on local birds. Jim Bartlett and his crew at North Caribou Lake deserve particular thanks for their interest and support. Austin Airways assisted by offering us reduced-fare transportation. The basic transportation and other expenses of the senior author were covered by a grant from the Natural Sciences and Engineering Research Council of Canada, provided by Trent University. Those of the junior authors were covered by Northern Scientific Training Grants from the Department of Indian Affairs and Northern Development, provided by Trent University.

Literature Cited

- Cadman, M.D., P.F.J. Eagles and F.M. Helleiner (eds.). 1987. Atlas of the Breeding Birds of Ontario. University of Waterloo Press, Waterloo, Ontario.
- Cringan, A.T. 1950. Notes on the birds of the Nikip Lake Area, Patricia. Unpublished report to the Ontario Department of Lands and Forests, Toronto
- Eagles, P.F.J. and M.D. Cadman. 1983. Ontario Breeding Bird Atlas Guide for Participants. Revised edition. Ontario Breeding Bird Atlas Management Committee, Toronto.
- Godfrey, W.E. 1986. The Birds of Canada. Revised edition. National Museums of Canada, Ottawa.
- James, R.D. 1980. Notes on the summer birds of Pickle Lake, Ontario. Ontario Field Biologist 34:80-92.
- James, R.D., P.L. McLaren and J.C. Barlow. 1976. Annotated Checklist of the Birds of Ontario, Royal Ontario Museum Life Sciences Miscellaneous Publications.
- Lee, D. 1978. An annotated list of the birds of the Big Trout Lake Area, Kenora District. Ontario Field Biologist 32:17-

36.

- Manning, T.H. 1952. Birds of the west James Bay and southern Hudson Bay coasts. National Museum of Canada Bulletin 125:1-114.
- McLaren, P.L. and M.A. McLaren. 1978. Studies of terrestrial bird populations in northwestern Ontario and northern Manitoba, June 1977. Unpublished report by LGL Limited for Polar Gas Project, Toronto.
- McLaren, P.L. and M.A. McLaren. 1981. Bird observations in northwestern Ontario, 1976-77. Ontario Field Biologist 35:1-6.
- Peterson, J.M.C. 1985. Birds of Little Sachigo Lake and Thorne-Sachigo Rivers, Ontario. Ontario Birds 3:87-99.
- Schueler, F.W., D.H. Baldwin and J.D. Rising. 1974. The status of birds at selected sites in northern Ontario. Canadian Field-Naturalist 88:141-150.
- Speirs, J.M. 1985. Birds of Ontario, Volume II. Natural Heritage/ Natural History Inc., Toronto.

Nest Building by American Crows

by Tom Reaume

Introduction

Various aspects of the nesting activities of the American Crow (*Corvus* brachyrhynchos) have been investigated. Good (1952) gave a general description of Ohio crows' nesting dates, tree species utilized and the materials of the nest. Emlen (1942) outlined his findings for colonially nesting crows in California, while Verbeek and Butler (1980) reviewed the benefits of helpers at the nests of Northwestern Crows (*C. caurinus*) in British Columbia. The cooperative breeding of American Crows was also described by Kilham (1984).

This article deals briefly with the spatial and temporal gathering process of the materials used in nest building by a pair of crows in Guelph, Wellington County.

Study area and methods The Guelph Agriculture Centre is located along Highway 6, about 1 km north of Woodlawn Road in

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Guelph. Situated on a modest rise, the Centre is surrounded by a mosaic of paved parking lots, lawn, weedy areas, hedgerows, orchards and shade trees. It is not a well-developed suburb. The nesting tree is in a moderately high-use area for vehicular and pedestrian traffic. Observations were made from a car about 50 m from the nest and the crows did not seem concerned about my presence.

The pair of crows (no helper) began nest building on or about 20 March 1987. Crows are most active at gathering materials in the morning, generally beginning shortly after sunrise. On 26 and 27 March I observed the gathering pattern of the pair for an hour each day. As the birds approached the nest I would try to determine what they were carrying in their bills. The locations and sequence were roughly marked on a hastily-drawn field map. The most distant locations from which the birds gathered nesting material were visible and distances from the nest were measured.

Results and discussion

Figures 1 and 2 indicate the areas and directions where the various materials were gathered by the pair of nest-building crows. The numbers (starting at 1) indicate the sequence in which the gatherings took place.

On 26 March 1987, I arrived at the nest site about 0545 h, several minutes before the birds left their coniferous roosting tree. The first trip to the nest was made at 0623 h, eight minutes after sunrise. A crow arrived with one twig in its bill. Since I did not see where the bird came from, this visit was not count-

1

ed. I began my count with the next visit, at 0629 h (number 1, Figure 1). This first observation period was concluded 64 minutes later, during which time a total of 18 nest-building visits had been carried out.

On the following morning, 27 March, the first nest visit was made simultaneously by both crows at 0623 h, ten minutes after sunrise. Two crows observed on the nest was recorded as two visits.

The first four visits were omitted, either because I could not tell from which direction the birds came, or because their bills were empty. Even with an empty bill, a crow's visit could last about the same length of time as a trip with nesting material. The birds appeared active on the nest platform.

I began recording visits at 0652 h and ended the observation period at 0754 h. During two of the trips made during this period no nesting material was brought; these were not counted as visits.

In a total of 126 minutes over two days a total of 31 nest-building visits were made by the crows. The average interval between visits lasted approximately four minutes. The longest interval was about 12 minutes. The average length of a visit was 93 seconds (range 44 to 145 seconds).

Single visits to the nest were much more common than double visits. During a double visit the crows rarely landed on the nest together and at most arrived about two minutes apart. Often one bird went directly to the nest as its mate perched nearby on a tree. Usually the second crow would fly to the nest about 30 seconds later. It is probable that the second crow to the nest

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Legend n =crow nest C =Guelph Agricultural Centre P =Parking Lot X =observation spot 7,8 =double visit, both crows to nest 3• =twig-gathering area 1 =grass-gathering area Figure 1: The loca- tion and sequence of 18 nest-material gath- erings by a pair of crows in 64 minutes, 26 March 1987.	$10^{14^{\circ}}$ $C 7,8 12,13^{\circ}$ $15^{6^{\circ}} 3^{\circ} 14^{\circ}$ $5 X 1^{4} 2$ $P 20m$	18*
Legend n =crow nest C =Guelph Agricultural Centre P =Parking Lot X =observation spot 7,8 =double visit, both crows to nest 3• =twig-gathering area 1 =grass-gathering area <i>Figure 2:</i> The loca- tion and sequence of 11 nest-material gath- erings by a pair of crows in 62 minutes, 27 March 1987.	$5^{*8^{*}}$ C $6,7$ a^{*} n^{*} a^{*} n^{*} a^{*} b^{*} b^{*} b^{*} a^{*} b^{*}	10,11

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dropped off its materials while the other bird finished building. Kilham (1984) noted that where yearlings (helpers) are engaged, they often left their twigs for an adult to build with.

On leaving the nest, a crow usually flew off in the direction from which it would subsequently return with new material (grass, bark, leaves or a twig). Its mate, if perched nearby, would follow. A few structured bouts of caws were heard. No territorial disputes interrupted nest building, even though another active nest under construction was situated about 280 m away in the Marymount Cemetery.

As Figures 1 and 2 show, the crows usually gathered material from a different direction on each successive trip. After a nest visit a crow sometimes headed out 180° from the direction in which the previous trip was made. Some ground areas and certain trees were visited more than once in the course of an hour. Materials were gathered from locations ranging from 10 to 190 m away. The nesting tree itself was not a source of nest material.

Although dead twigs were occasionally gathered from beneath a deciduous tree, the usual practice was to break off live twigs from deciduous trees. Two pairs of Florida crows with helpers gathered sticks and other materials from the ground (Kilham 1984), although no mention was made of the birds breaking off live twigs. The crows I observed rarely obtained coniferous twigs. Deciduous twigs were procured in a characteristic fashion. The crow would land in the lower half of a tree and begin hopping from branch to branch looking for

and then testing suitable twigs with a tug of its bill. Several twigs may be tested before one is broken off.

Grass carried in by the crows was of two types: cultivated lawn fragments, which would be in the form of a brown, roundish clump about 6-8 cm wide, and wild grasses which would extend out about 10 cm on either side of the bill like streamers. In one instance a crow walked and ran from clump to clump pulling and tearing off bits of wild grass 31 times before enough for a nest visit was obtained. Bark was stripped from fallen logs or living trees. Decaying leaves were gathered from the ground. One vine, estimated at 1.5 m long, was brought to the nest.

Conclusion

In theory and also in the name of efficiency the crows could make successive trips to one close tree to obtain twigs, but did not. The need for a mixture of nesting material obviously accounts for some of the variation in collecting strategy. However, by changing their direction and distance often, the crows can also "keep an eye" on their territory. This level of organization permits them to fend off intruding conspecifics and capitalize on unexpected food sources over a wider area.

Literature cited

- Emlen, J. T. Jr. 1942. Notes on a nesting colony of Western Crows. Bird-Banding 13(4):143-154.
- Good, E. E. 1952. The life history of the American Crow Corvus brachyrhynchos Brehm. Ph.D. dissertation. Ohio State University.
- Kilham, L. 1984. Cooperative breeding of American Crows. Journal of Field Ornithology 55:349-356.
- Verbeek, N. A. M. and R. K. Butler. 1980. Cooperative breeding of the Northwestern Crow Corvus caurinus in British

Identification of Redshouldered, Broad-winged, Cooper's and Northern Goshawks in Immature Plumage

by Bruce W. Duncan

Introduction

Adult Red-shouldered Hawks (Buteo lineatus), Broad-winged Hawks (B. platypterus), Cooper's Hawks (Accipiter cooperii) and Northern Goshawks (A. gentilis) differ distinctively in plumage, while immatures are quite similar to one another. All four species can be seen in Ontario during spring, summer and fall and all but the Broadwinged in winter. However the best opportunities for viewing them are certainly during migration at one of the major hawk lookouts along the shorelines of Lakes Erie and Ontario, Beamer Conservation Area near Grimsby in the spring and Point Pelee, Holiday Beach, Hawk Cliff and Hamilton in the fall are all excellent sites from which to see these and other hawk species which occur in Ontario.

Although all four birds are members of the family *Accipitridae* (the true hawks), two the Red-shouldered and the Broad-winged, are included in the subfamily *Buteoninae* (hawks with fairly long, broad wings and short, wide tails) while Cooper's and Northern Goshawks are in the subfamily *Accipitrinae* (hawks with shorter, rounded wings and longer, narrower tails). In immature plumage, all four are generally brown above and whitish below, have brown streaks on the breast and belly, and a regularly banded tail. As they fly by, distinctive features can be noted.

Size and Shape

Overall Features

All species of hawks exhibit a difference in size between male and female, with females being larger. Among the four species discussed in this article, this reversed sexual size dimorphism is most pronounced in the Cooper's Hawk, less so in the Northern Goshawk, and is hardly noticeable in Red-shouldered and Broad-winged Hawks. Thus, the length of a male Cooper's and a male Northern Goshawk is comparable to that of a Red-shouldered. Female Northern Goshawks are larger than all the others.

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These size distinctions are helpful when the observer has some familiarity with the species or when more than one bird is in the sky at once. Against a vacant sky however, birds can expand or contract remarkably and their size depends to some degree on the mind-set of the person watching. It is also useful to remember that hawks appear smaller against a clear blue sky than against white clouds.

Of the four species, the slimmest is certainly the Cooper's Hawk. It also appears to have the shortest wings and the longest tail, and with its relatively large head, gives one the impression of a flying cross or pheasant (Figure 1). At the other extreme is the Broad-winged Hawk, with proportionally much longer wings and shorter tail and a very chunky look to the body (Figure 2). These two are difficult to confuse.

Northern Goshawks, on the other hand, are the most buteonine of the Accipiters, while Red-shouldered Hawks are the most accipitrine of the Buteos. Ignoring flight style for the moment (which, in my opinion, make Red-shouldereds and Cooper's more difficult to separate), Northern Goshawks (Figure 3) are heavier-bodied than Red-shouldereds (Figure 4) and as they pass by show their considerably longer tails.

Tails

It is not just the length of the tail feathers themselves but also the narrowness of the tail that emphasize tail length in Accipiters. Buteonine tails, even when folded on gliding birds, are wider and shorter.

Cooper's Hawk is the only one of the four species with very pro-

nounced, rounded tip to the tail (Figure 1). In fact, on many birds the tail appears to have a lump sticking back out the middle between shorter outer tail feathers. Northern Goshawk tails may be somewhat wedge-shaped, while Broadwingeds and Red-shouldereds have very slightly rounded or squared tips when folded and smoothly rounded ends when spread. Also, on soaring Buteos the spread tails are wider and make larger arcs than do those of Accipiters. Although I haven't measured them. I suspect that single tail feathers of Buteos are wider than those of similarly sized Accipiters.

Wings

Wings of both Broad-winged and Red-shouldered Hawks appear longer than those of Cooper's and Northern Goshawks, especially fully outstretched as the birds soar. It is the section of wing from the body to the "wrist" (the point where the wing bends back) that seems longer in the Buteos than in the Accipiters. When gliding from one thermal to the next, Broad-wingeds tuck their wings slightly and thus become a very "neat-winged" bird; the "hand" of the wing forms a triangle, the trailing edge is quite straight (emphasized by a dark edge band) and there is almost no "fingering" (i.e., separated primaries) at the wing tip (Figure 2). None of the other species looks this way. Dunne et al. (1982) note that when soaring. Red-shouldereds angle their wings slightly forward as if reaching out for something, while Broad-wingeds hold theirs virtually at right angles to the body.

The shorter wings of Cooper's



Figure 1: Immature Cooper's Hawk, Point Pelee, Essex. Photo by *Barry Cherriere*.

Hawks and Northern Goshawks are not identical. Goshawks have proportionally longer wings and according to Clark (1984) they are also more tapered (Figure 3), while the wings of Cooper's Hawks are more rounded.

Markings

Dorsal

Although these four species do not often show their backs to us landbound watchers, birds flying low in early morning and late evening and those banking as they circle sometimes allow us to see their dorsal surfaces. The height of the Niagara Escarpment at Beamer Conservation Area allows one to look down on hawks passing by Grimsby.

All four species, although basically brown above, show clear differences. Northern Goshawks are palest and have an even paler head; Cooper's Hawks appear dark brown on the back and tawny- or rufousheaded (see Duncan (1983) for a more detailed discussion of this). The white eyeline of the Northern Goshawk can be seen even at a distance but many immature Broadwingeds and Red-shouldereds share this mark (Clark 1984). On most Northern Goshawks, however, a narrow white wingbar crosses the secondary coverts (Figure 3). This is a good field mark.

The Broad-winged Hawk's back and wings are a uniform dull, dark brown, with a little white speckling (not always visible) and a paler brown towards the front. The head is also slightly paler. Red-shouldered Hawks, however, while basically dull brown, tend to have some rufous along the leading edge of the wing - hints of the rich. red "shoulders" of the adults. They also show the lovely, translucent crescents (what used to be called "wing windows") in the primaries adjacent to the black tips of the feathers (Figure 4). These crescents are visible from above and below and are classic field marks. Do not confuse

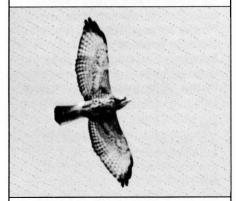


Figure 2: Immature Broad-winged Hawk, Point Pelee, Essex. Photo by Barry Cherriere.

these crescent, moon-shaped bright areas with pale, squarish-shaped areas in the primaries of many other species (e.g., Sharp-shinned Hawk (A. striatus), Red-tailed Hawk (B. jamaicensis) and especially Broadwinged Hawk).

Ventral

"Brown streaks on white" describes all four of the species' body markings below. Both immature Northern Goshawks and Cooper's hawks are sparsely marked on the ventral surface but the Cooper's streaking ends on the belly, while that of the Northern Goshawk's continues onto the undertail coverts. The Northern Goshawk's continues onto the undertail coverts. The Northern Goshawk's streaks are wider and thus make the bird appear more heavily marked; the base colour is also creamy rather than white as in Cooper's. Red-shouldered and Broad-winged Hawk streaking is generally confined to the chest and belly and varies in amount. Broad-wingeds, however, often have an unmarked white patch

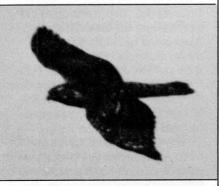


Figure 3: Immature Northern Goshawk, Point Pelee, Essex. Photo by *Barry Cherriere*.



Figure 4: Immature Red-shouldered Hawk, Beamer Conservation Area, Grimsby, Niagara. Photo by *Barry Cherriere*.

on the chest with streaking all around; not so in Red-shouldereds or the two Accipiters.

The streaking extends onto the wings in Red-shouldereds, as it does in Cooper's and Northern Goshawks. The wings of the Broadwinged Hawk are very sparingly marked and appear quite whitish, emphasized by an outline of black feather tips and a neat, black trailing edge. The flight feathers of the other three are barred and mottled but the translucent wing crescents of Red-shouldereds separate them from Cooper's and Northern Goshawks.

Tail markings will help separate each of these species. In Red-shouldereds and Broad-wingeds, the tail is pale brown with narrow, blackbrown bands — about half-a-dozen are visible, in whole or in part. The dark band closest to the tip of the Broad-winged's tail is double the width of the others; it is the same width on Red-shouldereds. Both these birds have a pale, narrow bar at the very tip of the tail. Cooper's and Northern Goshawks, have wider dark bars on the tail and a distinctly whitish tip — in Cooper's it is 1 cm or wider; in Northern Goshawks, it is much narrower. This wide, white band of the Cooper's is another good field mark.

Although difficult to see, it is useful to know that the banding of Northern Goshawk tails is wavy or zigzag and each dark band has a narrow (about 1-2 mm wide), buffy edge. This is the only species of the four with a tricoloured tail.

Flight

All of these species do some flapping and gliding as well as thermal soaring, depending upon weather conditions. Broad-wingeds try to soar and glide with as little flapping as possible, while Red-shouldereds quite frequently flap their wings as they glide along. Consequently, the latter are readily mistaken for Accipiters, particularly Cooper's Hawks. However, Cooper's seem to flap more rapidly and with somewhat stiffer wings, while Red-shouldereds have a slower, looser flap. Another stiff-winged flapper but one with a slow beat is the Broadwinged Hawk.

The flight of Northern Goshawks is most difficult to describe. It may be intermediate in style between the Cooper's and Red-shouldered because I have mistaken Northern Goshawks for both. Since it is the heaviest of the species under consideration and has the highest wing loading, the flight looks heavy, as if the bird definitely is working to stay in the air. Female Cooper's most nearly approach this appearance of hard work in flight.

Broad-winged Hawks are most often seen soaring in kettles, while Cooper's and Northern Goshawks are usually spotted flapping and gliding. Red-shouldered Hawks soar and glide, but also spend considerable time flapping and gliding. Keep in mind, however, that they can fly both ways — and do.

Timing of Migration

As mentioned earlier, in southern Ontario it is easiest to see all four of these species during the spring and fall migrations. Broad-winged Hawks are by far the commonest, appearing by the thousands in both seasons, with Red-shouldereds second (an average of about 700 each spring at Beamer and 550 each fall at Holiday Beach). Cooper's Hawks come third (160 in spring at Beamer and 350 during the fall at Holiday Beach) and Northern Goshawks last (fewer than 50 are recorded annually in spring and fall, although more occur every ten years during "invasions").

Since all species do not migrate at the same time, it is useful to know when to expect each. I do not have information for areas north of the lower two Great Lakes (Erie and Ontario) but can provide dates based on data from the Hawk Migration Association of North America counts at Beamer Conservation Area and Holiday Beach (1977-1985). The dates listed are based on the period during which about 85-90% of the migrants are seen and counted (see Table 1).

When one of these brown and white immature hawks comes along, watch it carefully as it approaches, flies over and recedes into the distance. Observation at each stage may reveal features disguised by Table 1: Dates of migration for four hawk species in southern Ontario.

SPECIES

Northern Goshawk

Cooper's Hawk

Red-shouldered Hawk

Broad-winged Hawk

SPRING

1 March-2 April no distinct peak 15 March-2 May peak about 10 April 10 March-5 April peak about 23 March 17 April-5 May peak about 26 April FALL

25 September-30 November no distinct peak 20 September-25 October peak about 4 October 6 October-15 November peak about 19 October 7 September-26 September peak about 15 September

perspective, distance of lighting at other stages. A little analytical observation by methodically recalling the characteristics to look for will pay dividends in polishing identification skills. Finally, there are things to examine which are not yet well studied in North America. The shape and proportions of the "arm" and "hand" parts of the wing during flight and the use of these parts while flapping are some. It is one thing to say that a Northern Goshawk has a heavy flap but another — and much better — to describe it in terms of movement of each portion of the wing. I recommend these areas of study to keener observers.

Acknowledgements

My thanks to all of my Hawk Cliff friends who have shown me these beautiful birds so many times over the years and to all the faithful watchers at Beamer who have shared with me many identification details.

Literature Cited

Clark, W.S. 1984. Field identification of Accipiters in North America. Birding 16:251-263.

Duncan, B.W. 1983. Identification of Accipiters in Ontario. Ontario Birds 1:43-49.

Notes

Communal Sheltering Under Snow by American Tree Sparrows

While birding at the "Lighthouse Crescent" field station of the Long Point Bird Observatory on Old Cut Boulevard in Long Point, Regional Municipality of Haldimand-Norfolk on 14 February 1987, I noticed an apparent absence of American Tree Sparrows (*Spizella arborea*) in the red osier dogwoods (*Cornus* stolonifera) they had been frequenting all winter. As overnight temperatures had dipped to -18°C with a wind chill factor of -32°C, and a bitterly cold wind made the -7°C at

Dunne, P., D. Sibley, C. Sutton and F. Hamer. 1982. Field identification. Newsletter of the Hawk Migration Association of North America 7:8-9.

noon still feel much colder. I assumed that the sparrows were sheltering in some of the thicker trees and shrubs nearby, but was unable to detect a single sparrow there, either. At 1340 h, as I crossed the small marsh on the property, I was surprised to note one American Tree Sparrow on open ground appear to materialize about 5 m ahead of me and then disappear again almost instantly. A closer approach stimulated the emergence of 18 American Tree Sparrows and one Song Sparrow (Melospiza melodia) from two small caverns under the snow, formed by the accumulation of hard-packed snow on archedover clumps of grass at the foot of the osiers. As I backed off, the sparrows crowded back into their tiny shelters, virtually filling all available space.

Although overnight roosting under snow in birds is best known in gallinaceous species, such behaviour is becoming increasingly well known in Eurasia (Sulkava 1969; Novikov 1972; Marjakangas 1981: Gladwin 1985), where several species appear to roost under snow frequently, including such species as Snow Bunting (Plectrophenax nivalis) and Common Redpoll (Carduelis flammea) also found in North America. There is little reason to suspect that such behaviour is less frequent in North America, where Thompson (1934) reported it in one American Tree Sparrow previously. I have previously observed Song Sparrows emerging from a communal under-snow roost on Prince Edward Island (McNicholl 1979), and watched another Song Sparrow

enter a vole-like burrow under the snow just before dusk near St. Williams, Regional Municipality of Haldimand-Norfolk, during the Christmas Bird Count at Long Point in 1985. Daytime under-snow sheltering has been less well documented, but Bagg (1943) observed Snow Buntings sheltering under snow throughout a day of -20°F temperatures in Massachusetts, and Cade (1953) observed Common Redpolls foraging for seeds under snow in Alaska.

While the very act of sheltering in a cavity conserves energy in cold weather (Kendeigh 1961), communal sheltering could enhance such energy savings (McNicholl 1979). Although American Tree Sparrows are generally gregarious outside the breeding season, they usually roost solitarily (Baumgartner 1968), and the only previous record of this species under snow involved roosting by a single bird (Thompson 1934). Thus, the birds I observed at the "Lighthouse Crescent" station appear to have been under sufficient cold stress to induce a breakdown of normal individual distance (Beal 1978). Communal roosting and sheltering in especially harsh weather conditions may be more characteristic of species at the northern edges of their winter ranges than species whose winter range encompasses such conditions on a more regular basis.

Marjakangas (1981) commented that snow roosting by small birds remains poorly known. The vast region covered by Ontario embraces a wide variety of winter conditions to which birds must adapt, offering Ontario birders a good opportunity to extend the interesting studies of Sulkava (1969) and Novikov (1972). Perhaps the behaviour of birds in harsh winter conditions could be considered as a future *Ontario Birds* "topic of note".

Literature cited

Bagg, A.M. 1943. Snow Buntings burrowing into snowdrifts. Auk 60:445.

Baumgartner, A.M. 1968. Spizella arborea (Wilson), Tree Sparrow, pp. 1137-1165. In A.C. Bent and collaborators. Life histories of North American cardinals, grosbeaks, buntings, towhees, finches, sparrows, and allies. Edited by O. L. Austin, Jr. United States National Museum Bulletin 237.

Beal, K.G. 1978. Temperature-dependent reduction of individual distance in captive House Sparrows. Auk 95:195-196. Cade, T.J. 1953. Sub-nival feeding of the Redpoll in interior Alaska: a possible adaptation to the northern winter. Condor 55:43-44.

Gladwin, T. 1985. Skylarks and Yellowhammers roosting under snow. British Birds 78:109-110.

Kendeigh, S.C. 1961. Energy of birds conserved by roosting in cavities. Wilson Bulletin 73:140-147.

Marjakangas, A. 1981. Snow Buntings, Plectrophenax nivalis, burrowing in the snow. Ornis Fennica 58:89-90.

McNicholl, M.K. 1979. Communal roosting of Song Sparrows under snowbank. Canadian Field-Naturalist 93:325-326.

Novikov, G.A. 1972. The use of under-snow refuges among small birds of the sparrow family. Aquila 13:95-97.

Sulkava, S. 1969. On small birds spending the night in the snow. Aquila 7:33-37.

Thompson, S.L. 1934. Unusual roosting of Tree Sparrows. Canadian Field-Naturalist 48:142-143.

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Fleas Collected from Cliff Swallow Nests in Ontario

Introduction

The Cliff Swallow (*Hirundo pyrrhonota*) nests widely in North America on natural and man-made structures. Fleas are associated with the nests of this swallow, and must feed repeatedly on the birds during the nesting season. When Cliff Swallows migrate south for the winter, they leave behind teneral adult fleas which overwinter in their cocoons. Five species of fleas are recognized as parasites of the Cliff Swallow, all of which belong to the same genus: *Ceratophyllus petrochelidoni* Wagner, *C. scopulo*- rum Holland, C. arcuegens Holland, C. calderwoodi Holland and C. celsus Jordan. The latter species, C. celsus, is generally found in the southern and eastern United States and eastern Canada on Cliff Swallows, but is also associated with the Bank Swallow (*Riparia riparia*) in British Columbia and Alaska.

As part of my ongoing research on Cliff Swallow fleas, I was interested in obtaining more complete distribution records for each species. However, since I restrict my own collecting to outside the breeding season and because of my teaching commitments in Winnipeg from September to April, my field trips outside Manitoba are limited. Therefore when I learned of the *Atlas of Ontario Breeding Birds*, I immediately contacted Mike Cadman and requested the assistance of the Regional Coordinators for the atlas. The response was overwhelming and I herein report the results of collections from Cliff Swallow nests in Ontario.

Results and Discussion

Fleas and/or nest contents were collected from 12 locations across Ontario, from 10 groups of collectors. Eleven of these locations produced fleas, 1116 of which were prepared for examination. All specimens examined were *Ceratophyllus celsus.* The data on each collection are presented in Table 1, and localities identified in Figure 1.

The material collected during this study is an important contribution to our knowledge of *C. celsus*. This species was known previously in Ontario only from Smith Lake in Algonquin Park, Nipissing District, and represented by only two females, collected from a Roughwinged Swallow (*Stelgidopteryx ruficollis*) in 1950 (Holland 1985).

A more complete account of the specimens from this study will appear at a later date and will include an examination of morphological variation, and zoogeographical analysis in relation to other Cliff Swallow flea species. My primary objectives for this note

Table 1: Collection data on *Ceratophyllus celsus* from Cliff Swallow nests in Ontario.

LOCALITY	DATE	NUMBER OF SPECIMENS		
		Males	Females	Collectors
Clinton, Huron	Feb. 1986	119	111	T.J. Lobb
Walton, Huron	Feb. 1986	107	108	T.J. Lobb
Peterborough, Peterborough	14 Aug. 1985	39	10	T.D. Galloway
Arden, Frontenac	17 Feb. 1986	132	128	M. Biro
Lake Couchiching, Simcoe	28 Jan. 1986	5	3	B. Clements
0.5 km north of Gravenhurst, <i>Muskoka</i>	Mar. 1986	2	4	R.L. Bowles
1 km east of Gravenhurst, <i>Muskoka</i>	10 Mar. 1986	10	12	R.L. Bowles
Oxtongue Lake, Haliburton	1 Mar. 1986	27	18	R.G. Tozer
Ottawa, Ottawa-Carleton	15 Nov. 1986	142	66	G. and D. Hanes
Sudbury, Sudbury	23 Apr. 1986	16	35	C. Blomme
Lac Ste. Therese, Cochrane	23 Feb. 1986	12	10	R. Cunningham
Atikokan, Rainy River	8 May 1986	0	0	D. Elder

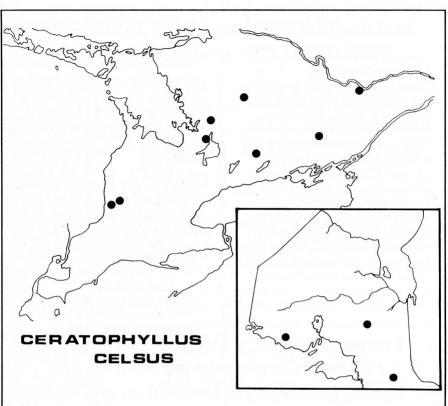


Figure 1: New locality records for *Ceratophyllus celsus* collected from Cliff Swallow nests in Ontario.

were to gratefully acknowledge the time and effort of the collectors across Ontario, to report the results of their collections, and draw attention to an additional application of data available in the *Atlas of Ontario Breeding Birds* (Cadman *et al.* 1987).

Literature Cited

- Holland, G.P. 1985. The fleas of Canada, Alaska and Greenland (Siphonaptera). Mem. Entomol. Soc. Can., No. 130; 631 pp.
- Cadman, M. D., P. F. J. Eagles and F. M. Helleiner (eds.). 1987. Atlas of the Breeding Birds of Ontario. University of Waterloo Press, Waterloo, Ontario.

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An Observation of an Albino Rufous-sided Towhee (*Pipilo erythrophthalmus*)

While birding the paths amongst the low willows and scrub grasses north of Tilden's Woods, Point Pelee National Park, Essex Co., on 3 May 1987, at approximately 1430 h, my wife and I observed a small flock $(30\pm)$ of White-throated Sparrows (Zonotrichia albicollis). Within a few minutes, we noted a larger white bird, foraging and moving with the flock. The bird's crown was pure white, while the rest of the body was a "smudgy", slightly greyish-white. After further observation, we noted that there was a slight ochre-brown wash of colour on its side flanks. The bird's foraging behaviour — snatching at the leaves, jumping into the air, tail cocked up, scratching again — led us to believe that it was a towhee. A few minutes later, a normally plumaged Rufoussided Towhee was seen in the flock. Its identical size and body shape confirmed to us that the "white" bird in question was indeed an albino Rufous-sided Towhee.

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Frequent Cowbird Parasitism of House Finches (*Carpodacus mexicanus*) at Guelph, Ontario

Previous literature (e.g., Bent 1968; Friedmann *et al.* 1977) indicates that the House Finch (*Carpodacus mexicanus*) is rarely parasitized by the Brown-headed Cowbird (*Molothrus ater*) over most of its range. In Ontario, 27 of 64 (42.2%) nest records cited by Peck and James (1987) were subject to cowbird parasitism. The present note reports on an Ontario population of House Finches in which the incidence of cowbird parasitism is high.

Eight House Finch nests were discovered in residential areas in Guelph, Wellington County, between April and June 1986 and observed over the egg laying or incubation period. Seven (88%) of the nests were parasitized. If nests found during the nestling stage are included, 10 of 13 (77%) nests were parasitized. Although these samples are small, they indicate a high frequency of parasitism in Guelph (95% C. I. = 100% to 58% using nests observed during the egg laying, incubation, or nestling stage).

One nest contained four cowbird eggs and no House Finch eggs. The width and length of these cowbird eggs, the distribution and darkness of spotting, and background colour suggested that three separate cowbirds had parasitized the nest. This nest was active on 19 April 1986, a date when few passerines have begun nesting in Ontario. Female cowbirds may have had few or no other nests to parasitize at this time and were thus forced to lay in this single nest.

House Finches in Guelph may be parasitized more frequently than in other areas of North American because they select different sites for nesting. House Finches in Guelph predominantly nest in evergreen trees (Graham, in press), while House Finches in other areas nest in a wide variety of sites (Bent 1968). Evergreen trees may be more intensively searched for nests by female cowbirds than other sites. The Chipping Sparrow (Spizella passerina) also nests predominantly in evergreen trees (Reynolds and Knapton 1984) and is frequently parasitized by the cowbird (Peck 1974).

Literature Cited

- Bent, A. C. 1968. Life Histories of North American Cardinals, Grosbeaks, Buntings, Towhees, Finches, Sparrows and Allies. United States National Museum Bulletin 237.
- Friedmann, H., L. F. Kiff, and S. I. Rothstein. 1977. A further contribution to knowledge of host relations of the parasitic cowbirds. Smithsonian Contribution to Zoology 235.
- Graham, D. S. In press. House Finch nestsite selection at Guelph, Ontario. Condor.
- Peck, G. K. 1974. Ontario Nest Record Scheme Eleventh Report. Royal Ontario Museum, Toronto.
- Reynolds, J. D. and R. W. Knapton. 1984. Nest-site selection and breeding biology of the Chipping Sparrow. Wilson Bulletin 96: 488-493.

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Book Review

A Seasonal Checklist of the Birds of the Long Point Area. 1985. By *Vic Fazio, Dave Shepherd & Terrie Woodrow*. First Edition. Long Point Bird Observatory, Box 160, Port Rowan, Ontario NOE 1M0. 12 pp. fold-out, \$1.00.

This list summarizes the seasonal status of 331 species of birds known to have occurred in the Long Point region. Based largely on Long Point Bird Observatory data, it provides a long overdue revision of a similar list published in report form by LPBO in 1969 and a more basic checklist produced by the Ontario Ministry of Natural Resources in 1976. Not only is it updated, it also incorporates information from the surrounding region — a welcome addition considering the ornithological richness of such areas as Turkey Point, Backus Woods, Spooky Hollow, and St. Williams Forestry Station.

On the cover, a map of the study area shows most of the roads in detail. Apart from the forgivable omission of a scale and compass reference point, the map would have benefitted greatly if a few place names other than just Port Rowan and Turkey Point had been included. County and concession roads could also have been identified but. as is the case in so many checklists, space seems to be the overriding limiting factor. For the more serious birder, the off-shore boundaries of the region could perhaps have been defined as well.

For "ticking" purposes, three blank columns are provided alongside the list of species. Space is at a premium, however, making it a little difficult to neatly tick off species. Birders would probably also have liked to have been provided with sufficient space in which to note dates of visits.

I can find only two errors. The dates for Smew are incorrectly given as 26 February-6 March 1960. The record should read 9-10 December 1973. "LeConte's" should be two words, honouring John Le Conte.

The nomenclature and taxonomic order adhere to the most recent AOU revisions. So-called "hypothetical" species are not included in the main body of the list, as is the usual case. Instead, they are listed separately as "additional" species, pending acceptance by the Ontario Bird Records Committee. The authors apparently overlooked the fact that Band-tailed Pigeon has been accepted by the Committee. Passenger Pigeon, though known to be a former Long Point resident, is perhaps understandably excluded from the list. On the other hand, Trumpeter Swan could just as easily have been omitted, especially since no annotation is provided. One could also argue for deletion of selected hybrids and phenotypes, or at least for a complete and consistent treatment of these forms.

Several codes are used to indicate frequency of nesting and to identify potential difficulties that might arise with identification and detectability. While these codes may be a little tedious to interpret, I see their value for the most part. My main criticism concerns the omission of definitions for nesting frequencies.

Seasonal occurrences and abundances are graphically depicted, providing a very efficient and effective treatment. As such, the checklist is a joy to use. However, I am disappointed with the vague definitions given for the various levels of abundance and frequencies of occurrence. For example, a rare species is defined as one which ...may be present annually but found infrequently; usually difficult to find". The other definitions are equally vague. Despite the overall goals of a checklist, I somehow expected something a little more specific, particularly considering LPBO's wealth of statistical information. Admittedly, a checklist is not an appropriate scientific forum in which to publish detailed information. Still, the checklist's bar graphs seem to infer a validity which, being based on highly subjective criteria, may actually be unfounded. Without proper definitions, all kinds of arguments

can be made with regard to interpretation of the seasonal abundances provided. Amongst other things, I wonder whether Great Blue Heron is truly abundant during migration, why several species of diving ducks are not considered abundant in the fall, whether Glaucous Gull is indeed common in winter and spring, whether Northern Bobwhite has in fact been recorded during every week of the year, and whether Bobolink is abundant in late summer. Furthermore, it is not clear whether the bar graphs can be used to draw comparisons between the abundances of individual species. For example, are Bobolinks more abundant in late summer than at other times of the year? Or can the graph also be interpreted to mean that Bobolinks, in late summer, are as abundant as Red-winged Blackbirds? Of course the former interpretation is correct, but the latter also seems to be inferred. Admittedly, this is a problem which is typical of bar-graph lists in general.

I also think that the authors have been overly generous in their designation of the "accidental" (i.e., "out of season") status. There are several instances in which the "occasional" or "rare" status would seem to have been a more appropriate description. For example, Merlin is presented as being "accidental" in the first week of April, but thereafter its status very oddly and abruptly switches to "uncommon" through the remainder of its spring migration. It is difficult to understand how the early April record could possibly be considered "out of season".

The "erratic" code may also have been too liberally applied, in my

opinion. I would feel more comfortable if it had been reserved only for irruptive species; otherwise it is redundant and confusing in relation to the "accidental" and "occasional" annotations displayed on the bar graphs. For example, based on six records. Little Blue Heron is considered "accidental" on the graph as well as being coded "erratic". Conversely, there are only five records for American White Pelican. but it is not considered "erratic". though it is considered "accidental". The authors might feel that Little Blue Herons tend to wander and hence, are more nomadic than American White Pelicans. However, their data do not clearly support this. There seem to be several more inconsistencies of this type. These can only be resolved if definitions and criteria are detailed.

Finally, the confines of the region, as displayed on the cover map, have not been correctly applied in the case of a few breeding species. For example, Red-bellied Woodpecker has never actually been confirmed as breeding in the study area, yet the authors consider it to be a regular breeding species. Also, Common Nighthawk is indicated as a regular breeder and common in summer; this is surely not an accurate assessment of its breeding status within the study area.

Apart from all this nit-picking, the checklist appears to be complete, well produced and is undoubtedly the result of a great deal of hard work. It is a vast improvement over previous lists for the Long Point area. While I feel that the provision of one additional page of text could very well have addressed and set to rest most of the interpretational problems that are indicated above, all in all, the list unquestionably meets most of the needs of Ontario's birding community. As such, it is a definite "must" for anyone birding in the Long Point area. Indeed, birders elsewhere in Ontario may find it valuable for comparative purposes. And the cost is certainly not prohibitive!

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OFO Announcements

Field Trips

6 February 1988, Saturday: EAGLES AT PETROGLYPHS PROV. PARK. Leader: Geoff Carpentier (705) 743-8594. Meet at the Park gate at 9:30 AM. From Peterborough take Hwy. 28 north 50 km to Woodview. Turn right on Northey's Bay Rd. and go 11 km to the Park gate.

29 April-1 May 1988, Friday to Sunday: PELEE ISLAND. Leaders: Chip & Linda Weseloh (416) 485-1464. Meet at ferry dock at Kingsville at 5:30 PM Friday. Accommodation at Mill Point Lodge (approx. \$48 double occupancy, Bed & Breakfast). Saturday morning start may be possible. Return on 2:00 PM ferry, Sunday. Reservations essential by April 1st — call Chip for details.

7 May 1988, Saturday: BIRDING FOR BEGINNERS, TORONTO ISLAND. Leader: Glenn Coady (416) 596-8109. Meet 7:45 AM at Toronto Island ferry terminal.

10-11 September 1988, Saturday & Sunday: CORNWALL DAM GULL OUTING. Leader Bruce DiLabio (613) 729-6267. This trip will be combined with a visit to Hoople Creek for shorebirds. Details to follow.

24 September 1988, Saturday: OFO PELAGIC TRIP. Leader: Bob Curry (416) 648-6895. M. V. "Macassa Bay" leaves Hamilton Harbour at 8:00 AM. Meet at the dock at the foot of Bay Street North by 7:45 AM with a lunch and plenty of warm clothing. Return 4-4:30 PM. Only 100 tickets available at \$40 per person.

5-8 October 1988, Wednesday-Saturday: MARATHON. Leader: Alan Wormington (519) 326-0687. Fall migration North of Superior. List of birding spots between Thunder Bay and Marathon will be available for those wishing to spend an entire week in the area. Details to follow.