Table 1: Dates of migration for four hawk species in southern Ontario.

| SPRING | FALL |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| l March-2 April no distinct peak | 25 September-30 November no distinct peak |
| 15 March-2 May peak about 10 April | 20 September-25 October peak about 4 October |
| 10 March-5 April | 6 October-15 November peak about 19 October |
| 17 April-5 May peak about 26 April | 7 September-26 September peak about 15 September |
| | 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 |

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

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

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. Omis 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. Aguila 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 |

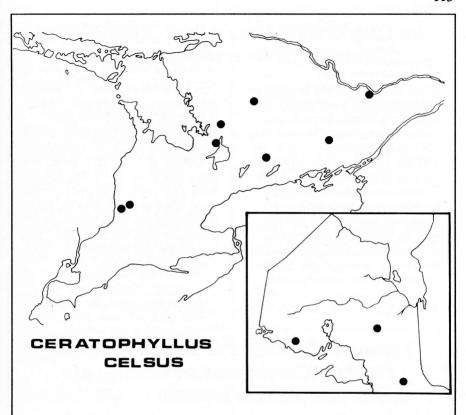


Figure 1: New locality records for Ceratophyllus celsus collected from Cliff Swallow nests in Ontario.

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±) 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 observa-

tion, 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 1MO. 12 pp. foldout, \$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.