J. Murray Speirs: Distinguished Ornithologist

J. Bruce Falls

Murray Speirs has made important and lasting contributions to ornithology and natural history in Ontario. He is the recipient of the OFO Distinguished Ornithologist Award for the year 2000.

Born in 1909, Murray was fascinated by birds as a lad; at age six he identified his first Ruby-crowned Kinglet. In his teen years, he was one of the most active birdwatchers in Toronto and by age 15 he was keeping records of the species and numbers of birds he saw, a practice he kept up until he was 90. His interest in science took him through **Physics** the **Mathematics** and course at the University of Toronto but he soon turned his quantitative skills to Fluctuations in the Number of Birds in the Toronto Region, the subject of his Master's thesis in the Department of Zoology. For this study, he gathered together field notes and publications of many other observers along with his own, an approach that was to characterize many of his later projects. His doctoral studies with Dr. Charles Kendeigh, a well-known ecologist at the University of Illinois, were interrupted by a stint as meteorologist with the RCAF during World War II. He completed his PhD thesis on *Local and Migratory Movements of the American Robin in Eastern North America* in 1946.

When Murray Speirs began his bird studies, it was customary to collect specimens. While he acknowledged the value of museum collections, his own efforts were directed to precise field identification aided by a keen ear for the distinctive sounds of different species. This was the basis of his quadrat censuses. He was a pioneer in Ontario in focusing his research on populations and communities of birds in different habitats. In 1937, with other young birdwatchers of the Ornithological Toronto Field Group, he conducted the first counts of birds in a surveyed quadrat at York Downs near Toronto. Following his doctoral studies, he carried out bird surveys for the Federal and Provincial Governments in Northern Ontario (effects of DDT spraying) and on the Georgian Bay Islands. After he and his wife, Doris Huestis Speirs, moved to Pickering in 1948, he began serious population studies of the birds of what was then Ontario County (now part of Durham



Figure 1: J. Murray Speirs in 1985. Photo by Phill Holder.

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Region). With student assistants, he drove the roads, paddled the waterways and conducted quadrat censuses in different habitats. Based on the results of these studies and reports of other observers, he published a six-volume series, Birds of Ontario County (1973-1978), detailing the seasonal distribution of birds. This was followed in 1985 by two large volumes entitled Birds of Ontario, including a meticulous compilation of records through the seasons and throughout the province. These and other publications, together with 75 years (over 40 years in the Pickering area) of detailed field notes of his daily observations, constitute an invaluable contribution to Ontario ornithology — a legacy that will be valued for years to come by those who would trace changes in the distribution and abundance of Ontario birds

In addition to his population studies, Murray and Doris Speirs investigated the life histories of several species, including American Robin, Black-capped Chickadee, Evening Grosbeak and Lincoln's Sparrow. Murray and Doris wrote the account of the Lincoln's Sparrow in Bent's *Life Histories of North American Birds*, published by the Smithsonian Institution in 1968.

While Murray Speirs was carrying out his field studies, he was mentor to many students and serious amateurs who acted as his assistants. Young ornithologists that he assisted and encouraged include Jim Richards, Ron Tozer, Rob Nisbet, Ron Orenstein and Matt Holder, and artist-naturalists Robert Bateman and Barry Kent MacKay.

Much of his career (1947–1974) was spent in the Department of Zoology at the University of Toronto, where he combined library and bibliographic work in the Fisheries Research Laboratory with teaching in animal ecology. He and I worked together introducing ecology students to field biology. Many of our trips were to Cobble Hill, his home in Pickering, where we compared the habitats of field and forest. Much to the benefit and pleasure of the students, these tours continued for years after Dr. Speirs retired.

Murray is a long-standing member of all the major ornithological societies in North America: American Ornithologists' Union, Association of Field Ornithologists, Cooper Ornithological Society, Society of Canadian Ornithologists and Wilson Ornithological Society. He has taken a special interest in local naturalists' organizations in Ontario. He is a charter (now honorary) member of the Toronto Ornithological Club, a co-founder of the Pickering Naturalists and a founding (now honorary) member of the Federation of Ontario Naturalists (FON). He was very active in the FON, editing The Bulletin (forerunner of Seasons

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magazine) from 1953 to 1961, and with W. W. Judd, editing *A Naturalist's Guide to Ontario* in 1964. He and his wife received the highest award of the FON for service to conservation. He has also been a strong supporter of Long Point Bird Observatory.

With his interest in bird populations, it was natural for Dr. Speirs to take part in many volunteerbased bird surveys. For 40 years, he compiled the Pickering Christmas Bird Count. When the Breeding Bird Survey began in the 1960s, he was an early participant and soon coordinated the BBS for Ontario. He contributed the account for the Lincoln's Sparrow to the *Atlas of the Breeding Birds of Ontario* (Cadman et al. 1987).

In 1995, he donated 2.8 hectares of his own property to protect a portion of the Altona Woods, one of the least disturbed tracts in the Toronto region. The 11- hectare forest now bears his name as the J. Murray Speirs Ecological Reserve.

For all his achievements, Dr. Speirs has recently been appointed a Member of the Order of Canada.

I cannot close this account without reference to the quiet unassuming way in which Murray Speirs interacts with others. He is a true gentleman. Two of his earlier assistants tell a story of when they were unable to locate the plot where they were supposed to be censusing birds. With some trepidation, they phoned to say they were lost and unable to carry out the survey. Murray's reply was "oh". One said to the other, "I have never known him to be so angry."

I have known and admired Murray Speirs as a friend for nearly 60 years. He is indeed a distinguished ornithologist and naturalist and a fine gentleman.

Acknowledgements

I thank Rayfield Pye for his help in preparing this account.

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J. Bruce Falls, 14 Tottenham Road, Toronto, Ontario M3C 2J4

Caspian Tern Night Roost on Roof

Jean Iron

At 2030h on 18 August 2000, I arrived at Polson Street on Lake Ontario in Toronto, Ontario. Getting out of my car I heard the distinctive calls of adult and juvenile Caspian Terns (*Sterna caspia*) flying noisily overhead toward the nearby flat roof of a recycling plant on the east side of Toronto Harbour (Figure 1). Between 2030h and 2105h, I counted 119 Caspians going to roost. Even as it got dark, it was easy to pick out the Caspians from the Ring-billed Gulls (*Larus delawarensis*) by sight and their distinctive calls.

Realizing that I had missed many early roosting Caspians the day before, I returned to count the birds between 1900h and 2100h on 19 August. I counted 175 Caspian Terns coming from Lake Ontario out of the southwest, south and southeast to roost on the flat roof. There were many vocal juveniles. The majority of birds arrived during the 40 minutes before dark. Great Blackbacked (L. marinus), Herring (L. argentatus) and Ring-billed Gulls also roosted on the roof. The roof must have been packed with birds. Heermann's (L,The Gull heermanni), which was present at the Toronto Harbour from 14 November 1999 to 16 September 2000 (Pittaway 2000), probably roosted regularly on the roof. At 2000h on 31 August, I saw the Heermann's fly from Polson Street and land on the roof among the gulls and Caspian Terns.

The peak count of Caspians was on 24 August 2000 with 256 Caspian Terns landing on the roof between 1946h and 2045h. At 2015h, a large flock of 83 came in together. In the twilight, several adult Caspians flew about calling raucously with fish in their bills. On 27 August, Tania Havelka of Canadian Wildlife Service and I counted 151 Caspian Terns flying to the roof.

Discussion

Caspian Terns normally roost on rocks, beaches, sandbars, natural mudflats, spits and small islands (Cuthbert and Wires 1999). I have also observed them resting during the day on artificial structures; for example, concrete and rock jetties, levees at sewage lagoons, artificial islands, and the parking lot at Polson Street. Pittaway (1987) observed Caspian Terns resting during the day at a dump with Ringbilled Gulls. A search of the literature found no reference to roof roosting (see Bent 1921, Cramp 1985, Cuthbert and Wires 1999). D.V. Chip Weseloh (pers. comm.), a colonial waterbird expert with the Canadian Wildlife Service, has not heard of roof roosting in Caspian

Time	Flying North to Roof Roost	Flying South to Lake Ontario
1900h – 1930h	0	0
1930h – 1945h	0	9
1946h – 2003h	29	0
2004h – 2014h	28	0
2015h – 2023h	135	0
2024h - 2034h	58	6
2035h – 2045h	6	0
Total	256	15

Table 1: Caspian Tern high count on 24 August 2000 at Toronto roost.

Table 2: Caspian Tern roost counts, August and September 2000, at Toronto.

Date	Time	Number
18 August	2030h - 2105h	119
19 August	1900h – 2100h	175
24 August	1900h – 2045h	256
27 August	1915h – 2040h	151
29 August	1900h – 2030h	121
31 August	1910h – 2030h	70
5 September	1920h - 2030h	46
11 September	1800h – 1935h	1
18 September	1800h – 1930h	2
19 September	1900h – 1930h	0

Terns. However, roof roosting and nesting is reported in Herring and Ring-billed Gulls (Blokpoel and Smith 1988, Blokpoel et al. 1990).

Most of the Caspian Terns observed roosting in Toronto probably originate from the large colonies on Georgian Bay. Pittaway (1987) described a migration route from Georgian Bay and Lake Simcoe to Lake Ontario. In recent years, Caspians have colonized artificial sites such as in Hamilton Harbour and Toronto's Leslie Street Spit (Tommy Thompson Park), but breeding numbers are small on Lake Ontario. For example, Glenn Coady (pers. comm.) reported 18 Caspian Tern nests on the Leslie Street Spit in Toronto in 2000. Caspian Terns are increasing on the Great Lakes and the outlook for them appears good (Iron 1995).

After fledging, juvenile and adult Caspian Terns disperse to linger at traditional feeding areas (Cuthbert and Wires 1999) such as along the shores of Lake Ontario in the Toronto area. Coady and Smith (2000) report the peak number of



Figure 1: Flat-roofed building at Toronto Harbour utilized by Caspian Terns as a night roost site. Photo by *Jean Iron*.

Caspian Terns in Toronto was 311 on 25 August 1987. On the Leslie Street Spit on 6 August 2000, Glenn Coady (pers. comm.) reported 129 Caspians at midday and Roy Smith (pers. comm.) reported 105 in early numbers afternoon. were so increasing before my evening counts began. The Spit is about five minutes flying time from the roof night roost. Coady and Smith (pers. comm.) saw Caspian Terns perched on the roof roost during the day, but they were unaware at the time that it was used for night roosting.

Little information exists about the important stopover sites and habitats used on migration by Caspian Terns (Cuthbert and Wires

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1999). The Toronto night roost site contributes new information about a significant stopover spot. Protection of this site is important because hundreds of birds depend upon it as a safe night roost. Toronto's waterfront development plans and its bid for the 2008 Olympics could put this important roost in jeopardy.

In conclusion, migrating adult and juvenile Caspian Terns, peaking at 256 birds on 24 August 2000, roosted on the flat roof of a recycling plant in Toronto. This location is ideal as it is elevated and undisturbed, and has a protective raised wall around the rim, making it safe from disturbance from people, dogs, cats, coyotes, foxes and raccoons. The roost is also close to productive feeding areas on Lake Ontario off the Leslie Street Spit. My observations in Toronto document the first report of Caspian Terns night roosting on the flat roof of a large building. Night roof roosting has probably been happening here for a long time and it probably occurs elsewhere as well.

Acknowledgements

I thank Chip Weseloh and Tania Havelka of the Canadian Wildlife Service for information on Caspian Terns. Glenn Coady and Roy Smith provided me with numbers from the Toronto database and their own sightings. Michel Gosselin, Barbara Mann, Ron Pittaway and Ron Tozer located Caspian Tern references.

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Jean Iron, 9 Lichen Place, Toronto, Ontario M3A 1X3

2001 OFO Annual General Meeting

We are pleased to announce that the Ontario Field Ornithologists' AGM will be returning to Point Pelee National Park on Saturday and Sunday, 29 and 30 September 2001. Mark your calendars now to enjoy this great weekend of fall birding. There will be field trips with a focus on identification, featuring small groups and experienced leaders. We will come together on Saturday evening for a banquet and special program at the Leamington Dock restaurant. Watch for further details in the coming months. Don't miss it! *Jean Iron*

Unusual Mating Behaviour by a Tree Swallow

Geoff Carpentier

The Tree Swallow (*Tachycineta bicolor*) is known to be an aggressive and prolific breeder, competing both intraspecifically and interspecifically (Bent 1942). Common throughout virtually all of Ontario (Quinney and Dunn 1987), the Tree Swallow often breeds in nest boxes in urban and suburban areas (Peck and James 1987).

On 13 May 1997, Bill Stone, Tony Bigg and I were birding at the Port Rowan sewage lagoons in *Haldimand-Norfolk* RM, Ontario. This large open area adjacent to water was suitable habitat for Tree Swallows to breed. The fields, wet scrub and open water harboured an abundant food supply for the nesting birds. Numerous nest boxes had been erected along the perimeter of the lagoons to facilitate breeding. At the time of these observations, most of the boxes were occupied by breeding pairs of Tree Swallows.

A male Tree Swallow, sexed by its behaviour, was observed fluttering on the gravel roadway, apparently sitting atop something on the road. We watched the bird for a few minutes and eventually determined that it was sitting on a dead Tree Swallow, which we presumed was a female. The male repeatedly attempted to copulate with the dead swallow. The dead bird was in excellent condition, as rigor mortis had not set in and it presumably had died very recently from an unknown cause.

The dead bird was positioned in a manner such that the belly was pressed against the ground and the wings were spread to the sides, almost fully extended. The image was representative of a bird in flight. The male, sitting atop the dead female, repeatedly oriented itself above and centred over her rump. The position was typical of the posturing one would expect had the male been mating with a live bird. Throughout the observation period (seven or eight minutes), the male periodically made minor adjustments to its position, but always maintained some level of physical contact with the dead bird. Eventually we approached more closely, but the male immediately flew off to the northeast, toward the lagoons. It did not subsequently return to the dead bird.

Discussion

Bent (1942) described the courtship flight of the Tree Swallow, during which the pair flies well above ground level and eventually the male grasps the female with its feet and both birds tumble downward, finally separating near the ground. Could the death of the female have been the result of a fatal courtship

flight, where the birds did not separate in time? The excellent condition of the plumage and the lack of any visible injuries lend some credence to this possibility. The male's interest in the female might also contribute to the circumstantial evidence that she died in a fatal courtship flight. The road on which the female lay was very sporadically travelled, so it was unlikely that an impact with a car was the cause of its death. Robertson et al. (1992) reported that during the breeding season, "both sexes often grapple with conspecifics inside cavity, in air, on ground, or even on water", and that the "combatants have been found injured or dead inside boxes or on ground after such fights". A physical interaction of this type may be the most likely explanation for the death of the female swallow we found.

The female's posture in death was very similar to that which it would have exhibited if alive and receptive to the male's mating attempts. This posture apparently illicited the copulatory response by the male. I found no reference in the literature to necrophilia in Tree Swallows, however.

Acknowledgements

I thank Robert Ryan for his insightful editing of earlier drafts, and Ron Tozer for his assistance with the literature and helpful comments.

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Geoff Carpentier, 155 Ravenscroft Road, Ajax, Ontario L1T 1Y3

An Observation of Solitary Sandpiper Feeding Behaviour

Bill Crins

The Solitary Sandpiper (*Tringa solitaria*) is a familiar and common migrant in much of Ontario, and often is found in wet places that are rarely frequented by other migrating shorebirds, such as beaver pond edges and small farm ponds. Given our familiarity with this species during migration, it may come as a surprise that many aspects of its biology are quite poorly known, or have not been well documented. As Moskoff (1995) recently stated, "much remains to be learned about this species."

Shorebirds exhibit diverse and characteristic feeding behaviours, and the Solitary Sandpiper is no exception. Usually, it can be seen probing in shallow water or mud with its bill as it works along the edges of ponds, ditches, and other open or shaded wet depressions (Bent 1929, Palmer 1967, Terres 1982, Moskoff 1995). It has been described as a "snatcher" (Palmer 1967), catching insects such as dragonfly nymphs, aquatic beetles and bugs, grasshoppers, and caterpillars, other invertebrates such as spiders, worms, and small crustaceans, and small frogs as it moves along (Bent 1929, Palmer 1967).

There are also a few reports of a more specialized feeding behav-

iour in the Solitary Sandpiper. This involves the rapid but subtle movement of the leading foot below the surface of shallow water to stir up food items, which the bird then captures (Bent 1929, Palmer 1967, Terres 1982). Variously known as *foot-paddling*, *foot-stirring*, or *foottrembling*, this foraging activity has been reported in herons, gulls, and several shorebirds (Terres 1982).

On 9 May 1999, I had the opportunity to observe this type of feeding behaviour by a Solitary Sandpiper at the Miller Creek Conservation Area near Lakefield in Peterborough County. It consistently waded in shallow water at the edge of an open mudflat in a cattail marsh, quickly but delicately shaking and probing its feet, one at a time, in the organic matter. It continued this behaviour as it slowly probed in successively deeper water until something was dislodged or disturbed, at which time it would capture the disturbed item with its bill. Several items were captured in this manner. During the five minute observation period (0910h-0915h), ten fairly large dragonfly nymphs (perhaps Libellula sp.) were eaten, as well as several smaller unidentified invertebrates. By the end of the observation period, the crop of this

Solitary Sandpiper was clearly distended, indicating that this method of feeding had been very successful.

Moskoff (1995) implied that this feeding behaviour had been observed only in fall migration, but the observation reported here indicates that it also is used in spring migration. It seems likely that this behaviour is used whenever habitat conditions dictate.

Acknowledgements

I thank Ron Pittaway and Ron Tozer for providing literature and comments on a draft of this note.

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Bill Crins, 170 Middlefield Road, Peterborough, Ontario K9J 8G1



PUBLICATION NOTICE

McLaughlin Bay Wildlife Reserve and Second Marsh Wildlife Area Visitor's Guide. 2000. By *Jim Richards*. Friends of Second Marsh, Oshawa, Ontario. Softcover, 74 pages. \$6.00.

This attractive and informative little book (pocket-sized for easy use in the field) provides a fascinating introduction and guide to the natural history (especially the birds) of Oshawa Second Marsh, McLaughlin Bay Wildlife Reserve, and Darlington Provincial Park in Durham Region. It has over 75 colour photographs, plus detailed maps and descriptions of the system of trails at Second Marsh and McLaughlin Bay. The text describes community and corporate involvement in the protection and enhancement of these areas, natural features along the many trails, and the extensive restoration activities which have been undertaken. The guide includes checklists of the herptiles, mammals, fish and birds recorded to date. The many colour photographs (by the author) of birds, and detailed information on access and where to find particular species will be of great interest to birders.

The guide can be purchased for \$6.00 (tax included) from Friends of Second Marsh, 206 King Street East, Box 26066, RPO King Street, Oshawa, Ontario L1H 1C0. Mail orders (cheques only) should add \$2.00 for postage and handling. *Ron Tozer*

CORRIGENDA

Ontario Birds 18(2) August 2000

We apologize to our readers and the authors involved for the following errors, which were made by the editors:

"Varella" should be "Varrela" as follows: **Table of Contents** (second article author), **Page 63** (last reference under Slaty-backed Gull), **Page 72** (last reference), **Page 73** (second author), **Page 76** (photo captions), and **Page 77** (second author).

Page 62

Under Heermann's Gull, the first sentence of commentary should be: "This remarkable first record for Ontario is also the second and most easterly record for eastern North America".

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In Table 1, the Total in the third column should be "2603", not "2606".