ONTARIO BIRDS

Journal of the Ontario Field Ornithologists
Volume 21 Number 3 December 2003

Ontario Birds
Volume 21 Number 3 December 2003 Pages 109-160

Table of Contents

Cover Illustration: Eastern Screech-Owl (*Megascops asio*) roosting in an old pear tree.
by *Betsy Potter*

ISSN 0822-3890
Publications Mail Agreement No. 1856170

Articles

Twenty-five Years of the Detroit River (Michigan-Ontario) Christmas Bird Count

Julie A. Craves and James A. Fowler, Jr.

INTRODUCTION

The Detroit River (Michigan-Ontario) Christmas Bird Count (CBC) was founded in 1978. The count circle is centred at the intersection of Warren Avenue and Interstate 94 in Detroit (42° 21' N, 83° 01' W), covering parts of Wayne County, Michigan and Essex County, Ontario, including the upper portion of the Detroit River. In Michigan, the count circle includes Belle Isle in Detroit, Greenfield Village in Dearborn, the campus and Natural Area of the University of Michigan-Dearborn, and Rouge and Palmer parks in Detroit. About 30% of the count circle lies in Ontario (ONC 2002), including Ojibway Prairie in Windsor. A large portion of the count circle is urban residential and industrial areas in the city of Detroit.

METHODS

The usefulness of CBC data to determine trends in bird populations is viewed with caution. CBCs have annual changes in effort, varying degrees of skill and diligence of observers, and biases in habitat coverage (Butcher 1990). In order to examine trends of relative abundance, actual numbers of individuals counted is often adjusted to individuals per party-hour—the number of hours spent looking for birds by a party of one or more observers. However, this assumes that increased effort will result in more birds counted, which is not always the case. Butcher and McCulloch (1990) noted that for some species, such as those that occur in habitats that can be covered in a few hours or birds that concentrate in certain areas, the amount of effort does not increase the number of birds counted. They recommended looking at the correlation between effort and numbers of birds counted. If the correlation was not positive, actual numbers of individuals counted should be used to examine relative abundance. If the correlation was positive, then actual numbers of birds could be corrected to a number that would be expected if the effort were standard (e.g., using the mean number of party-hours). While further refinements can and should be used for CBC analyses (Sauer and Link 2002), we used these Butcher and McCulloch recommendations for

looking at trends in a few species of interest. A simple linear regression was calculated using year as the independent variable, and either actual number of birds counted or standardized birds per 10 party-hours as the dependent variable.

RESULTS

Summary data

Table 1 gives summary statistics for the 25 years of the Detroit River CBC. The mean number of species per count is 70.5 (range 55 to 81) and the mean number of party-hours is 60.5 (range 32 to 93). The mean number of party-hours increased beginning in 1995, when the Rouge River Bird Observatory (RRBO) at the University of Michigan-Dearborn began coordinating parties covering the city of Dearborn. Since 1995, RRBO has averaged 4 parties and 22.4 party-hours within Dearborn. As a result, for the years 1978-1994, the mean number of party-hours for the Detroit River CBC was 49.2; for the years 1995-2002, it climbed to 84.8 ($p<0.001$, t-test).

Table 1: Summary statistics for the Detroit River CBC, 1978-2002.

	High N (year)	Low N (year)	Mean
Number of species	81 (1992)	55 (1982)	70.5
Number of individuals[1]	29,365 (1996)	2210 (1980)	11,293
Party-hours	93 (1997, 1999)	32 (1982)	60.5
Number of species per 10 party-hours	19.1 (1985)	8.0 (1997)	12.7
Number of individuals per 10 party-hours	3244.8 (1996)	937.2 (1982)	1776.6

[1]Excluding European Starling, whose huge numbers at the Ambassador Bridge roost were estimated.

The cumulative number of species recorded on the Detroit River CBC is 130. Of those, 4 were not recorded on count day, but rather count week (3 days before and 3 days after count day) or count period (the period designated by the National Audubon Society in which all counts must be held; once variable, beginning in 2000-2001 it was set at 14 December to 5 January). Table 2 summarizes the species recorded on the count, including species only recorded count week or count period. For species occurring on 5 or fewer counts, details rather than summary data are given.

The 10 most numerous species (as expressed in individuals per 10 party-hours) in descending order are European Starling (scientific names given in Table 1), Canvasback, Canada Goose, Mallard, Rock Pigeon, House Sparrow, American Crow, Ring-billed Gull, Common Goldeneye, and Herring Gull. It should be noted that European Starling numbers for this count are not accurate. Prior to 1990, a huge roost under the Ambassador Bridge spanning the Detroit River was visited and numbers were estimated, as it was done from shore. As security around the bridge increased, the area became more difficult to visit, and beginning in 2000 the roost site numbers were not included in the totals. Similarly, Rock Pigeon and House Sparrow numbers are no doubt inaccurate due to undercounts. A large portion of the count circle is highly urbanized and not surveyed at all. Presumably, however, Rock Pigeon and House Sparrow numbers in the portions of the count circles that are surveyed are relatively accurate.

Thirty-five species have been found on all 25 counts: Canada Goose, American Black Duck, Mallard, Canvasback, Redhead, Greater Scaup, Lesser Scaup, Bufflehead, Common Goldeneye, Common Merganser, Red-tailed Hawk, American Kestrel, Ring-necked Pheasant, Herring Gull, Rock Pigeon, Mourning Dove, Eastern Screech-Owl, Great Horned Owl, Downy Woodpecker, Hairy Woodpecker, Blue Jay, American Crow, Black-capped Chickadee, Tufted Titmouse, White-breasted Nuthatch, Brown Creeper, American Robin, European Starling, American Tree Sparrow, Song Sparrow, White-throated Sparrow, Dark-eyed Junco, Northern Cardinal, American Goldfinch, and House Sparrow.

Ten species have been found only in Ontario: Lesser Black-backed Gull, Long-eared Owl, Short-eared Owl, House Wren, Blue-gray Gnatcatcher, Ovenbird, Chipping Sparrow, White-crowned Sparrow, Lapland Longspur, and Baltimore Oriole. Details are provided in Table 2. Of the 10 Ontario-exclusive species, all occurred only on a single count except for Lapland Longspur (2 counts), Long-eared Owl (5 counts), and White-crowned Sparrow (11 counts). A Green-tailed Towhee (*Pipilo chlorurus*) that spent the winter of 1985-1986 in Windsor was in the count circle, but was not identified until after the count.

Trends and patterns

CANADA GOOSE – Canada Geese in southeast Michigan and southwestern Ontario are from 2 populations: migratory *Branta canadensis interior* and resident *B. c. maxima* (Johnson 1991). Prior to reintroduction efforts begun in the 1930s in Ontario (Lumsden 1987a) and in the 1920s in Michigan (Johnson 1991), the resident race, or Giant Canada Goose, was not present in the region. In southern Ontario, restoration efforts began in earnest in 1968 (Lumsden 1987a).

Table 2: Species list for the Detroit River CBC, 1978-2002.

	# of counts[1]	Mean per count	High number/ year	Mean per 10 p-h[2]	Comments
Common Loon (*Gavia immer*)	The only count was 1993, a single bird seen on the Detroit River, just north of the Belle Isle bridge.				
Pied-billed Grebe (*Podilymbus podiceps*)	8	0.6	5 in 1995	0.10	
Horned Grebe (*Podiceps auritus*)	First count in 1988 (2 birds). Seen on 3 counts: 1988, 1990, 1992.				
Double-crested Cormorant (*Phalacrocorax auritus*)	2 counts: a bird seen cw[3] in 1993, and 2 birds in 2002.				
Great Blue Heron (*Ardea herodias*)	17	5.4	20 in 2001 and 2002	0.88	This species has been present each year since 1987 and the mean count since then is 8.3.
Black-crowned Night-Heron (*Nycticorax nycticorax*)	11	1.1	8 in 1985	0.18	
*Greater White-fronted Goose (*Anser albifrons*)	1 cp[4] in 1993 at Greenfield Village.				
Snow Goose (*Chen caerulescens*)	2 in 1997.				
Canada Goose (*Branta canadensis*)	25	1339.0	5689 in 2000	221.06	
Mute Swan (*Cygnus olor*)	18	36.8	263 in 2001	6.07	First count was in 1981 (2 birds).
Tundra Swan (*Cygnus columbianus*)	12	7.0	60 in 2001	1.16	
Wood Duck (*Aix sponsa*)	15	1.2	5 in 1985	0.20	
Gadwall (*Anas strepera*)	22	25.7	210 in 2001	4.24	
American Wigeon (*Anas americana*)	20	4.0	37 in 2002	0.67	
American Black Duck (*Anas rubripes*)	25	54.7	139 in 1981	9.03	

	# of counts	Mean per count	High number/ year	Mean per 10 p-h	Comments
Mallard (*Anas platyrhynchos*)	25	1127.0	2334 in 2000	186.07	
Northern Shoveler (*Anas clypeata*)	2 counts: 2 birds in 1992 at Belle Isle, and a single bird in 2000, also at Belle Isle.				
Northern Pintail (*Anas acuta*)	13	0.8	6 in 1986	0.13	
Green-winged Teal (*Anas crecca*)	4 counts: 1978, 1988, 1999, 2001.				
Canvasback (*Aythya valisineria*)	25	1874.1	12,060 in 1996	309.41	
Redhead (*Aythya americana*)	25	227.6	3684 in 1996	37.58	
Ring-necked Duck (*Aythya collaris*)	15	16.7	100 in 1999	2.75	
Greater Scaup (*Aythya marila*)	25	43.2	144 in 1979	7.13	
Lesser Scaup (*Aythya affinis*)	25	13.5	42 in 1997	2.23	
White-winged Scoter (*Melanitta fusca*)	2 counts: 1993 (cw) and a single bird in 1996.				
Long-tailed Duck (*Clangula hyemalis*)	4 counts: 1980, 1990, 1995, 1996 (2 birds).				
Bufflehead (*Bucephala albeola*)	25	65.0	330 in 1992	10.72	
Common Goldeneye (*Bucephala clangula*)	25	360.8	1576 in 1992	59.56	
Hooded Merganser (*Lophodytes cucullatus*)	24	16.6	54 in 1996	2.75	
Common Merganser (*Mergus merganser*)	25	340.2	2758 in 2001	56.16	
Red-breasted Merganser (*Mergus serrator*)	25	35.6	552 in 2001	5.87	
Ruddy Duck (*Oxyura jamaicensis*)	8	1.2	12 in 2001	0.19	

	# of counts	Mean per count	High number/ year	Mean per 10 p-h	Comments
Bald Eagle (*Haliaeetus leucocephalus*)	6	0.6	10 in 2001	0.11	
Northern Harrier (*Circus cyaneus*)	6	0.2	All single birds	0.04	
Sharp-shinned Hawk (*Accipiter striatus*)	15	1.0	4 in 2001	0.16	
Cooper's Hawk (*Accipiter cooperii*)	21	3.3	13 in 2001	0.55	
Northern Goshawk (*Accipiter gentilis*)	The only count was 1982, a single immature female in Rouge Park.				
Red-shouldered Hawk (*Buteo lineatus*)	11	0.6	2 several years	0.09	
Red-tailed Hawk (*Buteo jamaicensis*)	25	32.2	58 in 1990	5.32	
Rough-legged Hawk (*Buteo lagopus*)	13	0.8	3 several years	0.13	
American Kestrel (*Falco sparverius*)	25	11.9	29 in 1995	1.97	
Merlin (*Falco columbarius*)	3 counts: cw in 1992 at Belle Isle, 2001 in Windsor, cw in 2002 at Belle Isle.				
Peregrine Falcon (*Falco peregrinus*)	11	0.6	2 several years	0.09	
Ring-necked Pheasant (*Phasianus colchicus*)	25	39.0	111 in 1981	6.43	
Northern Bobwhite (*Colinus virginianus*)	3	2.5	35 in 1978	0.42	None counted since 1981.
American Coot (*Fulica americana*)	10	2.7	44 in 1995	0.45	
Killdeer (*Charadrius vociferus*)	2 counts: 1992 and cw 1998.				
*Dunlin (*Calidris alpina*)	1 cp in 1994 at Belle Isle.				
Wilson's Snipe (*Gallinago delicata*)	3 counts: 1988, 1991, 1992.				

	# of counts	Mean per count	High number/ year	Mean per 10 p-h	Comments
Bonaparte's Gull (*Larus philadelphia*)	13	66.8	962 in 1995	11.04	
Ring-billed Gull (*Larus delawarensis*)	24	501.3	1918 in 1995	82.76	
Herring Gull (*Larus argentatus*)	25	352.5	1072 in 2001	58.19	
Iceland Gull (*Larus glaucoides*)	Single birds seen on 2 counts: 1981 and 1996.				
Glaucous Gull (*Larus hyperboreus*)	6	0.4	2 several years	0.06	
Lesser Black-backed Gull (*Larus fuscus*)	An adult seen in the Detroit River off Peche Island Marina in 1993.				
Great Black-backed Gull (*Larus marinus*)	23	15.5	44 in 1991	2.56	
Rock Pigeon (*Columba livia*)	25	913.6	2825 in 1997	150.83	
Mourning Dove (*Zenaida macroura*)	25	341.7	855 in 1981	56.42	
Eastern Screech-Owl (*Megascops asio*)	25	5.6	18 in 1992	0.92	
Great Horned Owl (*Bubo virginianus*)	25	3.8	7 in 1995	0.62	
Snowy Owl (*Bubo scandiacus*)	4 counts: 1979, 1984, 1993 (cw), 2002 (2).				
Long-eared Owl (*Asio otus*)	5	0.9	12 in 1992	0.15	All sightings have been in Ontario, most from a pine grove south of Windsor.
Short-eared Owl (*Asio flammeus*)	A single bird feeding over Peche Island in 2001.				
Northern Saw-whet Owl (*Aegolius acadicus*)	4 counts: 1991, 1993, 1995, and 2002. Birds in 1993 and 2002 were birds wintering at UM-Dearborn.				
Belted Kingfisher (*Ceryle alcyon*)	22	2.7	7 in 1999	0.44	

	# of counts	Mean per count	High number/ year	Mean per 10 p-h	Comments
Red-headed Woodpecker (*Melanerpes erythrocephalus*)	12	1.6	9 in 1984	0.27	With most of the dead elms from the area gone (legacy of Dutch elm disease), this species has virtually disappeared.
Red-bellied Woodpecker (*Melanerpes carolinus)*	22	7.2	33 in 2002	1.18	
Yellow-bellied Sapsucker (*Sphyrapicus varius*)	13	0.8	3 in 1995	0.13	
Downy Woodpecker (*Picoides pubescens*)	25	65.6	150 in 2001	10.84	
Hairy Woodpecker (*Picoides villosus*)	25	8.0	18 in 1987	1.32	
Northern Flicker (*Colaptes auratus*)	24	3.8	10 in 1990	0.62	
Northern Shrike (*Lanius excubitor*)	8	0.5	5 in 1996	0.09	
Blue Jay (*Cyanocitta cristata*)	25	196.6	417 in 2002	32.46	
American Crow *(Corvus brachyrhynchos*)	25	577.5	5000 in 1984	95.30	
Horned Lark (*Eremophila alpestris*)	15	58.6	981 in 1986	9.67	
Black-capped Chickadee (*Poecile atricapillus*)	25	130.4	373 in 2002	21.54	While not noted by local banding stations, the 2002 high total corresponds with an influx of chickadees east of the count circle in fall 2001.
Tufted Titmouse (*Baeolophus bicolor*)	25	39.6	85 in 1997	6.54	
Red-breasted Nuthatch (*Sitta canadensis*)	22	4.2	15 in 2000	0.70	

	# of counts	Mean per count	High number/ year	Mean per 10 p-h	Comments
White-breasted Nuthatch (*Sitta carolinensis*)	25	40.0	123 in 1996	6.61	
Brown Creeper (*Certhia americana*)	25	6.6	24 in 1997	1.09	
Carolina Wren (*Thryothorus ludovicianus*)	15	5.8	28 in 1997	0.95	First noted cp in 1984, this species has been found annually since 1989. Mean per count since 1989 is 10.3.
House Wren (*Troglodytes aedon*)	A single bird in Windsor in 1995.				
Winter Wren (*Troglodytes troglodytes*)	15	1.2	5 in 1993	0.20	
Marsh Wren (*Cistothorus palustris*)	2 counts: 1992 and 1999.				
Golden-crowned Kinglet (*Regulus satrapa*)	19	4.0	19 in 1991	0.67	
Ruby-crowned Kinglet (*Regulus calendula*)	3 counts: 1978; 1980 and 1985 both cw.				
Blue-gray Gnatcatcher (*Polioptila caerulea*)	A single bird in Spring Garden Prairie, Windsor, in 1991.				
Eastern Bluebird (*Sialia sialis*)	5	1.1	8 in 1988	0.18	
Hermit Thrush (*Catharus guttatus*)	14	1.4	9 in 1990	0.22	
American Robin (*Turdus migratorius*)	25	182.6	758 in 1998	30.15	
Gray Catbird (*Dumetella carolinensis*)	3 counts: 1981 (Rouge Park), 1994 (Windsor), 1995 (Ojibway Prairie).				
Northern Mockingbird (*Mimus polyglottos*)	9	0.4	2 in 1996 and 1997	0.07	
Brown Thrasher (*Toxostoma rufum*)	3 counts: 1978 (Rouge Park), 1982 (a bird that overwintered at Greenfield Village), 1983 (Elmwood Cemetery).				

	# of counts	Mean per count	High number/ year	Mean per 10 p-h	Comments
European Starling (*Stunus vulgaris)*	25	91,864.9	~320,000 in 1978	15,166.74	See text for caveats for starling numbers.
Cedar Waxwing (*Bombycilla cedrorum*)	23	62.8	271 in 1991	10.37	
*Orange-crowned Warbler (*Vermivora celata*)	cw in 1980 at Greenfield Village.				
Yellow-rumped Warbler (*Dendroica coronata*)	10	2.1	19 in 2001	0.35	
Pine Warbler (*Dendroica pinus*)	A single bird in 1980 at Rouge Park; another on 8 Jan 1983 near Greenfield Village just missed cp.				
Ovenbird (*Seiurus aurocapilla*)	A bird present at a feeder in Windsor for over a month in 1994.				
Common Yellowthroat (*Geothlypis trichas)*	4 counts: 1987, 1988, 1992, 1997.				
Eastern Towhee (*Pipilo erythrophthalmus*)	9	0.6	7 in 1981	0.09	
American Tree Sparrow (*Spizella arborea*)	25	184.9	531 in 1999	30.52	
Chipping Sparrow (*Spizella passerina*)	1997 in Windsor.				
Field Sparrow (*Spizella pusilla*)	10	0.8	5 in 1981	0.14	
Savannah Sparrow (*Passerculus sandwichensis*)	2 counts: 1991 (Windsor) and 1998 (Detroit).				
Fox Sparrow (*Passerella iliaca*)	4 counts: 1995 (2), 2000 (cw), 2001, 2002 (6). All 6 on the 2002 count were at Rouge Park, a traditional wintering area for this species.				
Song Sparrow (*Melospiza melodia*)	25	44.9	161 in 1995	7.42	
Lincoln's Sparrow (*Melospiza lincolnii*)	2 counts: 2000 and 2002, both downtown Detroit.				
Swamp Sparrow (*Melospiza georgiana*)	21	6.4	27 in 1992	1.06	

	# of counts	Mean per count	High number/ year	Mean per 10 p-h	Comments
White-throated Sparrow (*Zonotrichia albicollis*)	25	24.9	86 in 1996	4.11	
White-crowned Sparrow (*Zonotrichia leucophrys*)	11	5.2	41 in 1995	0.85	All from Ontario.
Dark-eyed Junco (*Junco hyemalis*)	25	236.0	764 in 1999	38.96	
Lapland Longspur (*Calcarius lapponicus*)	2 counts: 1981 (3) and 1990 (4) in Ontario.				
Snow Bunting (*Plectrophenax nivalis*)	12	49.8	370 in 1990	8.23	
Northern Cardinal (*Cardinalis cardinalis*)	25	208.6	455 in 1991	34.43	
Red-winged Blackbird (*Agelaius phoeniceus*)	18	7.3	38 in 1995	1.21	
*Eastern Meadowlark (*Sturnella magna*)	cw in 1981.				
Rusty Blackbird (*Euphagus carolinus*)	12	2.7	18 in 1999	0.45	
Common Grackle (*Quiscalus quiscula*)	20	3.4	20 in 2000	0.55	
Brown-headed Cowbird (*Molothrus ater)*	23	60.5	254 in 2000	9.99	
Baltimore Oriole (*Icterus galbula*)	1992 in Windsor.				
Pine Grosbeak (*Pinicola enucleator*)	10 birds at Rouge Park in 1978.				
Purple Finch (*Carpodacus purpureus)*	16	2.2	16 in 1978	0.36	
House Finch (*Carpodacus mexicanus*)	20	156.0	657 in 1995	25.76	
White-winged Crossbill (*Loxia leucoptera*)	2 counts: 1981 (3) and 1996 (1).				

	# of counts	Mean per count	High number/ year	Mean per 10 p-h	Comments
Common Redpoll (*Carduelis flammea*)	7	5.5	52 in 1986	0.91	
Pine Siskin (*Carduelis pinus*)	11	10.7	62 in 1988	1.76	
American Goldfinch (*Carduelis tristis*)	25	146.0	326 in 1995	24.10	
Evening Grosbeak (*Coccothraustes vespertinus*)	5 counts: 1978 (14), 1979 (6), 1981(25), 1987 (cp), and 1991 (cw).				
House Sparrow (*Passer domesticus*)	25	830.5	1381 in 2001	137.11	

[1] Includes years when the species was only recorded during count week or count period
[2] p-h = party-hours
[3] cw = count week
* indicates a species only recorded during count week or count period
[4] cp = count period

According to Breeding Bird Survey data, the mean annual percent change in Ontario's Canada Goose population from 1967 to 2000 was +23.1% ($p<0.05$) (CWS 2002a). Michigan's *B. c. maxima* population has grown at 14% annually (MDNR 2001) and 80% of the population resides in the southern part of the state (SOM 2001).

The trend on the Detroit River CBC reflects these increasing numbers. While the mean number per 10 party-hours over the 25 years is 221.06, over the last decade it is 463.98. On the Detroit River CBC, there was a positive correlation between effort and birds counted. Thus, Figure 1 uses birds per 10 party-hours, corrected to a number that would be expected if effort were constant (Butcher and McCulloch 1990). Over the 25 years on the count, there has been a significant increase in Canada Goose numbers, even considering that in 2001 nearly all water was frozen, and the goose count for that year was the lowest since 1981.

AMERICAN BLACK DUCK – Black duck populations have been declining since the mid-1950s due to habitat loss, hunting, and competition and hybridization with the Mallard (LePage and Bordage 1998). Being much more adaptable to urbanization, Mallards occupy territory being vacated by black ducks (due to hunting or habitat changes), which increases hybridization opportunities; this appears to be especially prevalent in southern Ontario (Longcore et al. 2000). Continental wintering populations of American Black Ducks declined

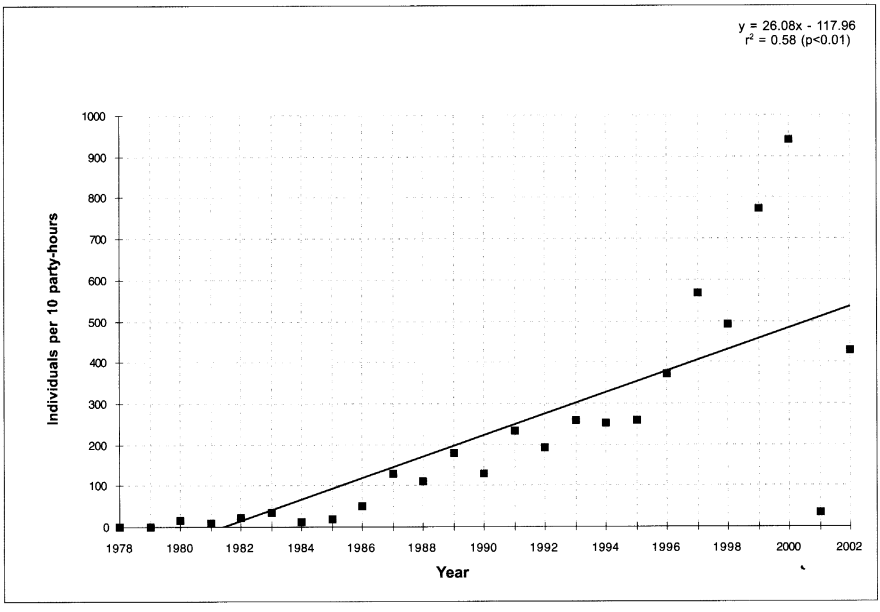

Figure 1: Canada Geese on the Detroit River CBC, 1978-2002. Birds per 10 party-hours are corrected to the number expected if effort were constant; see text for explanation.

50-60% from the 1950s to early 1980s (USGS 1998). Breeding Bird Survey data show the mean annual percent decrease in Ontario's black duck population from 1967 to 2000 was 4.2%, with the trend not significant (CWS 2002b), but Dennis (1987) states that "Canadian Wildlife Service surveys" put the decline in southern Ontario from 1951 to 1981 at 80%.

On the Detroit River CBC, there was no correlation between effort and birds counted; this was also noted by Butcher and McCulloch (1990) for black ducks. They surmised that because black ducks are scarcer in urbanized habitats and most CBCs are located close to human population centres, additional effort did not uncover more black ducks. Using the actual number of American Black Ducks counted, the regression equation was not significant (Figure 2). This agrees with trends in the U.S. Fish and Wildlife Service's continental Mid-winter Inventory, which shows stabilized numbers from 1980 to 2000, after harvest restrictions were put in place in 1983 in the U.S. and 1989-1990 in Canada (Longcore et al. 2000).

RING-NECKED PHEASANT – Ring-necked Pheasants, native to Eurasia, were first introduced in Ontario in the late 1800s (Lumsden 1987b) and in Michigan in 1885 (Belyea 1991);

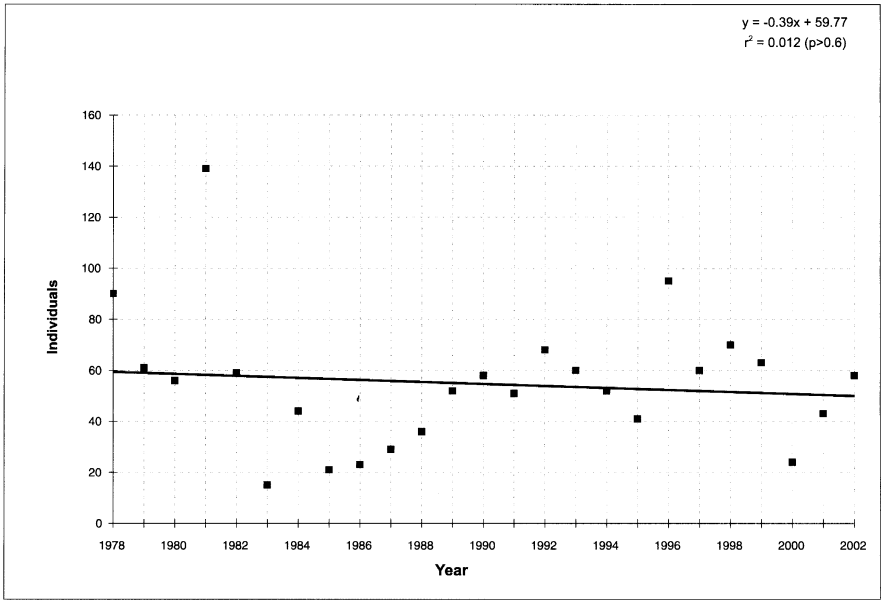

Figure 2: American Black Ducks on the Detroit River CBC, 1978-2002.

they reached their peak numbers in the mid-1940s. Populations have been declining since the mid-1950s, probably due primarily to habitat alteration (changing agricultural practices, loss of grasslands), with weather also playing a role (Tuovila et al. 2002). According to Breeding Bird Survey data, the mean annual percent decrease in Ontario's pheasant population from 1967 to 2000 was 8.8% ($p < 0.05$) (CWS 2002c). In Michigan, the annual decrease from 1966 to 1994 was 3.2% (Sauer et al. 2001).

This species has been found on all Detroit River CBCs. There was a negative correlation between effort and numbers counted, probably because in an urbanized count circle such as this one, most pheasants will be found in small patches of habitat which are easily covered by CBC participants. A significant decrease in the number of Ring-necked Pheasants has occurred in the count circle (Figure 3). Increasing urbanization in this region is likely nibbling away at suitable pheasant habitat. Mean numbers per 10 party-hours went from 16.18 from 1978 to 1985; to 5.93 from 1986 to 1993; and to 3.03 from 1994 to 2002—a decline of 81.3%.

CAROLINA WREN – Winter temperature is highly correlated with Carolina Wren distribution and abundance (Root 1988), and mild winters over the last two decades

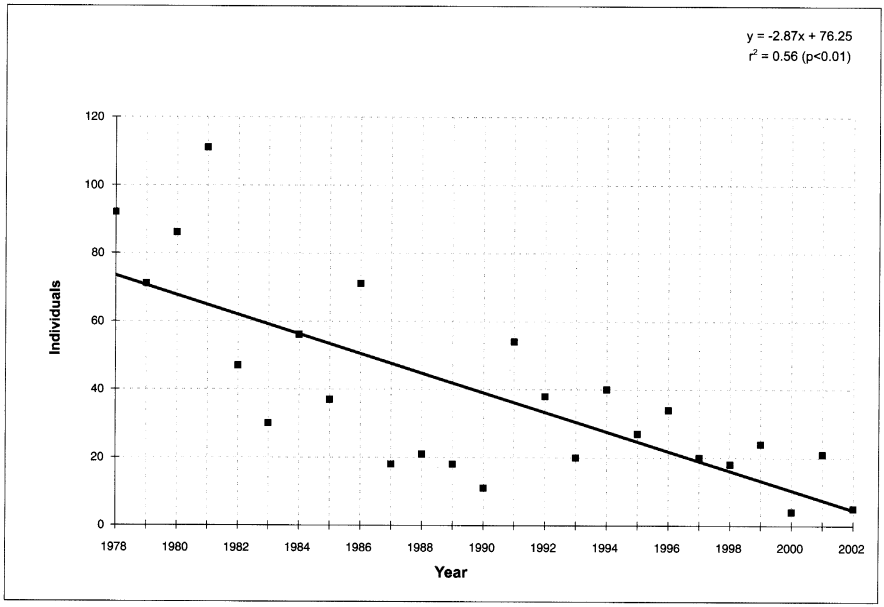

Figure 3: Ring-necked Pheasants on the Detroit River CBC, 1978-2002.

have contributed to the species' northward range expansion (Orton 1998). The severe winters of 1976-1977 and 1977-1978 caused a sharp decline in Carolina Wrens in most of the eastern U.S. (Robbins et al. 1986).

Numbers on CBCs began recovering in the late 1980s, and this trend is reflected on the Detroit River CBC. Carolina Wrens were not found until a bird was seen during count period in 1984; the first bird found on count day was in 1989. Since that time, there has been a significant increase in Carolina Wren numbers on the count (Figure 4).

HOUSE FINCH – House Finches (descendants of western birds released in New York in 1940) arrived in both Ontario and Michigan in 1972 (Kozlovic 1987, Hill 1991), and first appeared on the Detroit River CBC in 1983. They increased sharply through 1995 (Figure 5). After that point, numbers crashed due to a contagious conjunctivitis, *Mycoplasma gallisepticum*, first reported in eastern House Finches in 1994 in Washington, DC (Fischer et al. 1997), which has been causally linked with declines in House Finch populations (Hochachka and Dhondt 2000).

Analysis of CBC data and a special House Finch Disease Survey (administered by Cornell Lab of Ornithology) indicate that numbers

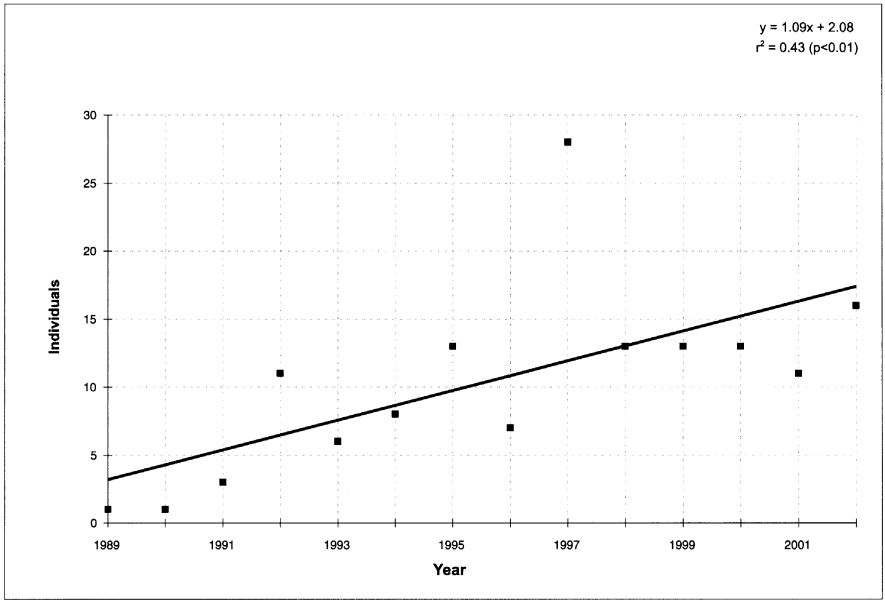

Figure 4: Carolina Wrens on the Detroit River CBC, 1989-2002.

of House Finches decline within the three years following a 20% or greater prevalence of the disease in a regional population, which occurred in southwest Ontario/ southeast Michigan around 1995 (Hochachka and Dhondt 2000). The decline in birds per 10 party-hours from 1995 to 1997 was 94.5%. This is a rapid decrease in a short period of time after reaching the 20% threshold, but variations in population declines are also influenced by density of House Finches (Hochachka and Dhondt 2000).

The pattern over time on the Detroit River CBC is very similar to the pattern for 50 CBCs in southern Ontario from 1980 to 1996 shown in Tozer's review of House Finch population trends in the province (Tozer 1997). Thus, Figure 5 is expressed in birds per 10 party-hours to match Tozer's graph. House Finches are primarily found at feeders, and CBC data do not separate birds counted at feeders and those found farther afield. Birds per party-hour is probably not the best method for estimating relative abundance for such species (Butcher and McCulloch 1990). Nonetheless, the CBC patterns discussed here are like those found by Project FeederWatch (CLO 2002), which only surveys feeder birds, and match what is to be expected given the well-studied progress and impacts of the conjunctivitis outbreak.

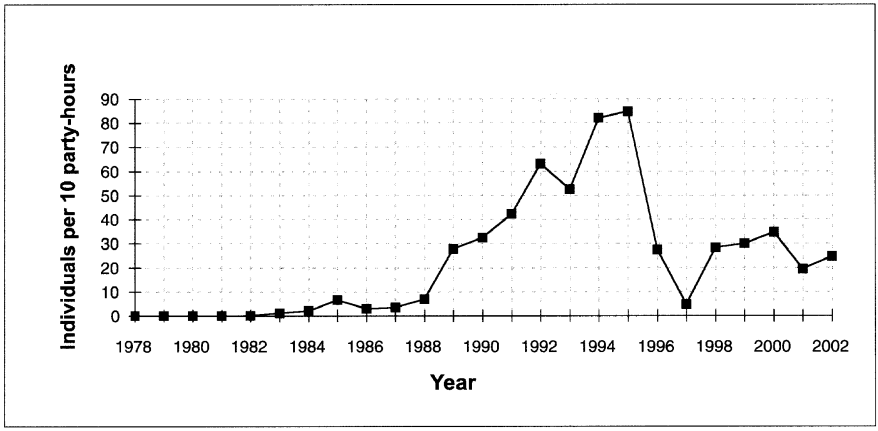

Figure 5: House Finches on the Detroit River CBC, 1978-2002.

Lately, House Finch numbers on the Detroit River CBC appear to be stabilizing. From 1998 to 2002, the mean per 10 party-hours is 27.34 versus highs in the 80s per 10 party-hours in 1993-1994 and 1994-1995.

DISCUSSION

The lower Detroit River has been designated an Important Bird Area (IBA) by BirdLife International's Canadian partners (IBAC 2002), for its globally significant concentrations of waterfowl (especially Canvasbacks and Redheads) and colonial waterbirds (primarily Ring-billed Gulls). The IBA begins just south of the Detroit River count circle, at the north end of Fighting Island, and extends southward. The importance of the Detroit River to waterfowl and wildlife is also recognized in the formation of the new Detroit River International Wildlife Refuge, which covers ~29 km (18 mi) of the lower river from Zug Island southward (ENN 2002); part of the Detroit River CBC is within refuge boundaries.

This count circle contains both highly urbanized areas as well as natural habitats critical to birds. Surrounding regions will continue to be developed while the Refuge and adjacent areas will be protected and restored, providing a unique monitoring opportunity in the coming years.

Acknowledgements

This is contribution No. 16 of the Rouge River Bird Observatory, whose work is made possible by numerous donors; special thanks to J. Jacob for his support. O. Gelderloos, K. Hall, D. S. O'Brien, and D. M. O'Brien provided helpful comments on the manuscript.

Literature Cited

Belyea, G. 1991. Ring-necked Pheasant. Pp. 180–181 *in* The Atlas of Breeding Birds of Michigan (R. Brewer, G.A. McPeek, and R.J. Adams, Jr., editors.). Michigan State University Press, East Lansing, Michigan.

Butcher, G.S. 1990. Audubon Christmas bird counts. Pp. 5–13 *in* Survey Designs and Statistical Methods for the Estimation of Avian Population Trends (J.R. Sauer and S. Droege, editors). United States Fish and Wildlife Service Biological Report No. 90.

Butcher, G.S. and C.E. McCulloch. 1990. Influence of observer effort on the number of individual birds recorded on Christmas Bird Counts. Pp. 120–129 *in* Survey Designs and Statistical Methods for the Estimation of Avian Population Trends (J.R. Sauer and S. Droege, editors). United States Fish and Wildlife Service Biological Report No. 90.

[CLO] Cornell Lab of Ornithology. 2002. Project Feederwatch long-term trend graphs. House Finch. <http://birds.cornell.edu/pfw/DataRetrieval/trendgraphs/houfin.html>. Accessed 26 December 2002.

[CWS] Canadian Wildlife Service. 2002a. Annual indices of population change for the Canada Goose in Canada based on Breeding Bird Survey data (1967-2000). Environment Canada, Canadian Wildlife Service, Migratory Birds Conservation Division. <http://www.cws-scf.ec.gc.ca/birds/Trends/species.cfm?Species_ID=1720&lang=e>. Version 13 March 2002. Accessed 24 December 2002.

[CWS] Canadian Wildlife Service. 2002b. Annual indices of population change for the American Black Duck in Canada based on Breeding Bird Survey data (1967-2000). Environment Canada, Canadian Wildlife Service, Migratory Birds Conservation Division. <http://www.cws-scf.ec.gc.ca/birds/Trends/species.cfm?Species_ID=1330&lang=e>. Version 13 March 2002. Accessed 25 December 2002.

[CWS] Canadian Wildlife Service. 2002c. Annual indices of population change for the Ring-necked Pheasant in Canada based on Breeding Bird Survey data (1967-2000). Environment Canada, Canadian Wildlife Service, Migratory Birds Conservation Division. <http://www.cws-scf.ec.gc.ca/birds/Trends/species.cfm?Species_ID=3091&lang=e>. Version 13 March 2002. Accessed 24 December 2002.

Dennis, D. 1987. American Black Duck (*Anas rubripes*). Pp. 70–71 *in* Atlas of the Breeding Birds of Ontario (M.D. Cadman, P.F.J. Eagles, and F.M. Helleiner, compilers). University of Waterloo Press, Waterloo, Ontario.

[ENN] Enivornmental News Network. 2002. First North American international wildlife refuge created. Version 15 January 2002. <http://www.enn.com/news/enn-stories/2002/01/01152002/s_46043.asp> Accessed 26 December 2002.

Fischer, J.R., D.E. Stallknecht, M.P. Luttrell, A.A. Dhondt, and K.A. Converse. 1997. Mycoplasmal conjunctivitis in wild songbirds: the spread of a new contagious disease in a mobile host population. Emerging Infectious Diseases 3: 69–72.

Hill, G.E. 1991. House Finch. Pp. 516–517 *in* The Atlas of Breeding Birds of Michigan (R. Brewer, G.A. McPeek, and R.J. Adams, Jr., editors). Michigan State University Press, East Lansing, Michigan.

Hochachka, W.M. and A.A. Dhondt. 2000. Density-dependent decline of a host abundance resulting from a new infectious disease. Proceedings of the National Academy of Sciences 97: 5303–5306.

[IBAC] Important Bird Areas of Canada. 2002. Lower Detroit River, Windsor, Ontario site listing. <http://www.bsc-eoc.org/iba/site.cfm?siteID=ON047&lang=en> Accessed 26 December 2002.

Johnson, W.C.J. 1991. Canada Goose. Pp. 120–121 *in* The Atlas of Breeding Birds of Michigan (R. Brewer, G.A. McPeek, and R.J. Adams, Jr., editors). Michigan State University Press, East Lansing, Michigan.

Kozlovic, D.R. 1987. House Finch (*Carpodacus mexicanus*). Pp. 492–493 *in* Atlas of the Breeding Birds of Ontario (M.D. Cadman, P.F.J. Eagles, and F.M. Helleiner, compilers). University of Waterloo Press, Waterloo, Ontario.

LePage, C. and D. Bordage. 1998. The American Black Duck web site. Environment Canada, Québec Region. Version 31 October 2002. <http://www.qc.ec.gc.ca/faune/sauvagine/html/black_duck.html> Accessed 23 December 2002.

Longcore, J.R., D.G. McAuley, G.R. Hepp, and J.M. Rhymer. 2000. American Black Duck (*Anas rubripes*). *In* The Birds of North America, No. 481 (A Poole and F. Gill, editors). The Birds of North America, Inc., Philadelphia, Pennsylvania.

Lumsden, H.G. 1987a. Canada Goose (*Branta canadensis*). Pp. 64–65 *in* Atlas of the Breeding Birds of Ontario (M.D. Cadman, P.F.J. Eagles, and F.M. Helleiner, compilers). University of Waterloo Press, Waterloo, Ontario.

Lumsden, H.G. 1987b. Ring-necked Pheasant (*Phasianus colchicus*). Pp. 134–135 *in* Atlas of the Breeding Birds of Ontario (M.D. Cadman, P.F.J. Eagles, and F.M. Helleiner, compilers). University of Waterloo Press, Waterloo, Ontario.

[MDNR] Michigan Dept. Natural Resources. 2001. Waterfowl status. <http://www.michigan.gov/dnr/0,1607,7-153-10363_10859-50168—,00.html> Accessed 24 December 2002.

[ONC] Ojibway Nature Centre. 2002. Detroit River Christmas Bird Count. Ojibway Nature Centre, City of Windsor Parks and Recreation web site. Version 02 January 2002. <http://www.city.windsor.on.ca/ojibway/cbc.htm> Accessed 23 December 2002.

Orton, J. 1998. The Carolina Wren. Birdscope 12(2): 6–7.

Robbins, C.S., D. Bystrak, and P.H. Geissler. 1986. The Breeding Bird Survey: its First Fifteen Years, 1965-1979. United States Department of the Interior, Fish and Wildlife Service Research Publication 157.

Root, T. 1988. Atlas of Wintering North American Birds. University of Chicago Press, Chicago, Illinois.

Sauer, J.R. and W.A. Link. 2002. Using Christmas Bird Count data in analysis of population change. American Birds 102nd Christmas Bird Count: 10–14.

Sauer, J.R., J.E. Hines, and J. Fallon. 2001. The North American Breeding Bird Survey, Results and Analysis 1966-2000. USGS Patuxent Wildlife Research Center, Laurel, Maryland. <http://www.mbr-pwrc.usgs.gov/bbs/grass/t3091.htm> Version 2001.2. Accessed 30 December 2002.

[SOM] State of Michigan. 2001. Human-goose conflicts and control techniques. <http://www.michigan.gov/emi/0,1303,7-102-113_128-46038—,00.html> Accessed 24 December 2002.

Tozer, R. 1997. House Finch population trends in Ontario. Ontario Birds 15: 89–94.

Tuovila, V.R., S.B. Chadwick, and C.A. Stewart. 2002. Ring-necked Pheasant and Northern Bobwhite Quail status in Michigan, 2002. Michigan Department of Natural Resources Report 3383.

[USGS] U. S. Geological Survey. 1998. Variables affecting the black duck decline and current status of black ducks and mallards in southern Ontario. USGS Patuxent Wildlife Research Center. <http://www.pwrc.usgs.gov/research/sis98/longco4s.htm> Accessed 26 December 2002.

Julie A. Craves, Rouge River Bird Observatory, University of Michigan-Dearborn, Dearborn, Michigan 48128

James A. Fowler, Jr., 20735 Carlysle, Dearborn, Michigan 48124

Breeding Status and Nest Site Selection of Turkey Vulture in Ontario

George K. Peck

In the late 1800s, the Turkey Vulture (*Cathartes aura*) was uncommon in Ontario and had been observed only in the southwest of the province, particularly in the counties of Essex, Kent, and Middlesex (McIlwraith 1894). In western Ontario, its early occurrences were listed by Snyder (1953), and the most northerly of these was at Sydney Lake, nearly 60 miles north of Kenora, in 1948.

Although nesting has never been recorded north of the Red Lake area of Kenora District, summer occurrences had been noted in the northeast at Moose Factory in June 1898 (Fleming 1903), in the northwest at Fort Severn where a bird was collected in August 1931 (Norris-Elye 1932), and at Winisk where a non-breeding bird was observed in 1983 (Cadman 1987).

Highway development and an increasing number of road kills by motor cars has undoubtedly contributed to the steady northward expansion of the species into Ontario. Although birds may be observed almost anywhere during the warmer months in southeastern Ontario and the southern part of western Ontario, they are particularly prevalent in southern Ontario along the 725 kilometre length of the Niagara Escarpment, to which they are attracted by its thermals and the ready accessibility of numerous nest sites in woodlands, cliff ledges, and caves and crevices.

No documented nesting records of Turkey Vulture exist for Ontario before 1900 (Peck and James 1983). There are undocumented reports of nests found in Middlesex County at Kerwood in 1890 and 1891, and at Coldstream in 1919 (Wood 1920). Two young Turkey Vultures were reported to have been raised in captivity in Lambton County in the early part of the 1900s (Williams 1918). Another early nest was reported at Poplar Bay, Kenora District in 1911 (Snyder 1953), but the first documented nest, also in Kenora District, was found in 1919 (Baillie and Harrington 1936).

Since these early records, the database of the Ontario Nest Records Scheme (ONRS) with 125 nest records, confirms that nesting has now been recorded in 36 provincial regions (see Figure1). The eastern and western breeding populations are obviously disjunct, which may be due to the lack of agricultural areas between Sudbury and Rainy River Districts, and the resulting absence of open country in which to forage.

Of 60 traditional nest sites of Turkey Vulture in Ontario, prior to 1989, 41 nests (68%) were in rocky sites (see Figure 2), and 19 nests (32%) were typically in woodlands (see Figure 3). The use of aban-

doned buildings as nest sites (see Figure 4) began to be recorded after 1989 in Ontario (Peck and James 1993). The former uniqueness of these sites is evident upon examination of the literature. Nuttall (1832) described one nest site in a chimney in a deserted house; Bent (1937) referenced only two nest sites in buildings, one in a pig sty in 1903, and one other in a neglected barn in 1927; and Palmer (1988) noted that only 5% of 418 nests, east of longitude 100° W, were in buildings.

Since 1989, in Ontario, of 54 nest records, 25 nests (46%) were in buildings, 19 nests (35%) were in rock sites, and 10 nests (19%) were in logs/stumps in woodlands. The continuing and increasing use of building nest sites is borne out in the period from 1999 to 2003, where a total of 18 nests consisted of 9 nests (50%) in buildings, 6 nests (33%) in rock sites, and 3 nests (17%) in woodlands.

Nidiology

RECORDS 125 nests representing 36 provincial regions (Figure 1).
Breeds on cliff ledges, crevices, caves, and among boulders on talus slopes and rocky outcroppings of shield and escarpment areas; in deciduous and mixed woodlands where nests were situated in standing hollow trees and stumps, in hollow fallen logs, and on the ground beside logs and piled wood; and in abandoned buildings (barns, houses, sheds, sugar shacks, stills, and cottages), in both agricultural lands and woodlands.

The rock sites (60 nests) overall outnumbered both the woodland sites (29 nests), and the deserted building sites (25 nests). However, as noted previously, these site numbers have shown a marked proportional change since 1989.

Nests were in various locations from near the tops of cliffs to near the bottom of talus slopes in rock sites, and one was in a crevice, 2 m above water; five nests in cavities in standing hollow trees and stumps were at the base of the cavity on the ground, and one other was 40 cm above ground level; and nests in buildings were on or under floor boards, and one was under a cottage porch. The eggs were placed usually on bare rock or ground or boards, and occasionally on wood chips, grain residue, hay, straw (see Figure 5), dead grasses and weeds. No nests were built, but scrapes or depressions were sometimes formed in the substrate.

EGGS 102 nests with 1 to 2 eggs; **1E** (18N), **2E** (84N).
Although 3E clutches are known, none have been reported in Ontario. In a barn loft in Kawartha Lakes in 2003, two nests, one with 2 eggs and one with 1 egg, were situated within 2 m of each other. Differences in markings and measurements seemed to indicate laying by two females. Both nests were deserted.
Average clutch range 2 eggs (84 nests).

INCUBATION PERIOD 4 nests, at least 29 days, at least 31 days, at least 33 days, and at least 37 days.
Although the period is known to be variable in length, the longest period is the most convincing.

EGG DATES 51 nests, 1 May to 20 July (71 visit dates); 25 nests, 20 May to 3 June.

The rapidly increasing use of deserted building nest sites since 1989 would appear to coincide with the decreasing use of rock and woodland sites because of forest fragmentation and more human encroachment of these nesting areas. The exodus from farming in recent years has resulted in a proliferation of abandoned barns and other farm buildings. Because the requirements of this species' nest sites are darkness and some seclusion from predators and humans (Kirk and Mossman 1998), these necessities are often better realized through the choice of abandoned buildings where nests usually are located under floorboards, or in dark lofts.

When any nest sites are undisturbed and nesting is successful, the birds show a marked tenacity to use these same sites annually, or intermittently, often for a number of years. From a nest site in a cavity at the base of a cliff in Bruce County, young were successfully fledged in seven nesting seasons, between 1981 and 1994. Another in the hollow stump of a Sycamore (*Platanus occidentalis*) in Kent County was occupied for six seasons, from 1947 to 1952.

Data from 12 nest records showed that nestlings (see Figure 6) remained in or near the nest over a period ranging from at least 52 days to 70 days. The early times indicate the age at which some nestlings moved on foot away from the actual nest site, prior to their first flight, which usually occurred at 60 to 70 days of age. Nests located inside buildings appeared to keep young from leaving their nest site as soon as those that were in hollow logs or among rocks and in caves, where there was no physical barrier pre-

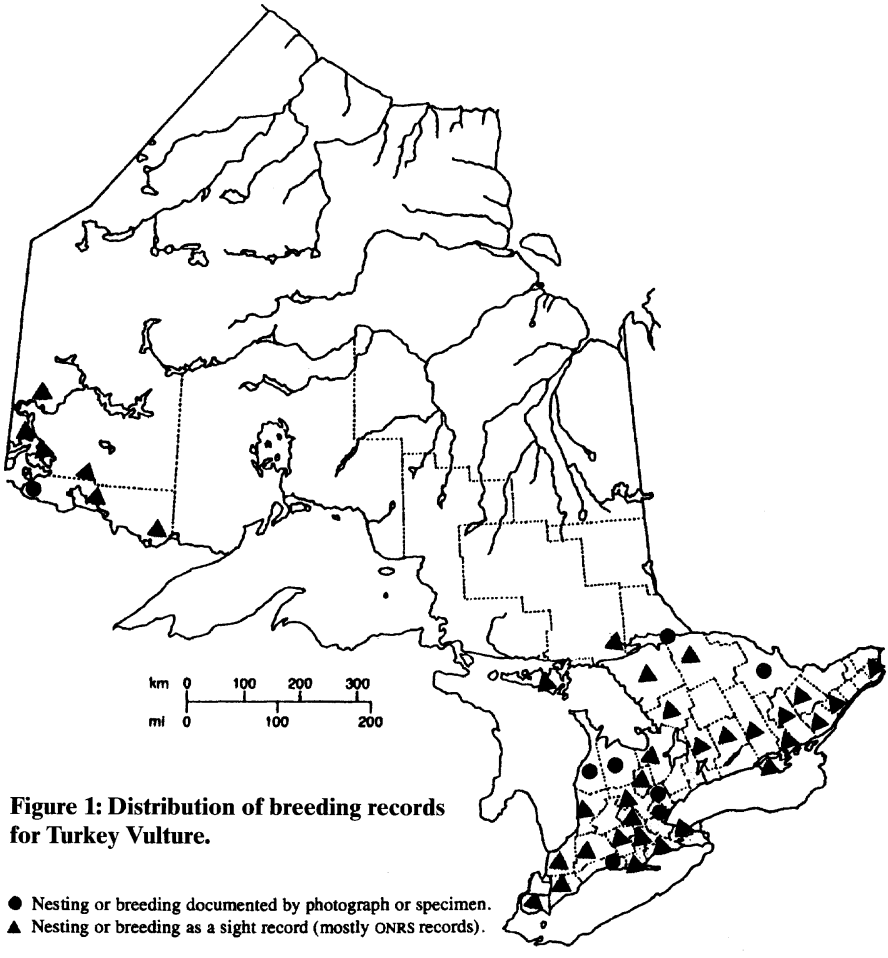

Figure 1: Distribution of breeding records for Turkey Vulture.

● Nesting or breeding documented by photograph or specimen.
▲ Nesting or breeding as a sight record (mostly ONRS records).

venting departure. For example, two young remained in a barn loft in Grey County for 77 days, although they were flying about inside the barn from at least 70 days of age (see Figure 7). The entrance through which the adult entered this barn was located about 5 m above the level where the young were raised.

In the ONRS database, of 46 nests where the outcome was known, 31 nests (67.4%) were successful. The 15 unsuccessful nests (32.6%), variously, were preyed upon by raccoons, had eggs and young collected, had adults shot, or were nests deserted for unknown reasons.

Despite the deleterious effects of predation, collisions with automobiles, habitat loss, and human encroachment on nest sites, breeding populations of this beneficial scavenger continue to increase in Ontario.

Figure 2: Turkey Vulture nest site in cave on Niagara Escarpment, Nassagaweya Township, Halton County, Ontario, 16 June 1966. Photo by *George K. Peck*.

Figure 3: Nest site of Turkey Vulture in tree cavity in farm woodlot, Haldimand County, Ontario, 15 May 1971. Photo by *George K. Peck*.

Figure 4: Turkey Vulture nest site in abandoned farm building, Rainy River District, Ontario, 13 June 2001. Photo by *George K. Peck*.

Figure 5: Nest and eggs of Turkey Vulture in barn loft, Epping, Grey County, Ontario, 26 June 2002. Photo by *George K. Peck*.

Figure 6: Nestling Turkey Vultures, 4 and 5 days of age, in barn nest, Epping, Grey County, Ontario, 25 July 2002. Photo by *George K. Peck*.

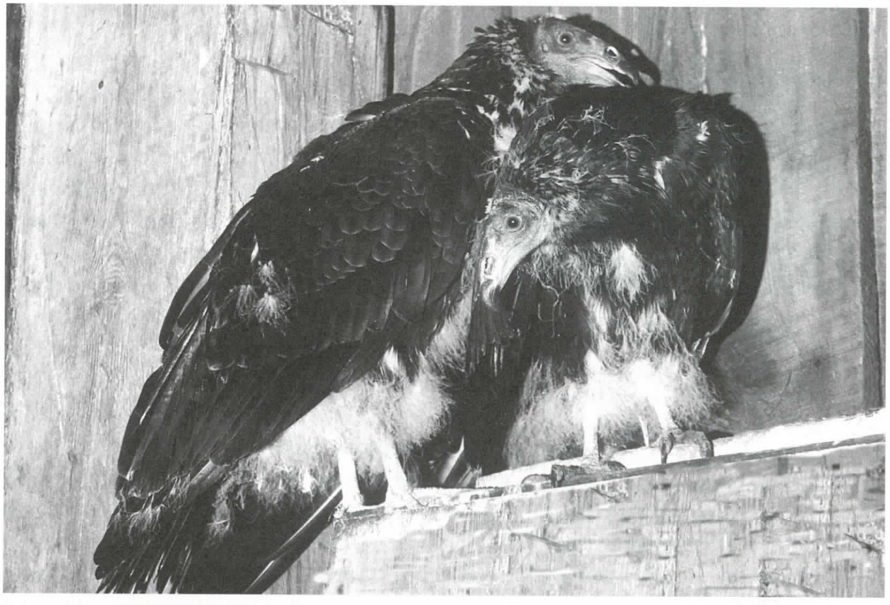

Figure 7: Two fledged young Turkey Vultures, 10 weeks of age and still in nest barn, although flying about, Epping, Grey County, Ontario, 29 September 2002. Photo by *George K. Peck*.

Literature Cited

Baillie, J.L. and P. Harrington. 1936. The distribution of breeding birds in Ontario. Part 1. Transactions of the Royal Canadian Institute 21: 1–50.

Bent, A.C. 1937. Life Histories of North American Birds of Prey. Part 1. United States National Museum Bulletin 167, Washington, D.C.

Cadman, M.D. 1987. Turkey Vulture (*Cathartes aura*). Pp. 106–107 *in* Atlas of the Breeding Birds of Ontario (M.D. Cadman, P.F.J. Eagles, and F.M. Helleiner, compilers). University of Waterloo Press, Waterloo, Ontario.

Fleming, J.H. 1903. Turkey Vulture at Moose Factory, James Bay. Auk 20: 66.

Kirk, D.A. and M.J. Mossman. 1998. Turkey Vulture (*Cathartes aura*). *In* The Birds of North America, No. 339 (A. Poole and F. Gill, editors). The Birds of North America, Inc., Philadelphia, Pennsylvania.

McIlwraith, T. 1894. The Birds of Ontario. William Briggs, Toronto.

Norris-Elye, B.A. 1932. A few bird records from the arctic. Canadian Field-Naturalist 46: 6.

Nuttall, T. 1832. A Manual of the Ornithology of the United States and of Canada: The Land Birds. Hilliard and Brown, Cambridge, Massachusetts.

Palmer, R.S. 1988. Handbook of North American birds. Volume 4. Diurnal Raptors (Part 1). Yale University Press, New Haven, Connecticut.

Peck, G.K. and R.D. James. 1983. Breeding Birds of Ontario: Nidiology and Distribution. Volume 1: Nonpasserines. Life Sciences Miscellaneous Publications, Royal Ontario Museum, Toronto.

Peck, G.K. and R.D. James. 1993. Breeding Birds of Ontario: Nidiology and Distribution. Volume 1: Nonpasserines (first revision, Part B: vultures to phalaropes). Ontario Birds 11: 83–91.

Snyder, L.L. 1953. Summer birds of western Ontario. Transactions of the Royal Canadian Institute 30: 47–95.

Williams, M.Y. 1918. Brief notes on the fauna of Lambton County, Ont. Ottawa Naturalist 32: 37-38.

Wood, A.A. 1920. An annotated list of the birds of Coldstream, Ontario, and vicinity. Canadian Field-Naturalist 34: 47–53.

George K. Peck, Research Associate, ONRS – Centre for Biodiversity and Conservation Biology, Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario M5S 2C6

Notes

Extended Incubation by a Tundra Swan

Ken Abraham

On 2 August 2002, Ontario Ministry of Natural Resources (OMNR) helicopter pilot, Don Filliter, noted a swan on a nest below us while transporting a goose banding crew to Cape Henrietta Maria. We were in Polar Bear Provincial Park (ca. 55° 05' N, 83° 16' W), the heart of Ontario's Tundra Swan (*Cygnus columbianus*) nesting range, so the observation was in the right place but it was decidedly at the "wrong" time of year. For a week, we had been recording broods of Tundra Swan containing one-quarter to one-third-grown cygnets at other locations throughout the park. Therefore, we backtracked and confirmed the sighting from the air, then landed nearby to investigate from the ground. As we approached, the swan flushed from the nest and flew to a nearby large lake, joining two other adult-plumaged swans.

The nest was on a peat mound that measured about 5 m across at the base. The nest bowl was made of twigs and branches and contained little down, but it sat upon a mound of moss and sedges pulled up by the swan. The nest was about 1 m above ground (Figure 1), similar to other swan nests I have visited in the Hudson Bay Lowland and those described by Kear (1972). The mound was situated in a *Carex aquatilis* fen approximately 30 m from a large open lake. Swamp birch (*Betula pumila*) covered about 50 percent of the mound, with black crowberry (*Empetrum nigrum*) and bog rosemary (*Andromeda polifolia*) also relatively abundant. It had two distinct paths leading to it from

Figure 1: Tundra Swan nest containing five eggs in Polar Bear Provincial Park, Ontario, 2 August 2002. Photo by *Ken Abraham*.

the surrounding sedge fen. The nest contained 5 eggs, but close examination of all eggs revealed both a smell and a metallic tinny sound when tapped, indicating (in my experience) decomposing contents. I opened one egg (or rather it exploded when I attempted to do so), sending forth a malodorous liquid and confirming the non-viable nature of the eggs.

Discussion

The Tundra Swan is one of the earliest northern waterfowl species to commence egg-laying (e.g., Bergman et al. 1977) because of the length of the period needed to successfully reproduce. The incubation period is about 32 days and the period from hatch to flight attainment is about 60–70 days, so about 100 days are needed in all (Bellrose 1976). Although laying dates from the Hudson Bay Lowland in Ontario are lacking, Lumsden (1987) indicated laying in late May, and my own unpublished observations show incubation is usually restricted to June and early July, and broods are present from early July onward. It was obvious from the date that this swan had been incubating for a long, extended period.

Incubation behaviour is under the control of the endocrine system and brain. As long as eggs are present, the stimulus is to sit. Hatch in most waterfowl is a relatively synchronous process, but still occurs

over 1–2 days. It is preceded by a brief period when the female and the young still in the eggs communicate. Because these eggs were incapable of hatching, this swan would only have received stimulus to keep incubating and would have lacked any communication stimulus signalling imminent hatch. How long the incubation may have continued is unknown, but eventually, loss of body weight and need for maintenance energy would have triggered desertion (see review in Afton and Paulus 1992). Kear (1972) reported cases of captive Mute Swans (*C. olor*) that sat on infertile or dead clutches for 50 days and 53 days, far beyond normal (35.5 days) for that species. Lumsden (1980, 1983) reported a female Canada Goose (*Branta canadensis*) that incubated a combination of dummy eggs and then foster eggs for a total of 53 days before hatching the foster eggs; the same female incubated a set of dummy eggs for 61 days before desertion in another year. Incubation extended about twice the normal period (28 days) in each case.

Causes of egg failure in the wild are varied, but include non-fertilization, developmental anomalies of embryos ending in death, and perhaps bacterial infection during laying. In 2002, spring melt along this part of the Hudson Bay coast was especially late (e.g., Canada Geese nested 21 days later than in 2001, hatching near 1 July). It is possible that the winter-like conditions led to freezing of the swan's eggs during laying, followed by embryo death and subsequent decomposition. Frequency of such events, and consequently of extended incubation, is difficult to estimate, as is the effect on subsequent condition and behaviour of the female.

Literature Cited

Afton, A.D. and S.L. Paulus. 1992. Incubation and brood care. Pp. 62–108 *in* Ecology and Management of Breeding Waterfowl (B.D.J. Batt, A.D. Afton, M.G. Anderson, C.D. Ankney, D.H. Johnson, J.A. Kadlec, and G.L. Krapu, editors). University of Minnesota Press, Minneapolis, Minnesota.

Bellrose, F.C. 1976. Ducks, Geese and Swans of North America. Stackpole Books, Harrisburg, Pennsylvania.

Bergman, R.D., R.L. Howard, K.F. Abraham, and M.W. Weller. 1977. Waterbirds and their wetland resources in relation to oil development at Storkersen Point, Alaska. Resource Publication No. 129, United States Fish and Wildlife Service, Washington, D.C.

Kear, J. 1972. Reproduction and family life. Pp. 80–124 *in* The Swans (Peter Scott and the Wildfowl Trust). Houghton Mifflin Company, Boston, Massachusetts.

Lumsden, H.G. 1980. Eggless Canada Goose raises foster broods. Wilson Bulletin 92: 415.

Lumsden, H.G. 1983. Malformation of the oviduct in a Canada Goose. Wilson Bulletin 95: 311–313.

Lumsden, H.G. 1987. Tundra Swan (*Cygnus columbianus*). P. 509 *in* Atlas of the Breeding Birds of Ontario (M.D. Cadman, P.F.J. Eagles, and F.M. Helleiner, compilers). University of Waterloo Press, Waterloo, Ontario.

Ken Abraham, Ontario Ministry of Natural Resources, Wildlife Research and Development Section, 300 Water Street, Peterborough, Ontario K9J 8M5

A Birder's Guide to Second Marsh Wildlife Area, McLaughlin Bay Wildlife Reserve, and Surroundings: Update

Jim Richards and Tyler Hoar

The purpose of this note is to revise OFO Bird Finding Guide # 7, published in *Ontario Birds* in 1999 (Richards 1999), with respect to additional birds and breeding species now known to have occurred in the designated area (Oshawa Second Marsh Wildlife Area and McLaughlin Bay Wildlife Reserve in southeast Oshawa, Ontario, and Darlington Provincial Park in the Municipality of Clarington to the east). In this update, reports of Review List species that have not yet been reviewed by the Ontario Bird Records Committee are marked with an asterisk (*).

The original article listed 276 species, of which 98 species were known to have bred (although there were in fact 99). A short note in *Ontario Birds* in 2000 corrected and updated this list by adding 12 species (Richards 2000a). Dates and details of currently known records for these additional species are listed below.

Western Grebe ***Aechmophorus occidentalis***
1963: three in Darlington Provincial Park, 20 October, M. Sherwood, N. Sherwood; and one still present, 21 October, J.L. Baillie (Tozer and Richards 1974).*
1966: one off Beaton's Point (now McLaughlin Bay Wildlife Reserve), 11 May, A. Foster, R. Foster (Tozer and Richards 1974).*
1997: one moving west with Red-necked Grebes (*Podiceps grisegena*) off Darlington Provincial Park and Oshawa Second Marsh, 22 April, T. Hoar.*

Barrow's Goldeneye ***Bucephala islandica***
1998: one male in Darlington Provincial Park, 16-18 January, M. Bain, T. Hoar, et al.

Northern Bobwhite ***Colinus virginianus***
A small covey was present during at least 1982 to 1986 on the east side of Darlington Provincial Park, and birds were encountered frequently (T. Hoar). Undoubtedly, these were escapees from a game farm or birds released for hunting purposes.

Parasitic Jaeger ***Stercorarius parasiticus***
1960: one adult in Darlington Provincial Park, 28 September, A.A. Wood (Tozer and Richards 1974).
1963: one in Darlington Provincial Park, 4 September, C. Christy (Tozer and Richards 1974).
2003: one adult in Oshawa Second Marsh, 2 June, T. Hoar.

Thayer's Gull ***Larus thayeri***
1997: one first summer in Darlington Provincial Park, 21 May, T. Hoar; and 22 May, R. Pye.

1997: one first summer in Darlington Provincial Park, 14 June, T. Hoar.
2000: one juvenile in McLaughlin Bay Wildlife Reserve, 2 January, T. Hoar.
2001: one adult in Darlington Provincial Park, 17 December, T. Hoar.
2002: one juvenile in Darlington Provincial Park, 22 December, T Hoar.

Ivory Gull ***Pagophila eburnea***
1971: one first winter at Oshawa lakefront, 3 January, G.A. Scott, D. Calvert (Tozer and Richards 1974, Wormington and Curry 1990).
1973/74: one first winter at Oshawa lakefront, 24 December, D. Calvert; and 1 January, D. Calvert, G.A. Scott et al. (Tozer and Richards 1974, Wormington and Curry 1990).
1997: one first winter at Pickering-Whitby-Oshawa lakefronts, 1 January, M. Holder et al. (Dobos 1998).

Great Gray Owl ***Strix nebulosa***
1979: one in Darlington Provincial Park, 18 February, G. Henwood, P. Bridges; and likely the same bird at Oshawa Second Marsh, 24 February, L. Raczkowski.
1995: two in Darlington Provincial Park, 23 December, T. Hoar, G. Carpentier.

Common Raven ***Corvus corax***
1997: one over Oshawa Second Marsh and Darlington Provincial Park, 25 April, T. Hoar.
1998: one in Darlington Provincial Park, 20 December, T. Hoar.
2000: one flying past Oshawa Second Marsh, 26 April, R. Pye.
2001: one in McLaughlin Bay Wildlife Reserve, 25 June, J. Richards.

Carolina Wren ***Thryothorus ludovicianus***
1991: one in Darlington Provincial Park, 29 August, T. Hoar.
2002: one in McLaughlin Bay Wildlife Reserve, 21 April, M. Bense.
2002: one male at Oshawa Second Marsh, 17 May, J. Richards, T. Hoar.

Bohemian Waxwing ***Bombycilla garrulous***
2000: 11 in Darlington Provincial Park, 12 March, T. Hoar.

Worm-eating Warbler ***Helmitheros vermivorus***
1992: one in Darlington Provincial Park, 12 May, C. McEvoy (Bain and Henshaw 1993).

Summer Tanager ***Piranga rubra***
2002: one male in the Ghost Road Bush, Oshawa Second Marsh, 17 May, T. Hoar.

Dates and details for currently known records of the three additional breeding species reported by Richards (2000a) are as follows:

Ring-billed Gull ***Larus delawarensis***
1998: one flightless young being fed by adults on the beach in Darlington Provincial Park, 23 June, T. Hoar.

Golden-crowned Kinglet ***Regulus satrapa***
1997: pair feeding young in nest in Darlington Provincial Park, 6 June, T. Hoar.

Orchard Oriole ***Icterus spurius***
1991: pair observed mating in Darlington Provincial Park, 20 May, D. Tozer, R. Tozer (Bain and Henshaw 1992); and adults with fledged young, 17 July, T. Hoar.

2001: pair feeding at least two fledged young in McLaughlin Bay Wildlife Reserve, 25 June, J. Richards.
2002: nest with three small young in McLaughlin Bay Wildlife Reserve, 21 June, J. Richards.

A new species total of 288, including 101 breeders (which should have been 102), was published in 2000 by Friends of Second Marsh in their *McLaughlin Bay Wildlife Reserve and Second Marsh Wildlife Area Visitor's Guide* (Richards 2000b). Records have now been obtained for 15 more species, bringing the checklist total to 303 species. Dates and details of these additional species are as follows:

American White Pelican ***Pelecanus erythrorhynchos***
2002: three in Oshawa Second Marsh, 16 May, D. Ruch.

Northern Gannet ***Morus bassanus***
1961: one juvenile off Beaton's Point, 22 October, G.A. Scott (Tozer and Richards 1974).*

Yellow-crowned Night-Heron ***Nyctanassa violacea***
1977: one on Beaton's Point, 5 June, G.A. Scott.*

Marbled Godwit ***Limosa fedoa***
1972: one in Darlington Provincial Park, 1 August, R.A. Smith (Tozer and Richards 1974).

Ruff ***Philomachus pugnax***
2003: one male (molting, with a hint of a black ruff) in Oshawa Second Marsh, 3 September, T. Hoar.

Pomarine Jaeger ***Stercorarius pomarinus***
2000: one subadult off Darlington Provincial Park, 17 December, T. Hoar.

Sabine's Gull ***Xema sabini***
2001: one juvenile off Darlington Provincial Park, 17 December, T. Hoar.

Black-legged Kittiwake ***Rissa tridactyla***
1967: one juvenile found freshly dead (ROM specimen #100003) on the beach in Darlington Provincial Park, 13 September, R.A. Davis (Tozer and Richards 1974).

Arctic Tern ***Sterna paradisaea***
2003: one in Oshawa Second Marsh, 25 May, T. Hoar.*

Blue-winged Warbler ***Vermivora pinus***
1998: one female in Darlington Provincial Park, 25-26 August, T. Hoar, G. Vogg.
1999: one male in Darlington Provincial Park, 15 May, T. Hoar.
2000: one male in Darlington Provincial Park, 27 August, T. Hoar.
2002: one male in Darlington Provincial Park, 17 May, T. Hoar.

Kentucky Warbler ***Oporornis formosus***
2002: one male in Darlington Provincial Park, 21 May, T. Hoar.

Le Conte's Sparrow ***Ammodramus leconteii***
2001: one in Darlington Provincial Park, 28 September, T. Hoar.

Yellow-headed Blackbird ***Xanthocephalus xanthocephalus***
1967: one male in Oshawa Second Marsh, 19 July, S. Hockett, D. Holmes, B. Staples (Tozer and Richards 1974).
1984: one male (worn first basic) in Beaton's farm field and later in Oshawa Second Marsh, 26 May, R. Tozer.
2002: one female in Darlington Provincial Park, 14 May, T. Hoar.
2003: one male in Oshawa Second Marsh, 13 May, D. Pazaratz.

Hoary Redpoll ***Carduelis hornemanni***
1977: one at edge of Darlington Provincial Park, 31 December, L. Raczkowski.
2001: one in Darlington Provincial Park, 8 December, T. Hoar.

Finally, records have been obtained for an additional four breeding species (bringing the checklist total to 106), as follows:

Ruddy Duck ***Oxyura jamaicensis***
2002: female with five small young in Oshawa Second Marsh, 10 August, T. Hoar.

Caspian Tern ***Sterna caspia***
2003: two active nests (contents unknown) in Oshawa Second Marsh, 26-27 June; appeared abandoned, 1 July, J. Richards, T. Hoar.

Cliff Swallow ***Petrochelidon pyrrhonota***
1981: 22 active nests on a barn at Beaton's Point, 28 June, G.A. Scott.

Carolina Wren ***Thryothorus ludovicianus***
2002: an adult with at least two fledged young being fed in Darlington Provincial Park, 6 August, T. Hoar.

Note:

On 9 July 2003, a pair of Trumpeter Swans (*Cygnus buccinator*) with five small cygnets was observed in Oshawa Second Marsh by T. Hoar. While not yet an established, "countable" species in Ontario according to the latest decision by the Ontario Bird Records Committee (Burke 2003), the observation is still of great interest.

Summary

Currently, the total number of bird species recorded within the described checklist area stands at 303, of which 106 species have been known to breed.

Acknowledgements

We are greatly indebted to the many observers who have made their records available through personal communications; listservs such as ONTBIRDS (M. Cranford), and the Durham Rare Bird Line (R. Pye); *The Naturalist* (Durham Region Field Naturalists newsletter); *Birders Journal*; and the Ontario Nest Records Scheme (M. Peck, Royal Ontario Museum).

Literature Cited

Bain, M. and B. Henshaw 1992. Annual Bird Report Durham Region Ontario. M.S.I. Graphics Inc., Pickering, Ontario.

Bain, M., and B. Henshaw 1993. The Durham Region Natural History Report 1992. M.S.I. Graphics Inc., Pickering, Ontario.

Burke, P. 2003. OBRC notes. OFO News 21(2): 3.

Dobos, R.Z. 1998. Ontario Bird Records Committee report for 1997. Ontario Birds 16: 51–80.

Richards, J. 1999. OFO bird finding guide # 7. A birder's guide to Second Marsh Wildlife Area, McLaughlin Bay Wildlife Reserve, and surroundings. Ontario Birds 17: 133–151.

Richards, J. 2000a. Oshawa guide update. Ontario Birds 18: 144.

Richards, J. 2000b. McLaughlin Bay Wildlife Reserve and Second Marsh Wildlife Area: Visitor's Guide. Friends of Second Marsh, Oshawa, Ontario.

Tozer, R.G., and J.M. Richards 1974. Birds of the Oshawa-Lake Scugog Region, Ontario. Alger Press, Oshawa, Ontario.

Wormington, A. and R.H. Curry. 1990. Ontario Bird Records Committee report for 1989. Ontario Birds 8: 4–33.

Jim Richards, 14 Centreview Street, Box 442, Orono, Ontario L0B 1M0

Tyler Hoar, 534 Fox Street, Oshawa, Ontario L1J 6X3

Early First Prebasic Molt in Short-billed Dowitcher

Kevin McLaughlin and Ron Pittaway

On 7 September 2003, the first author and Jerry Guenther observed six juvenile Short-billed Dowitchers (*Limnodromus griseus*) at the Grimsby Sewage Lagoons in *Niagara*. One of the birds clearly exhibited evidence of first prebasic (postjuvenile) molt. Among the dark-centred and narrowly buff-fringed juvenile scapulars on each side were at least four new contrasting grey first basic feathers as shown in Figure 1. These scapulars were a medium grey colour with a dark shaft streak and thin white fringe. The mantle (upper back between the scapulars) also had some grey first basic feathers mixed with brown juvenile feathers, but these are not fully visible in the photograph.

Previously, we had not seen signs of molt on southbound juvenile (and adult) Short-billed Dowitchers, although it is normal to see molting adult and juvenile southbound Long-billed Dowitchers (*L. scolopaceus*) in southern Ontario. Until this bird, our observations agreed with Dunn

Figure 1: Short-billed Dowitcher at Grimsby Sewage Lagoons, *Niagara*, on 5 September 2003. Arrow points to several new grey first basic scapular feathers, which contrast with the brighter juvenile scapulars. Photo by *Ken Newcombe*.

(1999) who reported: "Reflecting the pattern of adults, juvenile short-bills migrate through the Midwest in full juvenal plumage and even the latest migrants in early October haven't yet molted."

This is the first documented case of first prebasic molt in a juvenile Short-billed Dowitcher in Ontario.

Acknowledgements

We thank Ken Newcombe for his photograph, which made this note possible. Jean Iron commented on a draft.

Literature Cited

Dunn, J.L. 1999. Some additional thoughts on dowitchers. Ohio Cardinal 23: 30–33.

Kevin McLaughlin, 30 Bingham Road, Hamilton, Ontario L8H 1N4

Ron Pittaway, Box 619, Minden, Ontario K0M 2K0

OFO Annual Convention Oakville, Ontario 2 and 3 October 2004

Mark your calendar now to attend the 2004 OFO Annual Convention which will be held in Oakville. An exciting weekend of birding and presentations is being planned. On both Saturday and Sunday, experts will lead groups of convention participants to several of the great fall birding locations in the area. Saturday's events will include Ron Scovell's popular book sale, and an evening banquet and special featured speaker, at the St. Volodymyr Cultural Centre in Oakville. Watch for further details and registration information in *OFO News*.

Robert Curry: Distinguished Ornithologist

Bill Crins

This note is based on remarks by Bill Crins at the presentation of the Distinguished Ornithologist Award to Bob Curry at the OFO Annual Convention in Leamington, Ontario, on 20 September 2003.

It is a great honour and a pleasure for me to present the Ontario Field Ornithologists' (OFO) most prestigious award, the Distinguished Ornithologist Award, to Robert Curry, at this annual convention of our organization. Bob was my birding mentor, one of my geography teachers in high school, and continues to be my friend, as well as being a source of inspiration, particularly with regard to his depth of knowledge, commitment to excellence in observation and reporting, and incisive, analytical mind.

The Distinguished Ornithologist Award was established in 1997 to recognize individuals who have made outstanding contributions to the scientific study of birds in Ontario and Canada, and who have contributed significantly to OFO and Ontario's birding community (Iron 1997). Bob Curry was nominated for this award by the editors of Ontario Birds (Ron Tozer, Ron Pittaway, and me) because he meets these qualifications eminently, and as such, he joins company with the previous recipients, Earl Godfrey (Di Labio and Brunton 1997), Ross James (Peck 1998), Murray Speirs (Falls 2000), George Peck (Richards 2001), and Bruce Falls (Tasker 2002).

Before the award is presented, I would like to provide a brief overview of some of the many achievements for which Bob Curry is being recognized. Bob's legacy to Ontario's birding community spans several decades and has taken many forms. I have already mentioned that he was my mentor when I was developing my interest in birds. When I was in Grade 9 at M. M. Robinson High School in Burlington, I became interested in birds, but I really had no idea about how to go about cultivating that interest. I asked the teacher who supervised the Science Club at the school, Dr. Richardson, and he suggested that I talk to one of the geography teachers, namely Bob. Bob gave generously of his time, and even lent me a pair of binoculars until I obtained my own. Along with several other Hamilton area birders, including Barry Jones, John Olmsted, and George Bryant, I often was invited to join Bob on birding trips in the Hamilton and Long Point areas. My first birding trips to Point Pelee were with Bob and his compatriots, as well. Later, when I was an undergraduate student at Guelph, I joined them on a couple of weekend odysseys to Massachusetts, first in search of

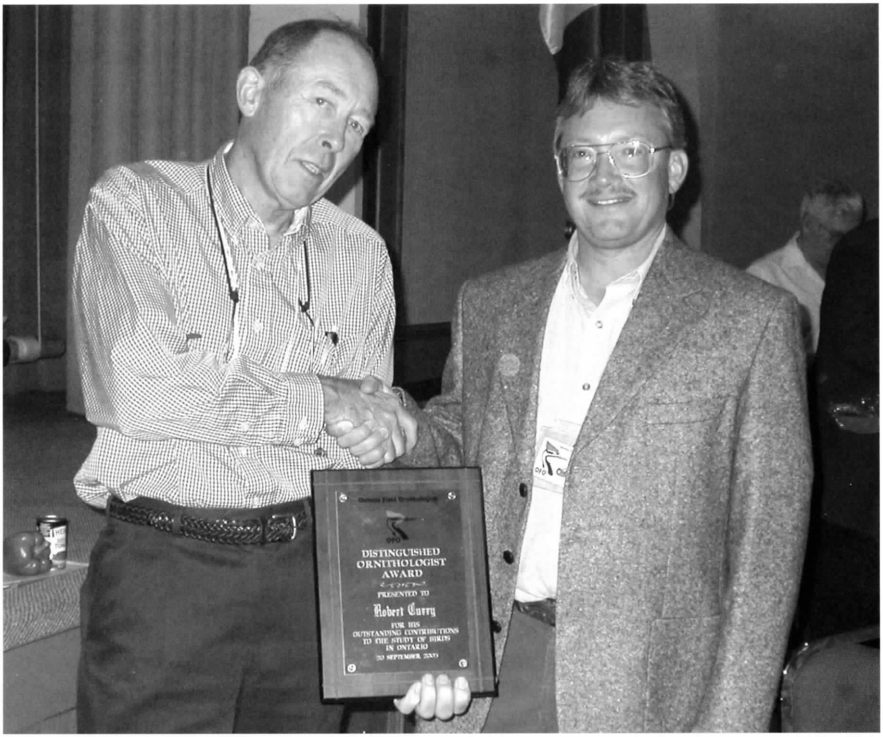

Figure 1: Bob Curry (left) receives the Distinguished Ornithologist Award, presented by Bill Crins, during the OFO Annual Convention at the Roma Club in Leamington, Ontario, on 20 September 2003. Photo by *Ron Pittaway*.

Dovekies and other late fall/early winter coastal birds, and then in search of the famous Newburyport Ross's Gull. These are just a few personal examples of Bob's generosity and willingness to cultivate a young person's interest in birds. This early mentorship has evolved into a friendship that lasts to this day. Many other birders, including OFO members Rob Dobos and Kevin McLaughlin, have benefited from Bob's knowledge and assistance, then and since, much as he himself benefited from the mentorship of the legendary George W. North.

Bob learned the birds and their vocalizations (this was well before audiotapes) as a teenager by hiking and cycling the fields, forests and shores of Hamilton, Long Point, and beyond. In 1960, he hitchhiked to Windmill Point on Lake Erie in search of an American Oystercatcher; not only did he see it, but he also found a Wandering Tattler. A favourite memory of his comes from June 1961 when the Wilson Ornithological Society held its annual meeting in Huntsville,

Ontario. Roger Tory Peterson wanted to bird Algonquin with George North so the three of them birded together. Bob was proud to point out song dialects (of, for example, Black-throated Blue Warbler) with which the world's most famous birder was unfamiliar.

Bob has been very active in local and provincial natural history organizations. He has been involved with the Hamilton Naturalists Club as president and in other capacities, and in its Bird Study Group, for many years. He has served on the Board of Directors of the Long Point Bird Observatory, and for several years, he was the compiler of the Long Point Christmas Bird Count. He was a founding life member of OFO in 1982, and was a founding member of the Ontario Bird Records Committee, as well as being its most frequently serving member (16 of its 22 years, including 9 years as Chairperson and 2 years as Secretary). Also, he has served our organization as the Photo Quiz Editor for *Ontario Birds* for 10 years, and during that period, he has provided extremely valuable and insightful instruction in bird identification to OFO members.

He has served important roles in the two Breeding Bird Atlas projects that have been undertaken in Ontario, as an atlasser and a member of the Data Review Committee in both atlases, and as an author (of the Gray Catbird, Northern Mockingbird, and Brown Thrasher accounts), reviewer of text, and Regional Coordinator for the Hamilton Region in the first atlas.

He is widely recognized as an authority on the status, distribution and identification of the birds of Ontario. Bob has published numerous articles about the birds of the province, and particularly concerning birds in the Hamilton Study Area. Currently, he is writing a major treatise on *The Birds of Hamilton*, which will be one of the most authoritative and extensive regional bird books ever produced in Ontario. In support of such a large undertaking, in addition to doing the exhaustive research necessary to produce such a book, he expends considerable effort in the field documenting the occurrence

of species himself. Presently, he is involved in conducting faunal surveys for the Halton Region Natural Areas Inventory, and he has been involved in similar surveys in Hamilton (formerly Wentworth County) and other areas in southern Ontario in the past.

This brief and partial summary of Bob's accomplishments on the birding front (not to mention his expertise in other areas of natural history), highlighting mentorship, communication skills, field experience, and overall ornithological expertise, illustrate his worthiness as a recipient of OFO's prestigious Distinguished Ornithologist Award.

A representative selection of his publications follows:

Curry, R. 1976. Sharp-tailed Sandpiper at Hamilton. Wood Duck 29: 83–85.
Curry, R. 1987. Gray Catbird, Northern Mockingbird, and Brown Thrasher. Pp. 332–337 *in* Atlas of the Breeding Birds of Ontario (M.D. Cadman, P.F.J. Eagles, and F.M. Helleiner, compilers). University of Waterloo Press, Waterloo, Ontario.
Curry, R. 1988. Mew Gull (*Larus canus brachyrhynchus*) at the Dundas Marsh, July 22, 1988. Wood Duck 42: 13–15.
Curry, R. 1991. Ontario Bird Records Committee report for 1990. Ontario Birds 9: 18–44.
Curry, R. 1994. Expanding Gadwall populations in Ontario. Pp. 221–228 *in* Ornithology in Ontario (M.K. McNicholl and J.L. Cranmer-Byng, editors). Special Publication No. 1, Ontario Field Ornithologists, Toronto.
Curry, B. 1996. Hurricane Fran: September 1996. Birders Journal 5: 283–297.
Curry, B. 2001. Book Review: The ROM Field Guide to Birds of Ontario. Ontario Birds 19: 89–93.
Curry, B. 2003. Book Review: Lars Jonsson: Birds and Light. Ontario Birds 21: 38–42.
Curry, R. and G.D. Bryant. 1987. Snowy Egret: A new breeding species for Ontario and Canada. Ontario Birds 5: 64–67.
Curry, B. and K.A. McLaughlin. 2000. The November 1999 Cave Swallow invasion in Ontario and northeastern North America. Ontario Birds 18: 13–26.
Curry, B., K. McLaughlin, and B. Crins. 2003. First "Greenland" Dunlin for Ontario and Canada. Ontario Birds 21: 23–30.
Curry, B., J.B. Miles, and C.A. Marantz. 2002. Smith's Longspur: First record for Ontario in winter, and for the Hamilton area. Ontario Birds 20: 120–129.
Curry, B. and J. Olmsted. 1996. The gifts of Hurricane Fran. Birders Journal 5: 231–232.
Wormington, A. and R.H. Curry. 1990. Ontario Bird Records Committee report for 1989. Ontario Birds 8: 4–33.

Literature Cited

Di Labio, B.M. and D.F. Brunton. 1997. W. Earl Godfrey: Distinguished ornithologist. Ontario Birds 15: 124–128.
Falls, J.B. 2000. J. Murray Speirs: Distinguished ornithologist. Ontario Birds 18: 126–129.
Iron, J. 1997. Distinguished Ornithologist Award. Ontario Birds 15: 123–124.
Peck, G.K. 1998. Ross D. James: Distinguished ornithologist. Ontario Birds 16: 150–152.
Richards, J. 2001. George K. Peck: Distinguished ornithologist. Ontario Birds 19: 130–131.
Tasker, R. 2002. J. Bruce Falls: Distinguished ornithologist. Ontario Birds 20: 144–149.

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

Book Reviews

Raptors of Eastern North America. 2003. By *Brian K. Wheeler.* Princeton University Press, Princeton, New Jersey. Hardcover, 16 x 23 cm, 439 pages, 559 colour photos, 37 maps. $45.00 U.S. ISBN 0-691-11598-2.

Raptors of Western North America. 2003. By *Brian K. Wheeler.* Princeton University Press, Princeton, New Jersey. Hardcover, 16 x 23 cm, 544 pages, 622 colour photos, 56 maps. $49.50 U.S. ISBN 0-691-11599-0.

Worldwide interest in watching and studying hawks has expanded greatly in recent years. *Raptors of Eastern North America* and *Raptors of Western North America* are two of the latest specialty books on a group of related birds. Note that raptor, meaning a bird of prey (hawks and relatives and owls), is not a taxonomic term. These two books treat the diurnal raptors in the order Falconiformes such as hawks, falcons, caracara, kites, eagles, harrier and osprey. Also included are the New World vultures and condors, which were formerly in Falconiformes, but are now in the order Ciconiiformes, which includes herons and storks. It is wise to keep vultures and condors as raptors because of their hawk-like appearance, flight styles, habits and history as raptors. However, these books do not treat owls, which are true raptors.

This review deals mainly with the eastern book, but most comments also apply to the western book. In fact, the two books should have been combined as one volume. Both are specialized handbooks for advanced hawkwatchers. They contain many new photos with detailed captions describing juveniles, subadults, and adults. For example, the eastern book has 82 photos of Red-tailed Hawks in flight and perched. Each species, subspecies and morph is given a detailed description. The text includes considerable information on identification, similar species, abnormal plumages, voice, behaviour, status, distribution, populations, summer and winter ranges, migration, courtship, nesting, habitat, food, mortality and conservation. Each species and subspecies is given a big 1/2 or 3/4 page range map. For example, there are three maps for the Red-shouldered Hawk in the eastern book, showing the ranges of the Eastern, Southern, and South Florida subspecies. The large maps show provincial and state boundaries and key cities, making them clear and easy to use.

These handbooks also contain five extensive glossaries: a general glossary; a plumage, molt and age glossary; an anatomy and feather glossary; a flying and perching dis-

plays glossary; and a perching and flying attitudes (with photos) glossary. Both books are printed on quality paper. I highly recommend these two superb references for the serious hawkwatcher.

Ron Pittaway, Box 619, Minden, Ontario K0M 2K0

Grebes of Our World. 2001. By *André Konter*. Lynx Edicions, Barcelona, Spain. Hardcover, 187 pages, 85 colour photos, many black-and-white sketches. $27.00 U.S. ISBN 84-87334-33-4.

Anyone who has ever watched a grebe can't help but be fascinated by their behaviour and mastery of the water. They glide effortlessly through the roughest lakes and sink almost magically below the surface with barely a ripple. Their often elaborate courtship displays leave us amused and, at the same time, spellbound.

A small group as bird families go, only twenty-two species are known worldwide. Mr. Konter shares his extensive experience, knowledge and admiration for these birds through a combination of words and pictures.

A nice foreword speaks concisely and informatively about grebes on such subjects as origins and subdivisions into genera, appearance, locomotion and diet. Included in this section are some great facts that would fascinate even a non-birder. Did you know that a grebe opens its eyes periodically even when asleep, presumably to subconsciously assess dangers in the vicinity? Facial stripes help offset the disadvantages of laterally situated eyes and help the grebes better focus on prey. Bill size and shape are quite different between species and reflect the preferred prey: fish, insects or other invertebrates.

Each of the six genera and all of the twenty-two species are described individually. Each account speaks to geographical distribution, measurements, appearance, habitat, nesting, food, subspecies and behaviour. One to several photographs and/or drawings support each account, and the author injects his own personal observations and theories throughout the text. This greatly enhances the readability and believability of the work. The book finishes with a detailed bibliography and a definitions section, as authors who write about grebes seem to have their own vocabulary.

If I had to find fault with the book, it would perhaps be with the quality of some of the photographs. Many of them seem to be added as fillers and often the purpose of the photo is unclear, at least to me.

If you are looking for a book that will tell you everything there is to know about grebes, a monograph so to speak, your search continues. If you're looking for a book that will introduce you to the wonders of grebes and give you insights into the lives of each of the world's species, and if you want to share the enthusiasm of one who obviously loves and understands these archaic birds, this will fill the bill. It is both informative and readable.

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

2004 OFO Board of Directors and Committees

Directors:

President: Jean Iron
Past President: Gerry Shemilt
Vice-President: Chris Escott
Treasurer: Eileen Beagan
Director, Memberships and Mailbox: Eleanor Beagan
Director, OFO Sales: Maris Apse
Director, Trips and Advertising: Don Barnett
Director, Publicity: Dave Milsom
Director: Sandra Eadie
Director: Bob Falconer

Committees:

Ontario Birds Editors: Bill Crins, Ron Pittaway, Ron Tozer
OFO News Editor: Jean Iron
Ontbirds Listserv Coordinator: Mark Cranford
OFO Website Coordinator: Sandra Eadie
Ontario Bird Records Committee (OBRC): Bill Crins (Secretary), Bob Curry, Dave Elder, Chris Escott, Kevin McLaughlin, Mark Peck (ROM Liaison), Ron Pittaway, Ron Tozer, Alan Wormington.
Distinguished Ornithologist Award: Bill Crins, Ron Pittaway, Ron Tozer
Certificates of Appreciation: Jean Iron, Bob Falconer
2004 Annual Conference: Don Barnett, Maris Apse, Dave Milsom
Birdathon and By-Laws: Chris Escott
Mailing: Eleanor Beagan, Eileen Beagan, Ariel Bergonzado, Trevor Hamilton, Myrle Hamilton, Jean Iron, Elisabeth Mihalj, Marilynn Murphy, Mary Lund and Elizabeth McKernan.
Archivist: Diane Henderson
OFO Representative, Ontario Breeding Bird Atlas: Bill Crins

In Memoriam

Jean Marianne Niskanen (1943-2003)

Mark Cranford

It was 30 August 1997, and I was not feeling too well; about to succumb again to the woes of *mal de mer*. Our party of four Ontario birders had boarded a Gulf Stream pelagic five hours earlier out of Brielle, New Jersey, and had yet to see a seabird. To make matters worse, an incredible Broad-billed Sandpiper, just 90 miles away at Jamaica Bay NWR in New York City, had been reported to us after we left the pier. That and dreams of rare storm-petrels were becoming nightmares. It wasn't just me; everyone on board was suffering except Jean Niskanen. In typical fashion for Jean, she refused to suffer anything. "Come on you guys, we need your eyes. You can't see birds looking at your feet." Forcing a grin, I straightened up and persevered. Jean was not going to let us lose the moment ... that was the way she was.

Jean Niskanen passed away on 19 March 2003, after an eleven-year struggle with cancer. The Ontario birding community lost one of its more active volunteers. It would surprise me greatly if I could find a field project in the Oakville or Parry Sound areas with which Jean had not been involved. For more than a decade, she accomplished this under the constant threat of terminal illness.

Jean was born in Toronto on 15 March 1943. She had been involved in organized birding and conservation for some thirty years, starting in the early seventies with the South Peel Naturalists. In addition to being a long time member of OFO, she was also a member of the American Birding Association, the Federation of Ontario Naturalists, the Toronto Ornithological Club, the Parry Sound Nature Club, the Friends of Killbear, and the Georgian Bay Osprey Society. She had served as President of the South Peel Naturalists' Club.

While she found time for overseas travel, Jean did a lot of her birding based out of her cottage on Georgian Bay at Dillon Cove. She took great satisfaction out of her compilation of bird checklists for Killbear Provincial Park and Carling Township. A Band-tailed Pigeon that visited Dillon Cove was an event.

Her bird studies were wide and varied and included Christmas Bird Counts in Oakville, work on both the first and second Breeding Bird Atlas projects in Parry Sound, Forest Bird Monitoring, Breeding

Bird Survey routes, Osprey monitoring, Red-shouldered Hawk Surveys and monitoring of Prairie Warbler colonies.

Her travels took her across Canada, including every province and the High Arctic. She spent a number of extended periods in Texas and Mexico. Jean had a fairly impressive life list of 2352 species, with highlights from Costa Rica, Peru, Ecuador, Chile, Brazil, Venezuela, Trinidad and Tobago, Belize, England, South Africa and Cuba. Her North American list (including Central America) was an impressive 1144.

I first met Jean on a South Peel Naturalists' Club field trip. It was one of my first glimpses into a lister's eye. I may have laughed when she talked about vagrant flycatchers and it took me a while to appreciate her enthusiasm, but it was there and I saw it. Everyone who met Jean knew she had a passion for the birds and that she wanted to share it with them.

Last April, Janet Robinson and I continued on with one of Jean's ongoing projects—the Killbear Provincial Park route for the Red-shouldered Hawk and Spring Woodpecker Survey. We left Toronto at three in the morning and were greeted by American Bitterns and Yellow-bellied Sapsuckers to begin the 20 survey stations at daybreak. It was a wonderful day. There may have been fewer Red-shouldered Hawks than previous years (construction in Killbear likely had something to do with it). But, with a complete suite of woodpeckers everywhere, Ruffed Grouse drumming, an irate Broad-winged Hawk and early Pine and Black-throated Green Warblers, the day and survey made for an exhilarating experience. I sensed Jean's appreciation, respect and love for the park and district. While Jean would be grateful to know that the birds of the forest will carry on, her presence will be missed.

Mark Cranford, 206-2437 Hurontario Street, Mississauga, Ontario L5A 2G4

Nikon

Photo Quiz

Sponsored by Nikon Canada

December 2003 Quiz

Glenn Coady

In late fall and early winter, many Ontario birders turn their thoughts to the challenges presented by the abundant concentrations of gulls to be found at our favourite birding haunts after their post-breeding dispersal to wintering areas. Twenty gull species have been found in Ontario thus far, and at least a handful of additional species are good candidates to be added to our checklist yet. Add to this the fact that all of these gulls exhibit a sequence of often subtly unique plumages and soft part appearances as they proceed from juvenile to adult age classes, and you have a group of birds that may serve as an excellent learning tool for honing identification skills for the beginner and intermediate birder, as well as a constant source to challenge any tendency toward complacency in even the most expert birder.

Our quiz presents a lone gull for analysis without any gulls of easily determined identity with which to make basic comparisons for an assessment of overall size and proportions.

Even without having a good reference for the size of this bird, we can tell from its rather short, thin and distinctly pointed bill and its delicately rounded head shape, that this bird is not likely one of the larger, white-headed gulls that take four years to reach maturity. These gulls, even as juveniles, all present a much thicker bill structure, with a culmen that curves sharply downward near the end, presenting a much duller, flatter, more hooked tip. They also tend to show a more prominent gonydeal angle than this bird. Hence, based on these structural clues alone, we can quickly and intuitively eliminate California Gull, Herring Gull, Thayer's Gull, Iceland Gull, Glaucous Gull, Lesser Black-backed Gull, Slaty-backed Gull and Great Black-backed Gull, without even so much as a look at plumage characters. Conversely, this bird's bill is both far too long and too thick for that of a Ross's Gull, the most diminutive-billed gull, which we also may eliminate easily.

One of the first things we notice about this bird is that it has a uniformly light grey mantle which contrasts with the more brownish lesser coverts and the dark brown tertials. Among the small to medium-sized gulls left to consider, this pattern should let us confidently age this as a first basic (first winter) bird that has mostly completed its first prebasic (postjuvenile) molt. Knowing this, we can now eliminate several other Ontario gull species. This gull is definitely not dark enough for a Heermann's Gull in first basic plumage, and the light grey mantle at this age is sufficient to easily exclude Ivory Gull.

The quiz bird shows mostly brownish legs with some orange tones, and a predominantly orange-pink bill with a dark tip. A first basic Black-legged Kittiwake would show all black feet and legs and an all-dark bill, and can thus be eliminated from further consideration. Similarly, Sabine's Gull is very unlikely to ever be found in Ontario in first basic plumage; it usually completes its first prebasic molt on its southern hemisphere wintering grounds. In any event, both juvenile and first basic Sabine's Gull would show an all-black bill and a darker nape than our quiz bird, thus ruling it out as well. First basic individuals of both of the medium-sized hooded gulls, Laughing Gull and Franklin's Gull, would demonstrate a considerably darker mantle than the quiz bird and would have much more uniformly darker bills and darker legs. Additionally, Franklin's Gull would show a partial hood. Both of these gulls thus can be dismissed also.

Looking at our quiz bird's head pattern, we can note that it shows a mostly white head with a light grey "ear spot" and dark plumage around the eye. These are more characteristic of one of the small hooded gulls rather than the pattern of overall fine streaking on the head, nape and upper breast

expected on first basic individuals of the smaller white-headed species such as Mew Gull and Ring-billed Gull.

We are left with only three small hooded gulls from the species found in Ontario: Little Gull, Bonaparte's Gull and Black-headed Gull.

Of these species, we are able to eliminate Little Gull most easily as a possibility. Little Gull should have a much finer and shorter, all-black bill in comparison to the quiz bird. In first basic plumage, it should show a darker and more solid and extensive carpal bar in the lesser coverts, and unlike our quiz bird, it should demonstrate a dark cap. A Little Gull with wings folded would not show as much of the primaries beyond the tertials as the quiz bird, which easily shows fully five primaries beyond the tertials, a character very unlikely to be seen with the shorter and rounder-winged Little Gull.

As far as the soft parts of our quiz bird are concerned, they are a better match for Black-headed Gull than Bonaparte's Gull. The latter generally has an all-black bill and should not show such a pale orange-pink base to the bill or such a two-toned effect. Also, Bonaparte's Gull has a slightly finer bill than the quiz bird. First basic Bonaparte's Gulls tend to have lighter pink legs than Black-headed Gulls (although this is variable and

prone to lighting artifacts) and usually considerably shorter legs as well. The quiz bird's orange-brown legs appear quite long also and are likely a better match for Black-headed Gull. Bonaparte's Gulls tend to have darker "ear spots" than Black-headed Gulls. Our quiz bird shows a fairly pale brown ear spot much lighter than the eye, a feature supporting Black-headed Gull. First basic Bonaparte's Gull has a slightly darker grey mantle shade than that of Black-headed Gulls of the same age. The grey extends up onto the nape in Bonaparte's Gull normally, whereas usually Black-headed Gull in first basic shows a distinct contrast between the grey mantle and its whitish nape. Once again, the pattern on the quiz bird is more consistent with Black-headed Gull rather than Bonaparte's Gull for these features. Indeed, our quiz bird is a first basic **Black-headed Gull** that was photographed by Roy Smith on 27 March 2001 at Chew Valley Lake, England.

If we could examine this bird in flight, or at least with outstretched wings, additional points of confirmation would be Black-headed Gull's dark undersides to the primaries, its all-dark secondaries and inner primaries (these are dark-tipped only in first basic Bonaparte's Gull), and its generally browner carpal bar through the lesser coverts.

Black-headed Gull breeds as close as the Magdalen Islands in Quebec and in western Newfoundland, and is a species that could potentially appear anywhere in Ontario. Although sightings on the lower Great Lakes predominate, so does coverage. However, it should be more expected, probably, on the lower lakes via the seaway, and it occurs annually in very small numbers.

Glenn Coady, 604-60 Mountview Avenue, Toronto, Ontario M6P 2L4

Ontario Field Ornithologists

President: Jean Iron, 9 Lichen Place, Toronto, Ontario M3A 1X3
(416) 445-9297 E-mail: jeaniron@sympatico.ca

Ontario Field Ornithologists is an organization dedicated to the study of birdlife in Ontario. It formed in 1981 to unify the ever-growing numbers of field ornithologists (birders/birdwatchers) across the province, and to provide a forum for the exchange of ideas and information among its members. The Ontario Field Ornithologists officially oversees the activities of the Ontario Bird Records Committee (OBRC); publishes a newsletter (*OFO News*) and a journal (*Ontario Birds*); operates a bird sightings listserv (ONTBIRDS), coordinated by Mark Cranford; hosts field trips throughout Ontario; and holds an Annual Convention in the autumn. Current information on all of its activities is on the OFO website (www.ofo.ca), coordinated by Sandra Eadie. Comments or questions can be directed to OFO by e-mail (ofo@ofo.ca).

All persons interested in bird study, regardless of their level of expertise, are invited to become members of the Ontario Field Ornithologists. Membership rates can be obtained from the address below. All members receive *Ontario Birds* and *OFO News*. Please send membership enquiries to: **Ontario Field Ornithologists, Box 455, Station R, Toronto, Ontario M4G 4E1**

Ontario Birds

The aim of *Ontario Birds* is to provide a vehicle for documentation of the birds of Ontario. We encourage the submission of full length articles and short notes on the status, distribution, identification, and behaviour of birds in Ontario, as well as location guides to significant Ontario birdwatching areas, book reviews, and similar material of interest on Ontario birds.

Submit material for publication by computer disk (CD or Floppy), or e-mail attachment (rtozer@vianet.on.ca). Please follow the style of this issue of *Ontario Birds*. All submissions are subject to review and editing. Send items for publication to the Editors at the OFO address noted above.