TWO SMALL AUTUMN ROOSTS OF GREAT EGRETS

at London and Metcalfe, Ontario

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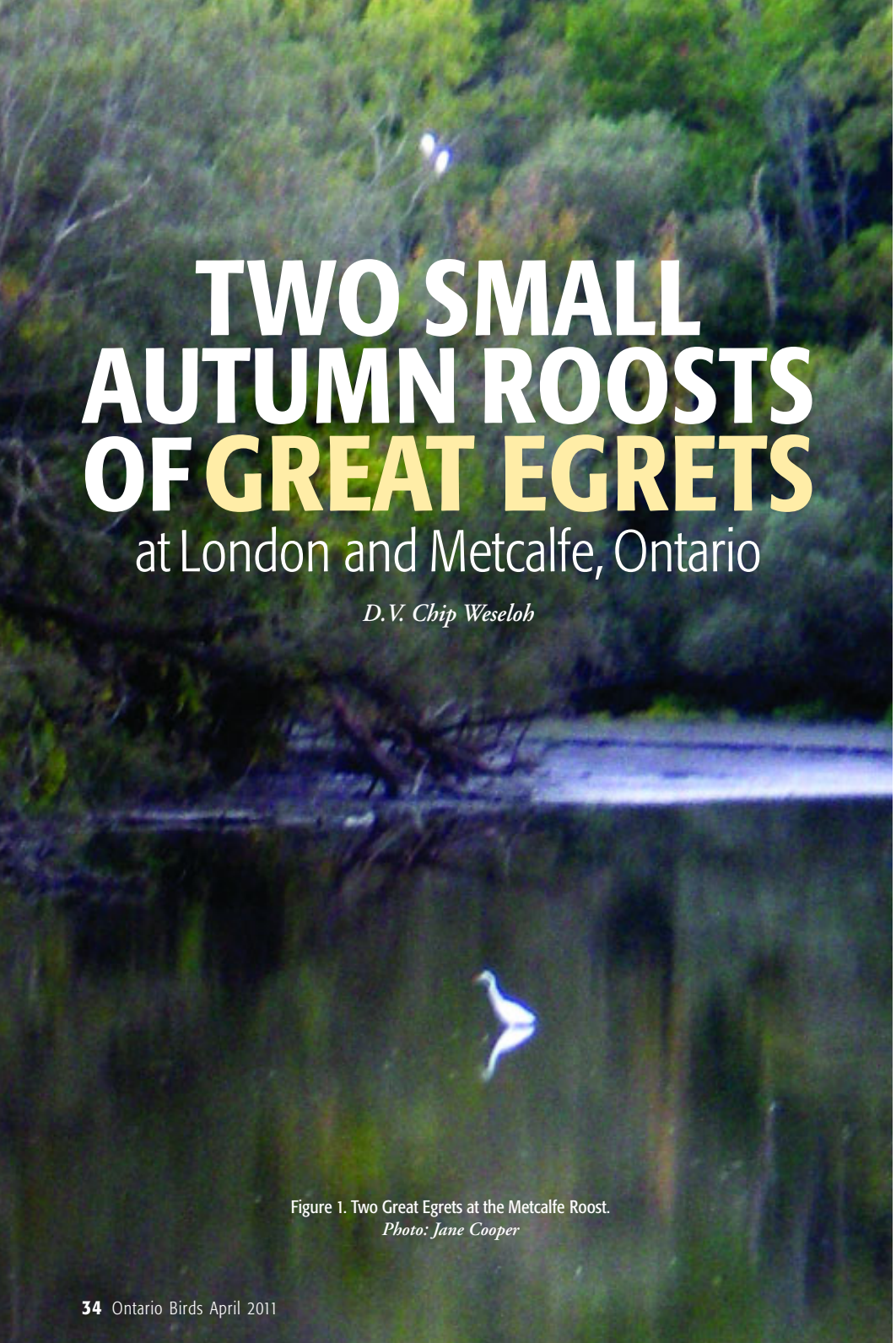


Figure 1. Two Great Egrets at the Metcalfe Roost.
Photo: Jane Cooper

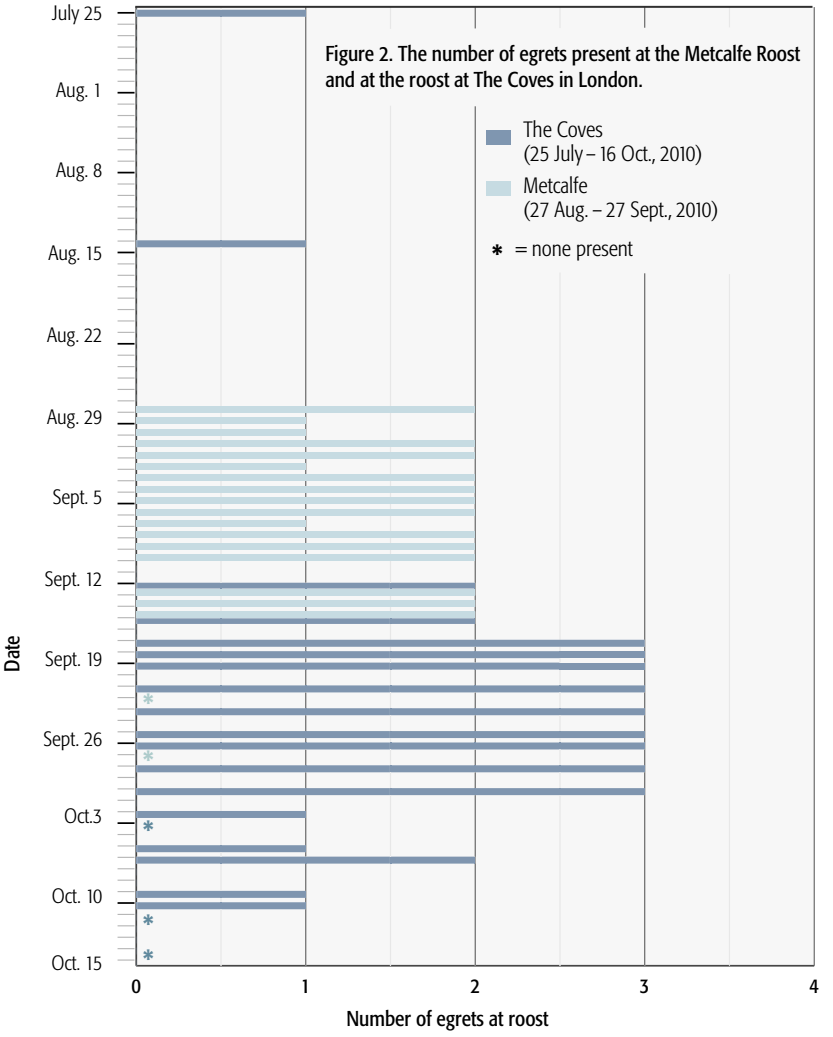
The roosting habits of the Great Egret (*Ardea alba*) in Ontario have been the subject of increasing recent interest. The large autumn roost of up to 304 individuals at Luther Marsh (Grand Valley, ON) has been noted for the last three years on Ontbirds, the listserv of the Ontario Field Ornithologists. That roost, and the large breeding colony near Collingwood, ON (only 100 km distant), are believed to be the largest such aggregations of Great Egrets in Canada (DVCW, unpubl. data). A detailed accounting of a smaller roost (76 birds) at Muddy Creek, near Wheatley, ON, has appeared in this journal (Weseloh *et al.* 2010). Also, during 2010 several subscribers to Ontbirds reported additional egret roosts to the author. Two of the driving forces behind this interest in roosting sites of Great Egrets are: 1. to identify sites where large numbers of egrets occur to facilitate the location of individually marked egrets (part of a larger study by the Canadian Wildlife Service), and 2. to identify specific areas of intense egret use and their potential as Important Bird Areas (IBAs)[1]. For example, Luther Marsh was identified as an IBA before its national significance as an egret roosting area was known. However, are there other significant egret roosting sites in Ontario, which should also be so recognized?

This paper reports on two very small egret roosts, one of two birds and the other of three birds, at Metcalfe and London, ON, respectively. The discovery of such small roosts was an unexpected outcome of the search for roosts. The occurrence of such small roosts of Great Egrets, a species known to roost communally in "large" roosts, has not been reported previously in the literature (Palmer 1962, Bent 1963, Hancock and Elliott 1978, Allen and Young 1982, McCrimmon *et al.* 2002). Further investigation into roosting sites of Great Egrets may yield important information on the stopover ecology of this species which has expanded its range in Ontario greatly during the last 25 years (Peck 1987, 2007).

Of the small roosts, the one at The Coves, in London, was tracked for 21 days over the period 25 July to 16 October and the one at Metcalfe (Figure 1) was tracked for 17 days over the period 21 August to 23 September. Counts of the number of egrets at the roosts usually were made in the evening once birds had arrived at the roost. Some counts at Metcalfe were made in the early, pre-sunrise morning.

During 2010, the first year the small roosts were known to the author, Len Manning, Anita Granger and Larry Gifford all made reports of egrets roosting at The Coves. The Coves are a series of small ponds in a wooded urban setting. On 25 July, Len Manning reported a single egret roosting in the North Pond of The Coves (Figure 2). Anita Granger further reported from one to three egrets present on 14 August and from 12 September to 10 October. During the August to September period, anecdotal observations

[1]. The Important Bird Areas Program is a science-based initiative to identify, conserve and monitor a network of sites that provide essential habitat for bird populations (see www.ibacanada.com).



suggest the birds were still present at The Coves (L. Manning, pers. comm.). On 3 October, no egrets appeared at the roost although two or three egrets were present both before and after that date (Figure 2). This may be a significant occurrence (see below). The last roosting egret was reported from The Coves on 10 October.

At Metcalfe, approximately 25 km SE of downtown Ottawa, Sarah Godoy and Jane Cooper reported a single egret roosting in dead trees surrounding a small rural pond, adjacent to their property on 21 August (Figure 2); this egret was marked with an orange wing-tag (Figure 3). A second egret roosted with the

wing-tagged bird on 27 August; it was later discovered that this egret was banded with a red plastic leg-band (both the orange wing-tag and red leg-band were part of the author's marking scheme). These two marked egrets were present at the Metcalfe roost on 13 of 17 nights (or mornings) when the roost was monitored between 27 August and 23 September. On the other four nights, only one of the marked egrets was present (Figure 2), always the leg-banded bird.

Discussion

The few egret roosts in southern Ontario which have been monitored intensively to date show a more or less bell-shaped curve with respect to the number of egrets using the roost overnight in the late summer to autumn period. They show a slow initial occupation, building up to a peak number and then a decline to zero when the birds leave for good (DVCW, unpubl. data). One of the things that is unique about the two small roosts described above is that their numbers started small, like most roosts, but they appear to have remained small throughout the season. Even the large roost at Luther Marsh starts out small, *e.g.* in 2009 there were three egrets in the roost on 25 June; it eventually built up to 304 by 21 August. In 2010, there was a single bird in the roost on 27 May; two birds on 10 June and by mid-September there were 235 (L. McLaren and DVCW, unpubl. data). In both years, the number of roosting egrets built up from one to three birds. Thus, the significant event at the two small roosts was the lack of an increased build-up in numbers as the season progressed. Why did these two small roosts not increase in numbers?

Figure 3. A wing-tagged Great Egret, similar to this one, was one of the birds present at the Metcalfe Roost. *Photo: Alan Wormington.*

There are at least two obvious potential reasons why these two roosts stayed small: there may not have been any other egrets in the immediate area or the other

egrets in the area went elsewhere to roost. Both of these possible answers beg the question of how far will an egret fly from its foraging area to where it will roost? Or, alternatively, how far will an egret fly from its roost to a foraging area such that in the evening it will return to the same roost it left in the morning? The size of the foraging area served by a given roost is probably influenced by the number of egrets that are using the roost at any one time. So the answer may be variable.

It is not known if there were other egrets in the immediate area of either of the small roosts. However, we can look at the location of the nearest other roost to each of the small ones. For the roost at Metcalfe, there were two other roosts about 20 to 25 km to the NW in Ottawa. From at least the second week of August until 6 September, there were up to 33 egrets using two sites in the Ottawa River: Conroy Island in the Deschene Rapids and a location on the west side of Shirley's Bay, about 7 to 8 km west of the Rapids (B. Di Labio, R. Dubois, pers. comm). The exact location of the latter roost could not be determined. Smaller numbers roosted at Conroy Island until at least 23 September (R. Dubois, pers. com.).

For the roost at The Coves in London, the nearest known other roost was at Wildwood Lake (near Harrington approximately 38 km NE). It has had as many as 14 egrets roost there in years past (J. Holdsworth, pers. comm.). On 30 September 2010, there were six egrets at that roost but numbers earlier in the season are unknown (A. Superina, pers. comm.). In three studies of foraging distances of breeding Great Egrets in the U.S., the authors found that birds flew an average of 6.3 km and 8.4 km and a range of 2.8 to 4.3 km from their breeding colonies (Bancroft *et al.* 1992, Thompson 1978, Custer and Osborn 1978, respectively). McCrimmon et al. (2001) concluded that the Great Egret "Typically forages <10km from [its] colony…." Whether the same distances apply to the post-breeding season and the egrets' roost sites is not known but it does suggest that it would be unlikely that birds would fly 20 to 25 km to roost. It turn, it would seem that egrets within a 5 to 10 km radius of a given roost would roost together. Thus the small numbers of egrets at these two roosts may have been the only egrets in those areas.

The pattern of occupation at these two very small roosts, and the fact that both birds at Metcalfe were colour-marked, prompts at least two other questions, or observations, about the roosting behaviour of Great Egrets. At Metcalfe, one bird showed extreme fidelity to the roost site being present every night the roost was checked. The other bird was away on four nights but always eventually came back to the Metcalfe roost. Where did it roost on those four other nights and how far did it go? Did it roost solitarily or with other egrets?

In the second case, at The Coves, no egrets roosted there on 3 October but there were one or two birds present after that date. Where did these birds come from? Were they the same birds that were there before the 3rd or were they entirely new birds, migrants in need of a roosting site/stopover location during their southward sojourn? If they were new birds, how did they know about the roost site at

The Coves? How did they know to roost in exactly the same area that other egrets had roosted in previously?

Although the coming autumn season is still four months away, readers are reminded to keep watch for roosting egrets at dusk, large numbers or small, and report them to the author.

Acknowledgements

This study of small roosts of Great Egrets would not have been possible without the counting efforts of Sarah Godoy and Jane Cooper at Metcalfe and Len Manning, Anita Granger and Larry Gifford at London. It would not have been possible to make comparisons to nearby roosts without the efforts of Bruce Di Labio and Rod Dubois in Ottawa and James Holdsworth and Annarita Superina, who provided information on the roost at Wildwood. Tyler Hoar and Dave Moore constructed the graphic Figures and Alan Wormington contributed the photo of the wing-tagged egret.

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