First Documented Nest of Connecticut Warbler in Ontario

Allan Harris

The nesting range of Connecticut Warbler (*Oporornis agilis*) extends from central Quebec to northeastern British Columbia and south into northern Minnesota, Wisconsin, and Michigan (Pitocchelli *et al.* 1997). This species is known for its secretive behaviour, but loud and distinctive song. Typical breeding habitat in Ontario is treed fen with tamarack (*Larix laricina*) and black spruce (*Picea mariana*) (McLaren 2007). In Ontario, the Connecticut Warbler nesting range extends from the Sudbury area west to Lake of the Woods and north through the southern Hudson Bay Lowlands (McLaren 2007). During Ontario's second breeding bird atlas (2001 to 2005) breeding evidence was recorded in 164 of the 10 km x 10 km atlas squares, mostly in northwestern Ontario (McLaren 2007). Confirmed breeding (including distraction displays, adults carrying food, or fledged young) was reported in only five squares. The remaining records were primarily observations of singing males. The species is generally uncommon through this range, but locally common in treed fens (McLaren 2007).

Although widespread in northern Ontario and relatively common in suitable habitat, no nests have been documented in the province. The Ontario Nest Records Scheme includes a report of three young leaving a nest in Sibley Provincial Park (now Sleeping Giant Provincial Park) on 24 July 1971, but the nest itself was undocumented (Peck and James 1987, M. Peck pers. comm.). Pitocchelli *et al.* (1997) cites Kells (1889) in reference to a previous Ontario nest, but this citation appears to be in error. Another paper by Kells (1904) describes the general range and occurrence of this species in Ontario, but does not indicate nesting (R. James and M. Peck pers. comm.).

Connecticut Warbler nests are difficult to find in part due to the elusive behaviour of nesting adults. Females tend to return to the nest by landing 10 to 15m away and walking in under the cover of vegetation (Harrison 1984). The male sings at some distance from the nest (> 100 m; Pitocchelli *et al.* 1997) and often sings from the dense cluster of branches near the top of a spruce tree.

Figure 1. Connecticut Warbler nest location north of Lake Nipigon, 15 June 2010. The habitat is treed fen with leatherleaf, cottongrass and Sphagnum moss. *Photo: Allan Harris.*

The nest is on the ground, usually hidden under vegetation or sunken in moss (Pitocchelli *et al.* 1997). The female does all the incubation, but both sexes feed the young (Pitocchelli *et al.* 1997).

On 15 June 2010, I found a Connecticut Warbler nest north of Lake Nipigon in Thunder Bay District in northwestern Ontario. This paper presents information on the first documented nest in Ontario.

I was walking through a large treed fen east of Zigzag Lake (N 50º 29' 58", W 88º 16' 25"), when a female Connecticut Warbler flushed from the ground near my feet. She flew about 10 m and landed on the ground and then flew to a low shrub where I was able to watch her for about 30 seconds before she disappeared. She was agitated, moving nervously back and forth, but performed no distraction display and did not vocalize. A male Connecticut Warbler was singing continuously from a black spruce about 50 m away.

After a few minutes of searching, I found the nest about 50 cm from the base of a 2.5 m tall black spruce. It was situated in a Sphagnum moss (*Sphagnum* sp.) hummock under a tussock of cottongrass (*Eriophorum vaginatum*) and leatherleaf (*Chamaedaphne calyculata*) (Figure 1). The nest was sunken about 12 cm below the surface of the hummock and consisted of a cup constructed of fine sedges (Figure 2). The inner diameter of the nest was 7 cm. The nest contained five whitish eggs that were marked with brown speckles and blotches (generally more heavily marked on the wide end) (Figure 3).

The habitat in the vicinity of the nest was treed fen with scattered black spruce with ericaceous shrubs (leatherleaf and bog laurel, *Kalmia polifolia*) and a continuous layer of Sphagnum moss. The black spruces were mostly 2 to 3 m tall and spaced at 5 to 10 m. This vegetation is classified as Ecosite 40: Tamarack-Black Spruce/Sphagnum: Organic Soil (Racey *et al.* 1996). The treed fen covers 86 ha and borders a small lake about 500 m to the southwest. Around the outer edges of the fen, the black spruces become taller and denser as the wetland grades into conifer swamp (Ecosite 35; Racey *et al.* 1996). The nest was about 100 m from the edge of the surrounding trembling aspen - dominated forest.

Connecticut Warblers are relatively common in the immediate area. I heard four singing males on the morning of 15 June within about 2 km of the nest site. Other common birds in the treed fen habitat included Palm Warbler (*Dendroica palmarum*), Nashville Warbler (*Oreothlypis ruficapilla*), Yellow-bellied Flycatcher (*Empidonax flaviventris*), and Ruby-crowned Kinglet (*Regulus calendula*). I did not revisit the site to determine the fate of the nest.

Discussion

The clutch size, egg dates, and description of the nest and eggs documented in this paper are similar to Connecticut Warbler nests described elsewhere (Pitocchelli *et al.* 1997). The treed fen habitat of this nest is consistent with breeding habitat previously described in Ontario (McLaren 2007). Similar habitat covers thousands of hectares of northern Ontario (Riley and Michaud 1989, Riley 1994).

Figure 2. Connecticut Warbler nest with five eggs, 15 June 2010. *Photo: Allan Harris.*

Figure 3. Connecticut Warbler nest with five eggs, 15 June 2010. *Photo: Allan Harris.*

Other breeding habitat is also used. In Rainy River District and the western provinces, upland aspen (*Populus tremuloides*) stands are used as breeding habitat (Elder 1991). The previous Ontario breeding record was in a cutover with dense undergrowth. The nest was on the ground under a raspberry (*Rubus* sp.) thicket (Peck and James 1987). This species also nests in damp woodlands (Pitocchelli *et al.* 1997) and immature Jack Pine (*Pinus banksiana*) stands (Godfrey 1986).

The incubation period for Connecticut Warbler is unknown, but other warblers of the genus *Oporornis* have an incubation period of 11 to 13 days with the young leaving the nest 7 to 10 days later (Baicich and Harrison 1997). These dates suggest that the nest described in this paper was about 2 weeks earlier than the 1971 Ontario record where recently fledged young were observed on 24 July 1971 (Peck and James 1987).

Acknowledgments

I thank Ross James, George Peck, Mark Peck and Jay Pitocchelli for comments and other information.

Literature Cited

Baicich, P.J. and **C.J.O. Harrison**. 1997. A Guide to the Nests, Eggs, and Nestlings of North American Birds. Second Edition. Academic Press. San Diego. 347 pp.

Elder, D.H. 1991. Breeding habitat of the Connecticut Warbler in the Rainy River District. Ontario Birds 9: 84-86.

Godfrey, W.E. 1986. The Birds of Canada, revised edition. National Museum of Canada, Ottawa.

Harrison, H.H. 1984. Wood Warbler's World. Simon and Schuster. New York. 335 pp.

Kells, W.L. 1889. Nesting of the Connecticut Warbler. Oologist 14: 49-50.

Kells, W.L. 1904. The Connecticut Warbler. Oologist 21(4): 57-59.

McLaren, P.L. 2007. Connecticut Warbler. Pp 518-519. *In* Cadman, M.D., D.A. Sutherland, G.G. Beck, D. Lepage, and A.R. Couturier (eds.). Atlas of the Breeding Birds of Ontario 2001-2005. Bird Studies Canada, Environment Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, and Ontario Nature, Toronto, xxii + 706 pp.

Peck, G.K. and **R.D. James**. 1987. Breeding Birds of Ontario: Nidiology and Distribution. Volume 2: Passerines. Life Sciences Miscellaneous Publications. Royal Ontario Museum, Toronto, Ontario. 321 pp.

Pitocchelli, **J.**, **J. Bouchie** and **D. Jones**. 1997. Connecticut Warbler (*Oporornis agilis*). *In* The Birds of North America, No. 320 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, PA, and the American Ornithologists' Union, Washington, D.C.

Racey, G.D., **A.G. Harris**, **J.K. Jeglum**, **R.F. Foster** and **G.M. Wickware**. 1996. Terrestrial and wetland ecosites of northwestern Ontario. Ontario Ministry of Natural Resources, Northwest Science & Technology, Thunder Bay, Ontario, Field Guide FG-02. 88 pp. + Appendices.

Riley, J.L. 1994. Peat and Peatland Resources of Northeastern Ontario. Ontario Geological Survey, Miscellaneous Paper 153. 155 pp.

Riley, J.L. and **L. Michaud**. 1989. Peat and Peatland Resources of Northwestern Ontario. Ontario Geological Survey, Miscellaneous Paper 144. 175 pp.

Allan Harris, 136 S. Hill St.,
Thunder Bay, ON P7B 3V1
E-mail: aharris@tbaytel.net