

THE CURIOUS CASE OF THE FIRST SPECIMEN RECORD OF VIRGINIA'S WARBLER (*OREOTHLYPIS VIRGINIAE*) FROM EASTERN NORTH AMERICA

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Virginia's Warbler (*Oreothlypis virginiae*) is a little-studied bird that breeds in the piñon-juniper (*Pinus edulis-Juniperus* sp.) and oak (*Quercus*) woodlands of the Intermountain West and Southwest regions of the United States, and winters in mountainous southwestern Mexico (Olson and Martin 1999). It has recently expanded its breeding range at its northeastern periphery, establishing a breeding population in the Black Hills of South Dakota in the late 1990s, some 370 km from the nearest breeders in Wyoming (Bubac and Spellman 2016). The Black Hills population and the populations in the Guadalupe Mountains and Davis Mountains of western Texas mark the easternmost extent of the breeding range.

Virginia's Warbler is a regular vagrant to the west coast, with many records from coastal southern California and some as far north as Oregon (Olson and Martin 1999). In contrast, there are only about 20 documented records from east of the Mississippi River, from various seasons and widely scattered sites, extending as far east as Newfoundland, the Atlantic coast of the United States, and the Bahamas (Table 1). All of the eastern North American records involve single birds observed in a single place, usually for only one or two days, but in some cases, especially during late fall and winter, for up to several weeks.

There are no known specimens of Virginia's Warbler from anywhere east of Kansas, although there is an egg set attributed to this species at the Cornell University Museum of Vertebrates (CUMV 37824) collected by W. C. Thro at Southport, Chemung County, NY, on 27 May 1893. This is an unfathomable breeding record for Virginia's Warbler, and it seems likely that either the eggs are from a misidentified nest or the CUMV catalog is in error; the original collector's data (notes, nest card, egg-set data slips, etc.) were not saved when the data were transcribed to the electronic catalog by an unknown person in the 1990s (C. M. Dardia, pers. com.).

Table 1. Documented records of Virginia's Warbler (*Oreothlypis virginiae*) in eastern North America.

Date(s)	Locality	Source
16 May 1958	Point Pelee NP, <i>Essex</i> , ON	Dow 1962
9-11 May 1974	Pelee Island, <i>Essex</i> , ON	Wormington 1986
3-4 May 1975	Point Pelee NP, <i>Essex</i> , ON	Wormington 1986
8 Mar 1993	Dover Sound, Grand Bahama, Bahamas	eBird (<i>El Pitirre</i> 1994)
13 May 1993	Dearborn, <i>Wayne</i> , MI	Chu 1995
21-22 Sep 1994	Goose Bay, Labrador, NL	Mactavish 1994
17 Sep 1997	Kennesaw Mt. NBP, <i>Cobb</i> , GA	Davis 1998
21 May 1998	Monhegan Island, <i>Lincoln</i> , ME	Perkins 1998
29 Aug 2001	Thunder Cape Bird Obs., Thunder Bay, ON	Roy 2002
14 May 2003	Port Lambton, <i>Lambton</i> , ON	Crins 2004
25 Jun 2006	Pitsfield Banding Station, <i>Kalamazoo</i> , MI	Putnam 2007
8 Oct 2006	Walkers Farm, <i>Bristol</i> , RI	Mitra et al. 2010
10-15 Feb 2007	Harper's Ferry, <i>Jefferson</i> , WV	Fazio & Wiltraut 2007
15 Jan+ 2010	Valdosta, <i>Lowndes</i> , GA	Blankenship & Southern 2010
8 Nov 2011	Monhegan Island, <i>Lincoln</i> , ME	Persons et al. 2015
26 Jan-25 Mar 2012	Pickering Creek Aud. Center, <i>Talbot</i> , MD	Davis 2013
31 Oct-30 Nov 2012	Alley Pond Park, <i>Queens</i> , NY	Wilson et al. 2014
14 Nov-2 Dec 2013	St. John's, Newfoundland, NL	Seeler 2015
29-30 May 2014	Monhegan Island, <i>Lincoln</i> , ME	Hanisek 2015
1 Nov 2016	Marshlands Conservancy, <i>Westchester</i> , NY	Bochnik 2017

The first fully documented New York State record of Virginia's Warbler involved a bird that was observed at Alley Pond Park, Queens County from 31 October to 30 November 2012 and accepted by the New York State Avian Records Committee (NYSARC; Wilson et al. 2014). In 2016, Virginia's Warbler was reported in two locations in New York. The first was seen by many birders at the Marshlands Conservancy in Westchester County, on 1 November. Good quality photographs and descriptions have been submitted for consideration by NYSARC. The second was found by RPG on 10 December, in Glenmont, Albany County, under curious circumstances that raise interesting questions regarding the origin of the bird and that we now describe.

On the afternoon of 10 December 2016, RPG was checking out some household building supplies at the Lowe's home improvement store in Glenmont, Albany County, NY, when he caught a glimpse of a small bird darting in and out of a display of poinsettias near the checkout lanes. His first impression was of Common Yellowthroat, but when it reappeared giving a second look, the general appearance suggested Orange-crowned Warbler. The bird was observed and photographed gleaning the flower buds in the poinsettias

(Figure 1, p. 42). With the help of a sales associate who produced a handled net, the bird was cornered and captured. With the bird in hand, RPG realized that he was holding a Virginia's Warbler. Failing to reach a licensed wildlife rehabilitator to evaluate the bird's condition to be sure it was well enough to release back to the wild, RPG took the bird home and gave it sugar-water. The bird readily drank and quickly perked up. That evening a rehabber was located and the bird was transferred to their care. Unfortunately, the bird did not survive the night and was returned the next day to RPG, who gave it to JJK for preservation as a museum specimen.

The Glenmont Virginia's Warbler was prepared as a traditional study skin with detached spread wing, partial skeleton, and frozen tissues (heart, skeletal muscle, liver, brain); all preparations are cataloged as NYSM 19236 (Figure 2, p. 42). The bird weighed 6.2 g and had no fat, but it was not emaciated. It had a fully pneumatized skull, lacked a bursa of Fabricius, lacked molt limits, and showed truncated (vs. pointed) tips to the outer rectrices and primaries—all indications of an adult passerine (although skull pneumaticization can complete as early as 1 October in hatch-year birds: Pyle 1997). Internal organs were fresh and easily observed under 12X magnification, but no gonads were seen. Given that testes of even juvenile males are always visible, whereas the smooth undifferentiated ovary of young females is often hard to see, even under high magnification, the absence of visible gonads is most consistent with a hatch-year female—and arguably more consistent with even an adult female than with a male of any age. Finally, the rufous crown and yellow breast patches conspicuously present in NYSM 19236 are generally absent or very inconspicuous in hatch-year females (Pyle 1997, Dunn and Garrett 1997). Thus, the sum of evidence points to an adult (AHY) female.

The attempted rescue and eventual salvage of this bird that surely would have died anyway is a remarkable event, and the specimen, deposited in a public museum where it is freely available for study in perpetuity, is a valuable contribution to ornithology. So far as we know, NYSM 19236 is the only specimen record of Virginia's Warbler from eastern North America. The preservation of the skin and spread wing will enable independent assessment of the age and sex of the bird, and the frozen tissues could be used to definitively determine its sex with sex-chromosome specific DNA markers.

The variety of tissues we have preserved may even enable researchers to investigate the most intriguing mystery surrounding this doomed bird found among the poinsettias in a suburban Lowe's: Is this a case of natural dispersal or might the bird have hitched a ride on a truck among the plants and products destined for the store? One might compare the hydrogen isotope signature present in the bird's feathers, which would record the approximate geographic location where the bird underwent its prebasic molt, to the signature in a tissue with faster turnover such as its blood, which would record its approximate location over the preceding three weeks, the average turnover time for a bird's blood cells. If the two tissue types are found to have the same hydrogen isotope

ratio, one could infer that the bird remained in its breeding/molting region in the three-week period prior to its discovery in upstate New York, and thus might have been assisted in its travels to its final resting place. We have not chosen to pursue such laboratory analyses, but by salvaging and preparing the specimen we have made these, and perhaps other investigations possible. We did inquire with the store's garden-center manager and learned that the most recent shipment of poinsettias predated the discovery of the bird by one week, but that these were grown in a greenhouse at a wholesaler in eastern Pennsylvania. Their only other plants at the store were house plants delivered from Florida several weeks prior to the discovery. Given that no deliveries came from anywhere near the range of Virginia's Warbler and that the sighting occurred at a time of year that is consistent with previous records in northeastern North America, we speculate that the bird was a natural vagrant, rather than a hitchhiker.

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Figure 1 (top): an iPhone photo of the Virginia's Warbler found among the poinsettias in the Lowe's home improvement store in Glenmont, NY, on December 10, 2016; Figure 2 (bottom): ventral, side, and dorsal views of the skin of NYSM 19236. See article pp. 2-6.