

fallen on you.

On a regional and national scale, *North American Birds* magazine, once published by the National Audubon Society, but now overseen by the American Birding Association, is the quarterly journal of record. The United States is broken down into a variety of regions, based on political and physiographic boundaries. All of Ohio now falls in the unfortunately-named "Eastern Highlands and Upper Ohio River Valley Region," along with all of Pennsylvania and West Virginia. Up until a few years ago, Ohio was divided between the "Middlewestern Prairie Region" and the "Appalachian Region," but now we are all cozied up in a single region. One of the Regional Editors for our region is none other than Victor W. Fazio, III. I suspect Vic would be happy with any reports you can provide him (hold the pterodactyls, please). His address is 18722 Newell St., Floor 2, Shaker Hts., OH 44122; e-mail at [bcvireo@sbcglobal.net](mailto:bcvireo@sbcglobal.net). Based on information gleaned from throughout the region, *NAB* editors then choose the "noteworthy" of the noteworthy, and prepare their report for publication. Given space constraints and the three-state-wide reporting area, seeing your records published in *North American Birds* certainly qualifies as a red-letter day.

Don't overlook other Ohio-based reporting options. The Ohio Breeding Bird Atlas II (<http://www.ohiobirds.org/obba2/>), which is already heading into its third year of data collection, covers the entire state and could certainly use your help. It has produced many fascinating rarity reports, all the while reinforcing our understanding of our expected nesters. But if birding in the summer doesn't appeal, then perhaps the Ohio Winter Bird Atlas ([http://www.bsbo.org/winter\\_bird\\_atlas/winter\\_bird\\_atlas.htm](http://www.bsbo.org/winter_bird_atlas/winter_bird_atlas.htm)) might be a good way to combat the winter blahs.

Several informal online reporting options are also available. For observations anywhere in Ohio, your first reporting stop will probably be the *ohio-birds Email List*, sponsored by the Ohio Ornithological Society, at <http://www.ohiobirds.org/publications/emailist.php>. In southwestern Ohio, you might wish to contribute to Ned Keller's *Cincinnati Bird Sightings Log* at <http://www.cincinnatibirds.com/goodbird/sighting/php>. In northwestern Ohio, you should consider the Toledo Area Rare Bird Alert at [http://www.rarebird.org/forum/forum\\_topics.asp?FID=1](http://www.rarebird.org/forum/forum_topics.asp?FID=1). Keep in mind that these informal online reporting options are essentially unedited; the information they proffer, while timely and usually helpful, should be considered transient and tentative rather than a part of the permanent historical record. If you report to electronic mailing lists or forums, such as the above, *don't stop there*. Also be sure to send a report to the appropriate print publications. This will help guarantee that your reports are formally evaluated by experienced compilers.

It's a nifty thing to see your name in black and white, credited with an unusual bird sighting. But reporting solely in hopes of seeing your name in print misses the point. I used to think that I had won a small victory whenever one of my sightings was printed. After considering the woodpecker, the curlew, the pigeon, and the rest, I now believe that the mere act of submitting a report is a small victory in itself, one worth repeating season after season. But the victories don't belong to us-- they belong to our birds, and to our future. However you choose to contribute— whether by submitting a detailed bird-by-bird seasonal report, or a filled-in checklist, or one bird at a time-- do it well, and do it now.

## A Fall Migration Study of Northern Saw-whet Owls in Ross County, Ohio: Preliminary Results and Historical Perspective

by Kelly Williams-Sieg

145 Polk Hollow Rd. Chillicothe, OH 45601

[kellyws@roadrunner.com](mailto:kellyws@roadrunner.com)

Northern saw-whet owls *Aegolius acadicus* are tiny denizens of our northern forests. Cannings (1993) reports that breeding birds reach highest densities in coniferous forests, though they use many woodlands and may be found in mixed forests with a well-developed mid-canopy. Starting in April, females lay five to six eggs in cavities. Natural cavities, including those excavated by woodpeckers, mainly northern flickers *Colaptes auratus* and pileated woodpeckers *Dryocopus pileatus*, are used, as are nest boxes. The male provides food, predominantly woodland mice *Peromyscus* sp. for the female and the nestlings until the female leaves the fledged young in the male's care (Cannings 1993).

While there are published reports of nesting in 24 Ohio counties, Peterjohn (2001) observes that most reports of summering birds date from before 1940. Wheaton (1882) claimed they were "not uncommon residents" in northern Ohio and were resident or winter visitors in other parts of the state. In northern Ohio, some regarded them as more abundant than the eastern screech-owl *Megascops asio*, whose color morphs were then referred to as red and mottled owls (Read 1853). Since 1940, there have been reports of nesting attempts in 1946, 1964, 1982, and 1995 in Lake and Cuyahoga counties and in Toledo in 1966 (Peterjohn 2001). By contrast, the ongoing second Pennsylvania Breeding Bird Atlas has to date documented one observed, 66 possible, 137 probable, and six confirmed nesting attempts.

Taverner and Swales (1911) reported that the northern saw-whet, or Acadian owl as it was called at the time, was regarded as a resident on its breeding grounds by Wilson (1814) and later by Coues (1874), and as an "irregular wanderer" in fall and winter by Fisher (1893). However, Swales had found the remains of two saw-whets on Point Pelee in October 1908, where it had previously not been documented, and reported that Saunders found the result of other depredations upon this species in the same location. In October of 1910, 12 saw-whets were found at the Point in thickets of eastern redcedar *Juniperus virginiana*, and they concluded that long-eared owls *Asio otus*, present in numbers and hunting the same thickets, were responsible for the depredations. Taverner and Swales also describe a report from a fishing-boat captain aboard the steamer Helena on Lake Huron on 10 October 1903 that reported "a large migration of small owls," many of which alit upon the vessel.

W.E. Saunders (1907) gives a haunting description of a snowstorm on 10 October 1906 that dumped over a foot of snow near the southeast corner of



A variety of measurements are recorded for each owl captured at Buzzard's Roost including bill length (Photo by Kelly Williams-Sieg).

Lake Huron. On 18 October, hundreds of birds were found dead along the shore of Lake Huron by Newton Tripp, who reported the disaster to Saunders. Saunders arrived on 21 October and counted 1,845 dead birds of 26 species along a two-mile stretch of beach in only two to three hours. Among the dead were 24 saw-whet owls. "The saw-whets were a surprise. They are rare in western Ontario, and one sees them only at intervals of many years. Evidently they migrate in considerable numbers."

A hundred years later, we still have questions about the movements of this secretive owl. We know that each year a portion of the population migrates south to spend the winter, yet the southern limits of the migration are not well defined, and appear to vary from year to year. Some years, mass movements are recorded. During the fall of 1995, five mid-Atlantic banding stations captured 2,596 saw-whets, while during the previous four years fewer than 200 owls had been caught each fall (Brinker, 1997). Audio lures were not used at most migration stations prior to 1989, so comparisons to other years are more difficult, but based on banding data it appears that larger than usual flights occurred in the east in 1965, 1980, and 1981 (Brinker 1997).

Project OwlNet was created to facilitate and coordinate the monitoring of owl populations and now includes over 160 members with over 50 stations in the US and Canada. Licensed bird banders set up mist nets, usually 12 m long by 3 m high with a mesh size of 60 mm, placing an audio lure comprised of the male "toot" call in the center of a net array to attract saw-whets into the area. Many east coast stations have operated in this way for a number of years and are starting to shed light on the movements of saw-whets.

In the past, fall migration of saw-whets in Ohio has not been not well described, but was thought to occur October through November. Peterjohn (2001) regarded the species as "casual to rare" near Lake Erie and "accidental to locally rare" in the rest of the state during fall. On a regional scale, Cannings (1993) cites a study by Holroyd and Woods (1975) that suggests two main migration routes in the east: one from central Ontario through the Ohio River valley to Kentucky and the other along the Atlantic coast from Nova Scotia to North Carolina. Brinker (1997) and Cannings (1993) cite examples of owls originally banded in Ontario, Wisconsin, and Minnesota that were recaptured at east coast banding stations.

Stahler et al. (1991) banded 21 saw-whet owls during a raptor survey at Killdeer Plains Wildlife area in Wyandot County, with 14 banded between 24 November and 9 December 1990. Several of these owls were recaptured from January to March, along with an additional seven owls banded. Randle and Austing (1952) found 15 saw-whet owls in upland habitat during the winter of 1949-50 near Cincinnati. Owls were found roosting most often between eight and 10 feet high in red pine *Pinus resinosa* and Scotch pine *Pinus sylvestris*, though two were found in honeysuckle *Lonicera japonica* tangles.

In late October 2003, I returned from an exhilarating week of training at the Powdermill banding station in Pennsylvania, where I saw my first saw-whet owl. I was enthralled, and full of questions about this species. If some reportedly overwinter in the southern coniferous forest and have been found in Ohio before, why wouldn't they use the habitat at Buzzard's Roost in Ohio's Ross County along their way? I convinced our banding team--which consists of morning people--to set up nets in the evening and stay out at night because I had to see if saw-whets occurred here and felt they had to see a saw-whet for themselves. No owls were caught on our first night, but our group was willing to humor me for one more. That night we caught a tiny owl that captured our hearts, and curiosity that has kept us coming back to spend the cool fall evenings in the woods.

We set up on only six nights that November, but we captured seven saw-whet owls, including one on 21 November that had been banded 5 November 2003 at Holiday Beach, Ontario (Sieg, 2003). We then joined Project OwlNet and started preparations to establish a fall migration monitoring station at Buzzard's Roost Nature Preserve. The migration station is a volunteer-run project with three licensed bird-banders and several other volunteers who patrol nets for a minimum of four hours after dark up to six nights a week from approximately 10 October to 10 December. Two net runs are used. One run consists of five mist nets and the other of four nets, all placed in series through second-growth woods with a dense understory near small field openings. An audio lure is placed in the middle of each run, with speakers facing in opposite directions to maximize the distance from which the call can be heard. Saw-whets are preyed on by larger owls, and are unlikely to be found in open woods used by great horned owls *Bubo virginianus* (R. Austing, pers. comm.). Placing nets in thicker cover improves the likelihood of finding these owls, and better ensures their safety.

In 2004, we spent 23 nights from 16 October to 9 December in the woods. The first owl of the season was captured on 17 October. Forty-five saw-whets were captured, with a capture rate of 0.23 owls per net-hour. A second-year female (a bird hatched the previous year) that had been banded on 6 April 2004 at the Straits of Mackinac in Michigan was netted at our station on 25 October. On 13 November, we recaptured a second-year female originally banded approximately 600 miles to our north on 22 September near New Liskeard, Ontario. An after-second-year female (at least in its third fall) banded on 3 December at Buzzard's Roost was recaptured two miles away on 17 March 2005 during periodic winter monitoring.

After capturing an owl in the nets, banders and trained volunteers carefully remove them and place them in a bag to keep them calm during our walk up the hill to our banding lab. Each is banded with a 4-short band specially developed to accommodate the saw-whet's small size. We check the overall condition of each bird and take a variety of measurements. We are able to age most owls by looking at the wing feathers, as the sequence of replacement of these feathers varies with age. Females are generally larger than males, and sex is assigned based on wing length and mass (Brinker 1997); however 18.5% of the 113 owls captured at Buzzard's Roost from 2003-2006 were not assigned to sex because the measurements fell in the overlap range.

Before releasing the owls, we place them back in a bag in a dark room to allow their eyes to adjust. One evening, I was in a hurry to get back down to the nets so I placed the owl I had just finished examining on my arm as I walked. The owl sat there calmly, looking from the dark woods to me, allowing me to carry it most of the way down the hill before giving me one last look and flying silently off into the night.

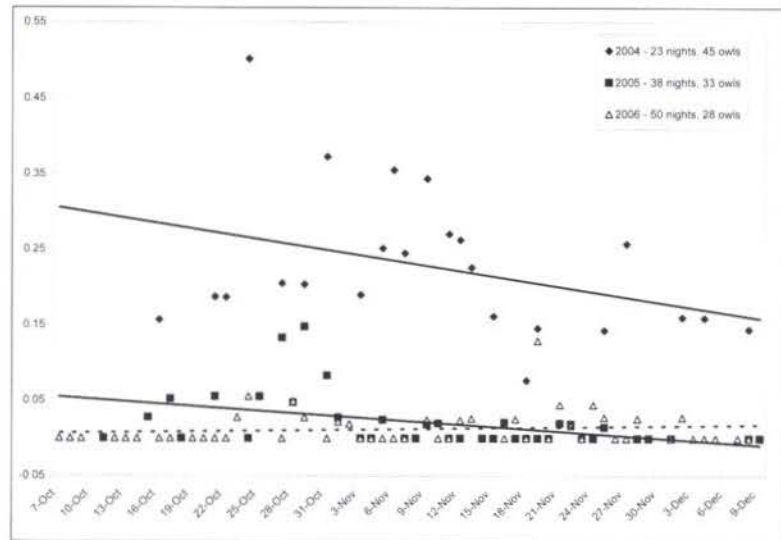
Monitoring in 2005 occurred on 38 nights from 12 October to 10 December with the first owl captured on 16 October. Thirty-three owls were captured, two of which had been previously banded. An after-second-year female recaptured on 29 October had originally been banded near Bittinger, Maryland as a hatch-year (first fall) on 4 November 2003. On 1 November, an after-second-year female was recaptured, originally banded at the Straits of Mackinac, Michigan on 9 April 2004. Six owls banded at our station in 2005 were recaptured, and had a mean stopover of 12.2 nights with the longest known stopover of 31 days.

Owls were heard vocalizing on 16 of 24 nights in November 2005 from perches near our net lanes and sometimes in flight around the study area. The saw-whets make a variety of chirps, twitters, and screams in addition to the advertising toot call in the vicinity of our banding operation. We think the owls

that vocalize near the nets may have already been banded, and we have found that we rarely recapture an owl in the same net run. A few bill-snap or make soft chitter calls while in the hand. The chitter call has also been heard upon release, eliciting soft chitters from the woods in response.

Monitoring in 2006 occurred on 50 nights from 8 October to 9 December, with the first owl caught a week later than the two previous years on 24 October. Twenty-eight saw-whets were captured, with a rate of 0.01 owls per net hour. Vocalizations were recorded on 16 nights, including our last night of operation, 9 December. Four owls were recaptured for known stopovers of three nights for two owls and 10 nights for an owl last recaptured on 4 December. Figure 1 shows the timing of fall migration of saw-whets at Buzzard's Roost from 2004-2006 controlling for effort. The number of owls captured is divided by effort, which is the number of nets multiplied by the number of hours the nets were open. One 12m net operated for 1 hour = 1 net hour. In 2004, more owls were captured per unit effort than in 2005 and 2006. Though fewer owls were captured, the timing of migration in 2005 appears similar to 2004 with most owls captured late October and early November. 2006 got off to a slow start with most owls captured in November.

Figure 1. Northern saw-whet owls captured per net hour from 2004-2006 at Buzzard's Roost in Ross County (N=113).



Six owls banded at the Buzzard's Roost banding station have been recaptured by other Project OwlNet stations. An after-second-year female banded on 21 October 2004 was recaptured 12 miles east of Bloomington, Indiana on 26 October 2005. A hatch-year female banded on 11 November 2004 was recaptured on 26 September 2005 near Tofte, Minnesota. Another hatch-year female banded on 8 November 2004 was recaptured on 10 October at the Straits of Mackinac, Michigan. A second-year female banded on 10 November 2004 was recaptured at Valley Falls State Park in West Virginia on 10 November 2005, while another second-year female banded on 8 November 2004 migrated to our west in 2005 and was recaptured on 30 November in Greene County, Indiana.

Three other banding stations monitored saw-whet owls in Ohio during the fall of 2006 (Table 1). The number of saw-whets captured per net hour is

similar between sites, suggesting that consistent monitoring in appropriate habitat may yield capture rates similar to the banding station near Chillicothe. While effort is not directly comparable between stations, capture rates at the Buzzard's Roost banding station of 0.23 to 0.01 owls per 12m net hour in 2004 and 2006 compare well to reported capture rates at Assateague, Virginia in 1992 and Cape May, New Jersey in 1993 of 0.211 and 2.83 owls per 10m net per 100 hours respectively (Brinker, 1997).

Consistent monitoring at different stations throughout Ohio may shed more light on variation in migration from year to year. It seems that more females migrate (Table 2). Adult males are thought to stay on or closer to territory to defend nesting sites or, when lack of food or severe weather necessitates, wander in search of food.

Table 1. Saw-whet owls captured at fall monitoring stations in Ohio during fall 2006

Banding Station	HY	SY	AHY	ASY	Total Owls	Nights	Net Hours	Owls per net hour
Buzzard's Roost, Chillicothe	7	3	6	12	28	50	1944.4	0.0144
Kelleys Island Tom Bartlett	8	4	1	1	14	19	310	0.0452
NE Seneca Co. Matt & Deb Plotts	1	0	0	0	1	6	90	0.0068
Sandusky Bay Tom Kashmer	0	0	1	0	1	6	90	0.0111

2006 left many banding stations wondering where all the owls were. We did not capture any owls banded by other stations but we did recapture our first owl we had banded during a previous season. This hatch-year female was originally banded on 29 October 2005 and recaptured 23 November 2006. It is unclear whether this owl's arrival nearly a month later in 2006 was attributable to change in breeding status (from a young bird to a potential breeder in 2006) or was indicative of a seemingly delayed migration. An after-second-year female banded on 1 November 2005 at Buzzard's Roost was recaptured at Long Point Bird Observatory, Ontario on 15 November 2006. Tom Bartlett reported seven saw-whets calling on 28 December 2006 on Kelleys Island after the Buzzard's Roost station had closed for the season (Whan, 2007). Reports from many saw-whet stations in the East that suggested that migration was delayed in 2006 seem to be supported by these observations. Consistent monitoring and continued cooperation among banding stations is needed to gain a clearer picture of the movements of these owls.

Table 2. Sex assignments of saw-whets caught in Ohio in 2006 (n=44).

Banding Station	Females	Males	Unknown
Buzzard's Roost, Chillicothe	20	3	5
Kelleys Island Tom Bartlett	10	1	3
NE Seneca Co. Matt & Deb Plotts	1	0	0
Sandusky Bay Tom Kashmer	1	0	0
Total	32	4	8

On 9 December 2006, after 50 nights and 1,944 net hours patrolled by volunteers willing to give up the comforts of home for cool enchanting evenings spent in the woods, we closed our nets for the season. A saw-whet continued to call near our nets. It was most likely an owl that had become wise to our traps, leaving us to wonder which one it was, when we had caught it, how long it would prowl our woods, where it was from and where it would go to. The quiet cry was a taunt, reminding us that so many of our questions remain unanswered.



William Bosstic combines research with education, explaining the biology of saw-whet owls to visitors at the Buzzard's Roost Banding station (Photo by Kelly Williams-Sieg).

#### Acknowledgments

This study is a volunteer effort conducted by licensed bird banders William Bosstic, Bob Scott Placier, and Kelly Williams-Sieg and would not be possible without many volunteers and financial support from the Scioto Valley Bird and Nature Club. Additional financial support has been provided through our Adopt-an-Owl program and the Ohio Ornithological Society.

#### Literature Cited

Brinker, D. F., K. E. Duffy, D. M. Whalen, B. D. Watts and K. M. Dodge. 1997. Autumn migration of Northern Saw-whet Owls (*Aegolius acadicus*) in the Middle Atlantic and Northeastern United States: What observations from 1995 suggest. Pp. 74-89 in J. Duncan, D. H. Johnson, and T. H. Nicholls [Eds.], *Biology and conservation of owls of the northern hemisphere: Second International Symposium* USDA Forest Service

- Gen. Tech. Rep. NC-190, St. Paul, MN U.S.A.
- Cannings, R. J. 1993. Northern Saw-whet Owl (*Aegolius acadicus*). In *The Birds of North America* No. 42 (A. Poole and F. Gill, Eds.). Philadelphia: The Academy of Natural Sciences: Washington, D.C.: The American Ornithologists' Union.
- Coues, E. 1874. *Birds of the Northwest*. U.S. Geol. Surv. Terr. Misc. Publ. no 3. Washington, D.C.
- Fisher, A.K. 1893. *The Hawks and Owls of the United States in their Relation to Agriculture*. USDA Division of Ornithology and Mammalogy Bulletin No. 3. Washington, D.C.
- Holyroyd, G. L. and J. G. Woods. 1975. Migration of the Saw-whet Owl in eastern North America. *Bird Banding* 46:101-105.
- Peterjohn, B. G. 2001. *The Birds of Ohio*. The Wooster Book Company. Wooster, Ohio.
- Randle, W. and R. Austing. 1952. Ecological notes on Long-eared and Saw-whet Owls in southwestern Ohio. *Ecology* 33:422-426.
- Read, M. C. 1853. Catalogue of the birds of northern Ohio. *Proceedings of the Academy of Natural Sciences of Philadelphia* 6:395-402.
- Saunders, W. E. 1907. A migration disaster in Western Ontario. *Auk* 24: 108-110.
- Sieg, K. 2003. Short Note: Northern Saw-whet Owl banding project in Ross County. *Ohio Cardinal* 27(1):45
- Stahler, K. D. Frevert, N. Moore, and B. Stahler. 1991. Northern Saw-whet Owls and other raptors wintering at Killdeer Plains. *Ohio Cardinal* 14:9-11.
- Taverner, P. A. and B. H. Swales. 1911. Notes on the migration of the saw-whet owl. *Auk* 28: 329-334.
- Whan, B. 2007. The Reports, Fall 2006. *Ohio Cardinal* 30(1):20.
- Wheaton, J. M. 1882. Report on the birds of Ohio. *Ohio Geological Survey Bulletin* 4:187-628.
- Wilson, A. 1808-1814. *American Ornithology; or the Natural History of the Birds of the United States*. Philadelphia, Bradford and Inskeep, 9 vol.