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THE KENTUCKY WARBLER

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THE COVER

We thank Jennifer Leyhe. for the photograph of the Northern Saw-whet Owl (*Aegolius acadicus*) taken in Madison County, Kentucky in November 1999 (see pg. 68 for related article).

THE SUMMER SEASON, 2001

Fred M. Busroe

The temperature for June was near normal, with July's temperature slightly above normal and humidity being unusually high. The high humidity may have kept some birders from going afield. However, several interesting observations were recorded. These include a juvenile Hooded Merganser photographed in Campbell County, a Blacknecked Stilt in Fayette County, possible continued nesting of Red-breasted Nuthatches in the Red River Gorge and observation of Swainson's Warbler in the Gorge as well.

Abbreviations - WMA = Wildlife Management Area; AJJ = A.J.Jolly Park, Campbell County; Bern = Bernheim Forest, Bullitt/Nelson counties; Camp = Campbell County; Cane = Canewood, Clark County; Can = Caneyville Reservoir, Grayson County; Day = Dayton, Campbell County; Hart = Hart County; Gray = Grayson County; Jef = Jefferson County; JMF = Jefferson County Memorial Forest, Jefferson County; KBend = Kentucky Bend, Fulton County; L#9 = Lake # 9, Fulton County; Lou = Louisville, Jefferson County; LWC = Louisville Water Company, Jefferson County; Mel = Melbourne, Campbell County; MCFH = Minor Clark Fish Hatchery, Rowan County; Old = Oldham County; PWMA = Peabody WMA, Muhlenberg/Ohio counties; RRSP = Rough River State Resort Park, Grayson County; SC = Short Creek, Grayson County; Sky = Sky Bridge, Wolfe County; SCCT = Swift Camp Creek Trail, Red River Gorge, Wolfe County; UKF = University of Kentucky Farm, Fayette County; Wild = Wilder, Campbell County.

Great Blue Heron - 1 on July 4 at Can (JP); 2 on July 14 at PWMA (DO).

Great Egret - 20+ on June 15 and 15 on July 29 at L#9 (KL).

Snowy Egret - 8 on July 29 at L#9 (KL).

Green Heron - 1 on July 14 at PWMA (DO); 50+ daily during July at MCFH (FB).

Black-crowned Night-Heron - 1 adult on July 13 and July 31 at AJJ (FR).

Wood Duck - 3 on July 4 at Can (JP); 10 on July 18 at AJJ (FR); 4 on July 29 at L#9 (KL).

Hooded Merganser - 1 juvenile, capable of flight, was photographed on July 25 at Watertown Yacht Club, Day (FR).

Mississippi Kite - 7 on June 25 at KBend and 1 on July 15 at L#9 (KL).

Bald Eagle - 1 immature near nest on June 25 at KBend and 1 adult on July 15 at L#9 (KL); 1 adult seen through the period at MCFH (FB).

Sharp-shinned Hawk - 1 on June 16 and 27 in Hart (MS).

Northern Bobwhite - 2 on June 16 in Jef (DO); 2 on several occasions during July at SC (JP).

Killdeer - 100 on June 15 at L#9 (KL); 1 on nest with four eggs on June 10 and 27 at Day (FR)

Black-necked Stilt - 1 on June 3 at UKF (BM, BPB, JW).

Greater Yellowlegs - 2 on July 15 at L#9 (KL).

Solitary Sandpiper - 3 on July 15 at L#9 (KL).

- Least Sandpiper** - 8 on July 15 at L#9 (KL).
- White-rumped Sandpiper**- 1 on June 3 at UKF (BM, JW).
- Yellow-billed Cuckoo** - 1 on June 2 and July 14 at SC (JP); 1 on June 13 in Lou (DO).
- Eastern Screech-Owl**- 1 on July 31 at RRSP (JP).
- Great Horned Owl** - 2 young calling on June 8 in Hart (MS), 2 on June 11 at SC (JP)
- Chuck-will's-Widow** - 1 on June 5 and 10 at SC and 1 on June 24 in Gray (JP).
- Red-headed Woodpecker** - Two on June 3 at SC (JP); 2 on July 14 at PWMA (DO).
- Acadian Flycatcher** - 1 on July 4 at Can (JP).
- Willow Flycatcher** - 1 on June 10 and 2 on June 16-18 at Day (FR); 1 on June 16 at LWC (DO).
- Cliff Swallow** - 4 on June 13 and 3 on June 24 in northwest Gray (JP).
- White-eyed Vireo** - 1 on July 4 at Can (JP).
- Yellow-throated Vireo** - 1 on July 4 at Can (JP).
- Wood Thrush** - 1 on June 13 and 24 in Gray (JP); 2 on July 1 at SCCT (FR); 2 on July 14 at PWMA (DO).
- Blue-winged Warbler**- 1 on June 3 at Bern (DO).
- Northern Parula** - 5 on July 1 on SCCT (FR).
- Black-throated Green Warbler** - 7 on June 30 and 5 including a female gathering nesting material on July 1 at SCCT (FR).
- Yellow-throated Warbler** - 3 on June 30 and 4 on July 1 at SCCT (FR); 1 on July 16 in Jef (DO)
- Pine Warbler** - 1 on June 3 in JMF (DO); 4 on June 30 and 3 on July 1 on SCCT (FR).
- Black-and-White Warbler** - 2 on June 17 at Bern (DO); 2 on June 30 on SCCT (FR).
- American Redstart** - 2 males singing on June 18 and 21 near Mel (FR).
- Worm-eating Warbler** - 3 on June 30 and 2 on July 1 at SCCT (FR).
- Swainson's Warbler** - 1 on June 30 and July 1 on SCCT (FR).
- Ovenbird** - 2 on June 30 on SCCT (FR).
- Louisiana Waterthrush** - 1 on June 16 in Old (DO); 2 adults feeding 2 young on June 30 plus 2 observed on July 1 at SCCT (FR).
- Kentucky Warbler** - 2 on June 21 near Mel (FR).
- Hooded Warbler** - 8 on June 30 and 7 on July 1 at SCCT (FR); 1 on July 16 in Bern (DO).
- Common Yellowthroat** - 1 on June 13 and 2 on June 24 in Gray with 1 on July 4 at Can (JP).
- Yellow-breasted Chat** - 1 on June 13 in Gray and 1 on July 4 at Can (JP).
- Summer Tanager** - 1 on June 24 in northwestern Gray (JP); 2 on July 16 in JMF (DO); 1 on July 24 at SC (JP).
- Grasshopper Sparrow** - 1-6 during the period in Hart (MS); 1 on June 30 at Cane (FR); 2 on July 14 at PWMA (DO).
- Henslow's Sparrow** - 5 on July 14 at PWMA (DO).
- Blue Grosbeak** - 1 on June 4 and June 15-22 also on July 3, 5 and 14 in Hart (MS); 1 on June 13 and June 24 in Gray (JP); 2 on June 16, 1 on June 28, a pair of

adults carrying food on July 3 and a pair of adults with 3 fledglings on July 13 near Wild (FR); 4 on July 14 at PWMA (DO).

Dickscissel - A high count of 5 during the period in Hart (MS); 8 on June 29-30 at Cane (FR); 5 on July 14 at PWMA (DO).

Contributors - Fred Busroe (FB), Ken Leggett (KL), Bob Morris (BM), Darrin O'Brien (DO), Brainard Palmer-Ball (BPB), Joyce Porter (JP), Frank Renfrow (FR), Mitchell Sturgeon (MS), Jim Williams (JW).

--- 437 Sunset Lane, Morehead, KY 40351

Kentucky Ornithological Society
2001 Fall Meeting
Kenlake State Resort Park
September 28 - 30

The 2001 fall meeting of the Kentucky Ornithological Society was opened by President Marilee Thompson at 7:30 p.m. at Kenlake State Resort Park. Ms. Thompson introduced Vice President, Kathy Caminiti, who made announcements and introduced the speakers for the evening.

The first speaker was Mr. Rick Huffines, Manager of the Clark's River National Wildlife Refuge. Established in 1997, this refuge is the only National Wildlife Refuge located entirely within the commonwealth of Kentucky. The Refuge consists of 18,000 acres of river bottom timber and farm land of which over 7,000 acres is currently owned by the refuge itself. The remaining land is under private ownership and is sought by the refuge. The Clark's River Refuge is located primarily in Marshall County along the East Fork of the Clark's River but extends into southeastern McCracken County.

Mr. Huffines explained that the purpose of the refuge was to preserve river bottom timber and to protect migrant birds and other endemic species. He also presented a short history of events leading to its establishment. He stated that birders are welcome to use the refuge and encouraged individual members to study and observe the bird life of the property.

The second speaker of the evening was KOS member Dr. Gary Ritchison of Eastern Kentucky University. Dr. Ritchison spoke on communication tactics of woodland Kentucky owl species. With tapes of the Eastern Screech-Owl, Barred Owl, and Great Horned Owl, Dr. Ritchison demonstrated different calls of each owl species and discussed the purposes of each call. He pointed out that lower pitched notes were used for territory establishment and defense as they traveled further in the woodland environment than the higher pitched calls of owls. These calls are used primarily for communication within the territory between mating pairs, according to Dr. Ritchison.

Following the program, a short owl walk was held and members of the Society were able to hear several Eastern Screech-Owls and a Great Horned Owl.

On Saturday morning, three field trips departed the Kenlake lodge. One trip was led to Blood River and Jonathan Creek mudflats by Ms. Hap Chambers. This trip

focused on shorebirds, migrant passerines, and land birds. Several species of warblers and other migrant passerines were observed. A second trip was led by Mr. David Roemer to Kuttawa Landing and other points along upper Lake Barkley. Water birds and migrant passerines were the focus of this trip which also visited Kentucky Dam and Smithland Dam. This trip also reported numerous species of migrant warblers and other passerines as well as water birds. Ken Leggett led a third field trip to the Land Between the Lakes.

At 3:00 p.m. the KOS Board of Directors met to discuss Society Business. At 7:30 p.m. on Saturday, the evening meeting was opened by Marilee Thompson. The evening program was presented by Mr. Brian Myres. Mr. Myres is a retired biology teacher at Cypress College in California where he directed students in the study of coastal salt marshes. His program included numerous slides of birds and the coastal salt marsh itself. Mr. Myres discussed teaching methodology, salt marsh ecology and avian fauna, and the pressures of development in southern California on this fragile and increasingly rare ecosystem. The program was highly informative and included a photo quiz on "Birds of the World" embedded within the presentation.

Following the program, President Marilee Thompson presided over a general business meeting of the Society. The following were elected as officers by acclamation:

Kathy Caminiti, President; Hap Chambers, Vice President; Brainard Palmer-Ball Jr., Treasurer; Mark Monroe, Corresponding Secretary; Mark Bennett, Recording Secretary; Richard Cassell, Councillor; Janet Howard, Councillor; Scott Marsh, Councillor; and Roseanna Denton, Councillor.

The term of service for officers is one year except for the office of Councillor which is a three year term. Scott Marsh and Roseanna Denton were elected to a regular three year term while Richard Cassell and Janet Howard were elected to complete two years remaining on their original three year term. Ms. Howard and Mr. Cassell were appointed by the Board last year when a by-laws revision created two vacant positions. All terms begin and end at the conclusion of the annual fall meeting.

On Sunday morning, a single field trip returned to the east side of upper Lake Barkley. This trip was again led by David Roemer. Numerous sites were visited and several species of migrant warblers, other passerines, and water birds were observed.

Society members observed a total of 122 species through Saturday evening. On Sunday, four additional species were added bringing the grand total of species observed for the weekend to 126. There were 64 members in attendance at the meeting. --- **MARK BENNETT**, Recording Secretary, 113 Iroquois Circle, Russellville, Kentucky 42276

ATTENDANCE AT THE FALL MEETING 2001

- BEREA:** Art Ricketts and Tina Ricketts
BOWLING GREEN: Valerie Brown, Tina Coates, Diane Elmore, Jackie Elmore, Blaine Ferrell, David Roemer, Joanie Roemer
BURLINGTON: Joey Caminiti, Joe Caminiti, Kathy Caminiti, Lee McNeely, Lynda McNeely
CADIZ: Cookie Gray, Willard Gray
CARLISLE: Ginny Kingsolver, Wendell Kingsolver, Brian Myres
COX'S CREEK: Dona Coates, Roger Coates
ELIZABETHTOWN: Janet Gebler
FRANKFORT: Amy Covert
GILBERTSVILLE: Rowena Cary, E. J. Conrad, Madelyn Conrad
JAMESTOWN: Arlene Martin
LEXINGTON: Rhonda Bryant, Hollianne Hash, Tony Hash, Scott Marsh, Jim Williams
LOUISVILLE: Richard Cassell, Katherine Fulkerson, Celia Lawrence, Mark Monroe, Marsha Noe, Peggy Oates, Brainard Palmer-Ball
MADISONVILLE: Ann Morgan, Marian Morgan
MORGANTOWN: Carroll Tichenor, Doris Tichenor
MT. STERLING: Gerald Robe
MURRAY: Hap Chambers
OWENSBORO: Janet Howard, Emily Kavolus, Michael Kavolus, Cassie Knight, Marilee Thompson, Wendell Thompson
PADUCAH: Bernice Caddell
PRINCETON: John W. Niemi, Phylis B. Niemi
RICHMOND: Gary Ritchison
RUSSELLVILLE: Mark Bennett
SCIENCE HILL: Roseanna Denton
SOUTH WINSON: Joan Carr, Les Estep
CORYDON, IN: Mary Walter
DYERSBURG, TN: Bette Leggett, Ken Leggett
KNOXVILLE, TN: Kathleen Kramer
TIPTONVILLE, TN: Nancy Moore

BIRDS OBSERVED AT THE FALL MEETING

Bird species observed in the proximity of Ken Lake State Resort Park and the Land Between the Lakes included: Common Loon, Pied-billed Grebe, Double-crested Cormorant, Great Blue Heron, Great Egret, Snowy Egret, Cattle Egret, Black-crowned Night-Heron, Canada Goose, Wood Duck, Mallard, Ring-necked Duck, Lesser Scaup, Black Vulture, Turkey Vulture, Osprey, Bald Eagle, Sharp-shinned Hawk, Cooper's Hawk, Red-shouldered Hawk, Red-tailed Hawk, American Kestrel, Wild Turkey, Northern Bobwhite, American Coot, Semipalmated Plover, Killdeer, Lesser Yellowlegs, Solitary Sandpiper, Semipalmated Sandpiper, Least Sandpiper, Pectoral Sandpiper, Ring-billed Gull, Herring Gull, Lesser Black-backed Gull, Caspian Tern, Forster's Tern, Rock Dove, Mourning Dove, Yellow-billed Cuckoo, Eastern Screech-Owl, Great Horned Owl, Chimney Swift, Ruby-throated Hummingbird, Belted Kingfisher, Red-headed Woodpecker, Red-bellied Woodpecker, Yellow-bellied Sapsucker, Downy Woodpecker, Hairy Woodpecker, Northern Flicker, Pileated Woodpecker, Olive-sided Flycatcher, Eastern Wood-Pewee, Eastern Phoebe, Great-crested Flycatcher, Eastern Kingbird, Tree Swallow, Northern Rough-winged Swallow, Barn Swallow, Blue Jay, American Crow, Carolina Chickadee, Tufted Titmouse, Red-breasted Nuthatch, White-breasted Nuthatch, Carolina Wren, Sedge Wren, Blue-gray Gnatcatcher, Eastern Bluebird, Gray-cheeked Thrush, Swainson's Thrush, Wood Thrush, American Robin, Gray Catbird, Northern Mockingbird, American Pipit, Cedar Waxwing, Loggerhead Shrike, European Starling, White-eyed Vireo, Blue-headed Vireo, Yellow-throated Vireo, Philadelphia Vireo, Red-eyed Vireo, Tennessee Warbler, Orange-crowned Warbler, Nashville Warbler, Northern Parula, Yellow Warbler, Chestnut-sided Warbler, Magnolia Warbler, Cape May Warbler, Yellow-rumped Warbler, Black-throated Green Warbler, Blackburnian Warbler, Yellow-throated Warbler, Pine Warbler, Palm Warbler, Bay-breasted Warbler, Cerulean Warbler, Black-and-white Warbler, American Redstart, Northern Waterthrush, Common Yellowthroat, Yellow-breasted Chat, Summer Tanager, Scarlet Tanager, Northern Cardinal, Rose-breasted Grosbeak, Blue Grosbeak, Indigo Bunting, Eastern Towhee, Chipping Sparrow, Swamp Sparrow, Dark-eyed Junco, Red-winged Blackbird, Eastern Meadowlark, Common Grackle, House Finch, American Goldfinch, and House Sparrow for a total of 122 species. Species added on the Sunday field trip were Franklin's Gull, Ruby-crowned Kinglet, Brown-headed Cowbird, and Purple Finch, bringing the weekend total to 126 species.

**Breeding Red-breasted Nuthatches in Kentucky:
A Nesting Attempt in Campbell County and a Wolfe County Update**

This article details two distinctive categories of Red-breasted Nuthatch (*Sitta canadensis*) nestings within Kentucky. The first being an extralimital nesting attempt following a postirruption winter in a setting of planted conifers in Northern Kentucky. The second is an update on the nest activities of a small population inhabiting a natural eastern hemlock (*Tsuga canadensis*) and white pine (*Pinus strobus*) forest in Eastern Kentucky.

A Campbell County Nesting Attempt

The winter of 1999-2000 was a banner season for Red-breasted Nuthatches in our region. Individuals were present at several Campbell County, Kentucky locations beginning in early autumn. It was not until mid-March (2000), however, that I was able to locate them at the Evergreen Cemetery in Southgate. On 18 March I observed a pair foraging among a stand of centenarian Austrian pines (*Pinus nigra*), flat-topped and gnarled with age, where I had seen a male several days earlier. As I followed the pair into a nearby tuliptree (*Liriodendron tulipifera*) I was surprised to witness the male calling excitedly from a dead twig adjacent to a dead snag, in which it then began to tap out an indentation. It was soon joined by the female, which began tapping out another indentation a few inches away.

They soon abandoned their efforts to begin foraging again, but even at this their behavior was somewhat exceptional. Under the close-cropped yews (*Taxus*), only 2-3 foot high, which border the stone chapel walls, they kept up a lively chatter. While bouncing wren-like on the lowest branches they tapped on the bark for insects, remaining for some ten minutes only inches from the ground. Later in the day, I found the female swaying in a pendulum motion from side to side, at the top of a dead snag on an Austrian pine, behavior strongly indicative of courtship in this species (Matthysen 1998). During the next several days the pair spent much of the time foraging in a large American elm (*Ulmus americana*).

On 22 March, I returned to find the male excavating a dime-sized hole near the top of a dead snag about 20 feet up in a medium-sized black maple (*Acer nigrum*). The female took over the task a few minutes later, and continued to enlarge the cavity for about five minutes. Shortly thereafter, the male Red-breasted Nuthatch aggressively chased away a Brown Creeper (*Certhia americana*) which was feeding nearby. I arrived the next morning to find the male digging away at the hole which was now enlarged to almost an inch in diameter and several inches deep. The female soon relieved the male and worked very vigorously, with wood chips flying, for almost a half hour. The male attempted to return to the hole several times during this period, but the female would not budge from her task.

I was unable to return to the cemetery until 2 April, during which time the unseasonably warm weather of March had changed to unseasonably cold weather for April. The hole was now an almost perfectly round one inch in diameter. I found the pair foraging in nearby deciduous trees but only observed the female at the hole on one occasion, during which she briefly looked inside. The next several days were cold and stormy. On 5 April I found the female sitting perfectly still in a near dormant state on a short stub, sheltered from the gusting wind under the thick needle clusters near the top of an Austrian pine. On 6 April I found the pair feeding in deciduous trees near the black maple. The male briefly went to the hole but did not dig or go in.

I did not return until 18 April. A Northern Flicker (*Colaptes auratus*) was calling from the top of the maple. The hole was greatly enlarged to almost 2 inches in diameter. I did find the pair of Red-breasted Nuthatches in a nearby section of the cemetery. This time the tables were turned. A pair of American Robins (*Turdus migratorius*) angrily chased the nuthatches from a large white cedar (*Thuja occidentalis*) in which the robins' nest was located.

I returned often during the next several days but could not find the nuthatches. The flicker was frequently observed in the maple, as well as a pair of Red-bellied Woodpeckers (*Melanerpes carolinus*) which were working on a nest hole in another dead snag on the same tree.

I had pretty much given up hope when on 23 April I found the pair of Red-breasted Nuthatches showing renewed interest in a 1-inch diameter hole just to the side of and below the enlarged hole. At one point the male looked in the hole and then aggressively charged a nearby Yellow-rumped Warbler (*Dendroica coronata*). The warbler remained in the tree until the female nuthatch also confronted it, giving an "electric buzzer" type alarm call. The nuthatch pair continued to bicker with several yellow rumps in a nearby tree. They then began to bicker between themselves, and after another buzzer type call the nuthatches copulated briefly. I returned on 25 April to find the male foraging alone for about an hour. Despite repeated trips to the cemetery I was unable to locate these birds again, except for a distant call note heard on 28 April.

The 250 acre Evergreen Cemetery was founded in 1847 and contains many large coniferous trees. Cemetery records indicate that the planting of "evergreen trees" was initiated in 1866 (Pretot 1980). A ring count of a recently toppled Austrian Pine indicates an age of at least 114 years.

Evergreen Cemetery is quite similar in character to Spring Grove Cemetery, ten miles to the north in Cincinnati, Ohio where a Red-breasted Nuthatch nest was found in the summer of 1982 (Renfrow 1982). This was also located in the dead portion of a live deciduous tree, adjacent to a stand of Austrian pines. A previous Cincinnati record has just recently come to my attention. A Red-breasted Nuthatch was observed going in and out of a cavity in May of 1972 by Worth Randle and Karl Maslowski (pers. comm. Karl Maslowski). This was near the home of the noted naturalist, E. Lucy Braun, in a beech-maple woods but also near a mature stand of Austrian pines. This location is only 3 miles east of Evergreen Cemetery. All three of these records are consistent with a pattern of extralimital nesting records following Red-breasted Nuthatch irruption winters. These extralimital nestings often occur in urban residential areas and cemeteries with ornamental conifers (Peterjohn and Rice 1991).

The 22 March date for commencement of nest excavation was somewhat early, possibly prompted by the unseasonably warm, sunny weather. However, I did observe fledging of this species in southeastern Ohio on 4 June 2001, indicating a similar nesting chronology. Nestlings were still in the hole at this same Ohio nest site on 21 June 1999 (Renfrow 1999a). These records demonstrate that a considerable variability in the timing of nesting can occur from year to year in this species.

The Wolfe County Population

The only other known nestings of this species in Kentucky have occurred at the Rock Bridge area of the Red River Gorge in Wolfe County, Kentucky. Red-breasted Nuthatches have now been found in this area for six consecutive summers. Breeding evidence has included observation of recently fledged young and a nearby resin-coated nest hole on 4 July 1996 (Renfrow 1996), at least 4 young birds with an adult on 3 June 1997 (pers. comm. Brainard Palmer-Ball), and a pair at a nest hole with the female apparently incubating inside during the period of 5-27 May

1999 (Renfrow 1999b). Both of these nest holes were located in severely rotted sections of live red maples (*Acer rubrum*). This population appears to consist of only 2 to 4 pairs with a total of 7 individuals counted on 4 July 1996 and 5 on 9 July 1998. I have had no definite summer records farther than 2 miles from Rock Bridge, despite numerous extensive searches.

During a trip to this location on 5 June 2000, I observed a female as it flew out of a hole in a dead white pine (*Pinus strobus*) near the junction of the Swift Camp Creek and Rock Bridge trails. The 1-inch diameter hole was about 20 feet up and coated with droplets of resin. The female Red-breasted Nuthatch was observed flying out of the hole as the male called from the top of a dead snag nearby. Two other Red-breasted Nuthatches were located along Swift Camp Creek the next day, with a male carrying food just past the old log dam site. A pair was again located on 25 August very close to Rock Bridge.

Upon returning to Rock Bridge on 23 May 2001 I found a male Red-breasted Nuthatch calling from the overlook area just above the Rock Bridge and Swift Camp Creek trail junction and heard the female answering from nearby on the following day. On 30 June and again on 1 July, I found the pair in this vicinity. There were indications that they may have been accompanied by fledged young, but this was not confirmed. The dead white pine from the observations of the previous year had fallen. Upon inspection I found the hole to be several inches deep, but with no descending cavity, indicating that last year's nesting attempt was not completed in this cavity.

The Rock Bridge population of Red-breasted Nuthatches may represent one of several disjunct populations in the plateau and lower elevation areas of the Southern Appalachians (as defined in Holt 1970). This species is also found along the Chatooga River in Rabun County, Georgia and Oconee County, South Carolina. In mid-June 2000 I found a total of 14 Red-breasted Nuthatches along a 17.6 mile stretch of the Chatooga River south from Burrell's Ford. This area contains extensive forests of eastern hemlock (*Tsuga canadensis*) and white pine, mixed in with cove hardwoods and rhododendron thickets (Carter 1993). This area is remarkably similar in habitat and elevation to the Rock Bridge site. I have observed the Red-breasted Nuthatches moving freely back and forth from the white pines up into the Virginia (*Pinus virginiana*) and pitch pines (*P. rigida*) which line the upper slopes at both the Rock Bridge and Chatooga River areas.

Nesting activity was first suspected in South Carolina on 26 May 1986, although there is also a 10 June 1910 record from the same location (Post and Gauthreaux 1989). There are no published summer records from the Red River Gorge area prior to 1996 (Renfrow 1996). Two previous Kentucky summer records occurred at Bardstown, Nelson County on 16 July 1886 and Big Black Mountain, Harlan County 3 July 1982 (Monroe, 1994).

A tendency of the breeding range of the Red-breasted Nuthatch to expand to the south has been documented (Matthysen 1998), and this may explain these recent discoveries. It is also possible that these populations were simply overlooked, as was the case with the Swainson's Warbler (*Limnothlypis swainsonii*) (Mengel 1965) with which the Red-breasted Nuthatch shares these same haunts.

---FRANK RENFROW, 611 South O'Fallon Ave, Bellevue, KY 41073.

Acknowledgements

Special thanks to Karl Maslowski for sharing his recollections on the 1972 Cincinnati record. Thanks also to Brainard-Palmer Ball for his trips to Rock Bridge to help confirm breeding and for sharing his records.

Literature Cited

- Carter, R.M. 1993. *Finding Birds in South Carolina*. University of South Carolina Press, Columbia, South Carolina.
- Holt, P.C. 1970. *The Distributional History of the Biota of the Southern Appalachians; Part II: Flora*. Virginia Polytechnic Institute and State University, Blacksburg, Virginia.
- Matthysen, E. 1998. *The Nuthatches*. Academic Press, San Diego, California.
- Mengel, R.M. 1965. *The Birds of Kentucky*. American Ornithologists' Union Monograph No.3. Allen Press, Lawrence, Kansas
- Monroe, B.L. 1994. *The Birds of Kentucky*. Indiana University Press, Bloomington, Indiana.
- Peterjohn, B.G., and D.L. Rice. 1991. *The Ohio Breeding Bird Atlas*. Ohio Department of Natural Resources, Columbus, Ohio.
- Post W. and S.A. Gauthreaux. 1989. *Status and Distribution of South Carolina Birds*. The Charleston Museum. Charleston, South Carolina.
- Pretot, W. 1980. Evergreen Cemetery; A Place in Space. *Fort Thomas Living* 4:10-11
- Renfrow, F. 1982. Red-breasted Nuthatches Nesting in Cincinnati. *The Ohio Cardinal* 5:40.
- Renfrow, F. 1996. Red-breasted Nuthatches Nesting at the Red River Gorge: A First State Record for Kentucky. *The Kentucky Warbler* 72:62-64.
- Renfrow, F. 1999a. Red-breasted Nuthatches Nesting at Hocking Hills: The First Records for Southeastern Ohio, *The Ohio Cardinal* 22:131-133
- Renfrow, F. 1999b. An Active Nest of the Red-Breasted Nuthatch at the Red River Gorge. *The Kentucky Warbler* 75:53-55

Northern Saw-whet Owl Surveys in the Big South Fork National River and Recreation Area, Kentucky and Tennessee

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INTRODUCTION

Northern Saw-whet Owls (*Aegolius acadicus*) are considered rare winter residents in Kentucky (Monroe 1994) and Tennessee (Robinson 1990). They are also rare permanent residents in the eastern mountains of the latter state (Robinson 1990). Prior to 2000, no observations of Northern Saw-whet Owl had taken place

in the Big South Fork National River and Recreation Area (BSF). Furthermore, no records of this owl existed for any of the five counties in which the BSF is located, including McCreary County, Kentucky, and Fentress, Morgan, Pickett, and Scott counties, Tennessee.

During the fall of 1999, a major irruption of saw-whet owls took place in the northeastern U. S. and southeastern Canada (Contreras 2000), reaching south to north-central Kentucky (M. Monroe, pers. comm.) and the Carolinas (Contreras 2000) and prompting me to undertake a project to detect this small owl in the BSF during the following winter. During January, February, and March 2000 I conducted a 100-stop survey and detected 10 Northern Saw-whet Owls in the BSF. To determine whether the Northern Saw-whet Owls present during 2000 were winter residents resulting from the irruption event or members of a previously undetected permanent resident population, I surveyed 50 sites, including 48 sites originally surveyed during 2000, for these owls in the BSF during February 2001. No saw-whets were detected during the second survey, indicating that those encountered during 2000 were probably present as a result of the irruption event.

Details about the locations of the Northern Saw-whet Owls encountered during the 2000 survey are presented (Table 1). Since winter vocalizations of this species in Kentucky and Tennessee have been infrequently heard and rarely described in the past (C. E. Hill, pers. comm.), details about these are also discussed and presented (Table 2).

STUDY AREA

Occupying an area of about 50,000 hectares (125,000 acres), the BSF was authorized by Section 108 of the Water Resources Act of 1974 (PL 93-251) to preserve the scenic and ecologic features of the Big South Fork of the Cumberland River, its larger tributaries, and adjacent portions of the Cumberland Plateau. More than 40,000 hectares (100,000 acres) of the authorized total have been purchased. Lying about one-third in McCreary County, Kentucky, and two-thirds in Fentress, Morgan, Pickett, and Scott counties, Tennessee, the BSF features one of the most pristine river gorges in the eastern United States. Elevation ranges from 212 m (700 ft) above mean sea level in the gorge to 545 m (1800 ft) on the plateau. The Area varies from 15 to 40 km wide east to west, while it is over 100 km long from its northernmost point near Whitley City, Kentucky, to its southernmost point near Rugby, Tennessee. Various forest communities are found in the BSF, depending on the elevation, slope, and aspect of the sites involved. The most common community of upland sites is the mixed pine-hardwood forest, while the most common communities in the gorge are the white pine-hemlock and mixed mesophytic forests.

METHODS

During January, February, and March 2000 I surveyed 100 BSF sites, 80 situated in Tennessee and 20 in Kentucky. During February 2001 I surveyed 50 BSF sites (40 in Tennessee and 10 in Kentucky); 48 sites surveyed during 2001 were identical to sites surveyed during 2000, and five of the 48 sites were ones at which Northern Saw-whet Owls had been located during 2000. I placed all sites along gravel roads within the BSF at intervals of 0.65-0.8 km. In nearly all cases the stops were selected during hours of darkness and placed at 0.8-km intervals with

out regard to the forest type or other characteristics of the sites involved. In the few remaining cases a shorter interval between stops was used because gravel roads were limited in the areas surveyed. I drove from one site to another with an automobile.

Surveys typically began about 40 min after sunset (c. 1840-1920 EST, when full darkness had fallen). During 2000 I spent about 80-90 min surveying each evening of the survey, and I surveyed no sites later than c. 2100 EST; during 2001 I spent about 90-120 min surveying each evening, and I surveyed no later than c. 2130 EST. I generally selected nights when clear skies and calm wind conditions (Beaufort 0-2) prevailed.

At each survey site I spent about 5-6 min. After stopping at each site, I played a recording of Northern Saw-whet Owl vocalizations for 1 min, listened for 1-2 min, played the recording for 1 more min, and listened for 1-2 additional min. I seldom varied this routine except in instances when Northern Saw-whet Owls responded to the recordings. In those instances, I often remained at the site listening to the responses for an additional 2-10 min, depending on how vocal the owls were. I classified vocal responses by ear, using vocal categories described by Cannings (1993) and Hill (1995).

I used a battery-operated tape recorder (GE Model No. 3-5301A) to play a recording of Northern Saw-whet Owl vocalizations obtained from the *Stokes Guide to Bird Songs: Eastern Region* (Elliot *et al.* 1997). The *Stokes* recording consists of two sequences of advertising calls (one about 35 notes long and the other 11 notes long) and two contact calls (see descriptions in Results). I copied the version on the *Stokes* recording twice to create the tape used for the surveys. I played the recording at a rather low volume. I do not know how far the recording could be heard by humans or owls, but I strongly suspect <300 m.

RESULTS

Ten Northern Saw-whet Owls were detected at nine of 100 sites surveyed during 2000, for an average of one owl per 10 sites surveyed (Table 1). Five Northern Saw-whet Owls were detected in Tennessee (where 80 sites were located) and five in Kentucky (20 sites), possibly indicating a more dense population of owls occurred in the Kentucky portion of the BSF. Seven detections were of single owls at stops 3.2 km or more from other stops at which Northern Saw-whet Owls were heard; the three remaining owls heard were at adjacent sites (two owls at one site and one at the other). No Northern Saw-whet Owls were detected during the 50-stop survey conducted in 2001 (Table 1), suggesting that they were absent from, or present at much lower density in the BSF that winter.

I carried a flashlight and attempted to observe vocalizing Northern Saw-whet Owls, but in no case did I see one. Northern Saw-whet Owls heard in the BSF uttered three identifiable calls (Table 2), each described by Cannings (1993) and Hill (1995): 1) the advertising (# 1 in Cannings 1993) or toot call (Hill 1995); 2) a wail/whine (# 3 in Cannings 1993) or whine (Hill 1995); and 3) a loud, sharp squeaking (# 4 in Cannings 1993) or kew (Hill 1995) resembling a short version of the call of Elf Owl (*Micrathene whitneyi*) as presented in *The Field Guide to Western Bird Songs* (Anonymous 1975). I refer to these below as the advertising, contact, and threat calls, respectively. I heard various other short, indistinct calls that probably were also uttered by Northern Saw-whet Owls a few times during

the survey, but in no case could I assign any of these calls to one of the call types described by Cannings or Hill.

All Northern Saw-whet Owls registered during the survey were detected by call. Considerable difference in the amount of vocal response to the recording was exhibited, ranging from owls that used a single call in response to the recording to several that called many times for several minutes. In Hill's (1995) study, similar variability in winter calling was also detected. Nine owls responded to my recording during the time when the first sequence was playing or immediately after the first playing ended; one of the owls responded after the second playing of the recording. The most frequently used vocal response was the contact call, uttered by seven of the ten owls heard during the survey; the advertising call was used by six owls; and the threat call by three. Hill (1995) also found advertising and contact calls to be more commonly used winter vocalization than threat calls. Collectively, the calls I heard indicate that Northern Saw-whet Owls are quite vocal during winter in response to tape playback of their calls, more so perhaps than is often appreciated.

Six owls responded to my recording with two of the three call types, and four used only one call type (Table 2). For owls responding with two call types, the order of the calls was noted: two owls uttered one or more contact calls and followed with one or more series of advertising calls; two owls uttered one or more series of advertising calls and followed with one or more contact calls; one owl uttered several series of advertising calls, followed with two contact calls, and resumed uttering the advertising call; and one owl began with one threat call and followed it with an unusual version of the advertising call (see below). Hill (1995) also detected owls that used these (and other) sequences of calls in his study. Additionally, he found that only males use the advertising and contact calls, while either sex may use the threat call.

The contact calls uttered by the Northern Saw-whet Owls in the BSF were inflected at the end both upwardly and downwardly. No pattern in the inflections of this call emerged from the instances in which it was heard. Most birds uttered this call only one or two times. However, one owl heard 5 March 2000 used this call 4-5 times before switching to the advertising call.

The advertising calls heard during the survey varied in duration quite a bit among the six owls that uttered them: several owls gave a couple of short tooting bouts and then became silent; others called for 2-4 min before becoming silent; one owl continued to call for 10 min and was still calling when I left the site. Hill (1995) also found considerable inter-individual variation among advertising calls he encountered. In one instance the musical quality of the advertising call given by a Northern Saw-whet Owl was somewhat different from the quality of all other advertising calls I heard. On 2 March 2000, an owl first responded to my recording with a single threat call (Cannings # 4); about 2 min later it began uttering the advertising call and gave about 15-20 toots having a metallic, somewhat strained quality, noticeably unlike the more mellow quality of all other advertising calls I heard. The threat call was heard from three owls, each uttering it in a slightly different manner. These differences and the differing distances and behaviors of the owls that uttered them suggest that the threat call may have a range of possible delivery forms that depend on the situations (indicating the degree of aggressive

Table 1. Results of Northern Saw-whet Owl surveys in the Big South Fork National River and Recreation Area, Kentucky and Tennessee, during January-March 2000 and February 2001.

Date	Number NSWOs Heard	Number Stops Conducted	County in which NSWO Heard
14 January 2000	1	7	Fentress, TN
9 February 2000	2	11	Pickett (1), TN Scott (1), TN
15 February 2000	0	12	
21 February 2000	1	10	Scott, TN
25 February 2000	1	10	Scott, TN
28 February 2000	1	10	McCreary, KY
29 February 2000	0	10	
2 March 2000	1	10	McCreary, KY
5 March 2000	3	10	McCreary, KY
6 March 2000	0	10	
2000 Totals	10	100	
11 February 2001	0	8	
19 February 2001	0	11	
23 February 2001	0	15	
26 February 2001	0	16	
2001 Totals	0	50	

Table 2. Summary of Northern Saw-whet Owl vocalizations heard during a survey of the Big South Fork National River and Recreation Area, Kentucky and Tennessee, January-March 2000.

Date	Advertising Call ¹	Contact Call ²	Threat Call ³
14 January	x	x	
9 February/bird 1			x
9 February/bird 2	x	x	
21 February			x
25 February		x	
28 February	x	x	
2 March	x		x
5 March/bird 1	x	x	
5 March/bird 2		x	
5 March/bird 3	x	x	

¹ Cannings # 1 (Cannings 1993).

² Cannings # 3 (Cannings 1993).

³ Cannings # 4 (Cannings 1993).

ness to be evidenced?) in which they are used. One of the owls heard 9 February 2000 responded to the recording with a single utterance of this call from moderately close range (15-20 m). The call was three-syllabled, rapidly repeated, and somewhat emphatic. The owl heard 21 February 2000 uttered this call twice, each call being three-syllabled; each call was less emphatically delivered than the call of the first owl described above, and the two calls were separated by an interval of silence lasting about 1 sec; the bird was about 25-30 m away when it uttered this call. The third owl uttering the threat call was heard 2 March 2000 giving a single, three-syllabled version from close range (c. 10 m) in a louder, more emphatic manner than the calls used by either of the other two owls. When the recording was repeated, the owl responded by flying closely and very audibly by me rather than by uttering another threat call. This owl then began uttering a "strained" sounding version of the advertising call, as noted above.

Nights with wind speed above Beaufort 2 were much less productive than nights when wind speed was Beaufort 0-2. Variations in temperature and phase of moon did not affect owl response rates in any obvious manner.

DISCUSSION

Size of Northern Saw-whet Owl Population in the BSF during the Winter of 1999-2000

Although the advertising call of a Northern Saw-whet Owl can be heard across open terrain for a distance of about 1 km (Cannings 1993; Milling *et al.* 1997), it can be heard in forested terrain for a distance of only about 300 m (Cannings 1993). From my experience with Northern Saw-whet Owl vocalizations during this survey, I do not believe that either of the other two calls I encountered can be heard for distances > 300 m in forested terrain. Nine of the owls I detected responded immediately from distances of 10-100 m. The immediacy of their responses suggested they did not fly toward me before responding. The remaining owl called from a distance of 100-150 m after the second series of recording had been played and may have flown in from a greater distance. Assuming a maximum detection distance of 300 m, each stop represents 0.28 km². Thus, the 100 stops surveyed covered 28 km². The BSF contains about 500 km². Therefore, about 5.6 percent of the BSF was surveyed during 2000, with 10 owls being detected. Extrapolation to the entire BSF indicates that a population of about 180 Northern Saw-whet Owls may have been present in the BSF during the major irruption winter of 1999-2000. The accuracy of this figure depends on the ratio of birds present to those that responded to recordings, which in turn depends on unknown differences in tendency to vocalize among the owls, as determined by sex, age, individual variation, and other factors. It is unlikely that 100 percent of owls present responded to the recordings, so 180 is undoubtedly a conservative figure.

Winter territory size of Northern Saw-whet Owls is not well known, especially for owls at the southern edge of the species' range. Winter territory size for one Northern Saw-whet Owl radio-tagged in Minnesota during 1965 was 115 ha (Forbes and Warner 1974). In the southern Appalachians winter territory size of permanent resident Northern Saw-whet Owls may be roughly equivalent to summer territory size, which varies from 73 to 250 ha (Milling *et al.* 1997) with 160 ha per

haps being average (M. Rowe, pers. comm.). Assuming 160 ha to be the average size of the winter territory of migratory Northern Saw-whet Owls in the mid-south, a maximum of 312 winter territories could exist within the BSF. The figure of 180 owls calculated above is therefore mathematically possible, but still conservative.

Factors Possibly Influencing Results of the Surveys

Results of the 50-stop survey conducted during February 2001 may have been affected by two factors not in evidence during January-March 2000. First, an infestation of southern pine beetles (*Dendroctinus frontalis*) considerably reduced the number of living pines present in 2001 at many of the 40 sites surveyed in the Tennessee portion of the BSF. Mortality among Virginia pines (*Pinus virginiana*) and shortleaf pines (*P. echinata*) was close to 100 percent at 15-20 of the 40 sites, and at the remainder of sites mortality among these pine species was generally more than 50 percent. However, mortality among white pines (*P. strobus*) and Eastern hemlocks (*Tsuga canadensis*) was not evident at any of the sites. Second, recent extensive logging activity had taken place near all 10 sites surveyed in the Kentucky portion of the BSF; these sites lie directly adjacent to the Daniel Boone National Forest where the logging occurred. However, there is currently no evidence that wintering saw-whet owls are ever limited in density by availability of suitable roosting sites (C. E. Hill, pers. com.). Therefore, these factors may not account for much of the difference in owl numbers detected between 2000 and 2001.

Hill (1995) presents evidence that playbacks of contact calls of Northern Saw-whet Owl are much less effective in eliciting responses than playbacks of advertising calls. In fact, Hill recommends that playback of contact calls be entirely avoided by those surveying populations of these owls. Since the recording I used in this survey included examples of both contact calls and advertising calls, it is possible that the results I obtained were somewhat reduced by the presence of the contact call on the recording. If so, the extrapolation data presented above are even more conservative than already suggested.

"Lazy" Migrant

Some Northern Saw-whet Owls are known as "lazy" migrants because they delay migration northward long after most individuals in the migratory population have departed the winter range. A probable instance of delayed migration behavior was noted in the BSF during 2000. At the Hattie Blevins Cemetery in the BSF, Scott County, Tennessee, a Northern Saw-whet Owl was heard 9 and 25 February 2000; on 7 June 2000 a Northern Saw-whet Owl was heard at the same site; on 26 February 2001 no owl responded when this site was surveyed.

CONCLUSION

A survey for Northern Saw-whet Owls conducted in the Big South Fork National River and Recreation Area during January-March 2000 resulted in the detection of 10 saw-whet owls, revealing that a moderately large population wintered there, perhaps as many as 180 individuals. Half of the sites surveyed in 2000 were resurveyed in February 2001, but no saw-whet owls were detected. The population discovered during the first survey winter probably occurred as a result of a major irruption event rather than being a newly discovered resident popula

tion. Owls were most often found at sites with mixed (*i.e.*, coniferous-deciduous) forest on ridgetops adjacent to slopes with white pine-hemlock forest. Vocalizations of owls heard during the survey were of three call types encountered with varying frequency, collectively indicating that saw-whet owls are moderately vocal during winter, at least in response to tape playbacks of their calls.

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Literature Cited

- Anonymous, 1975. *A Field Guide to Western Bird Songs*. Cornell Laboratory of Ornithology/Houghton Mifflin Co., Ithaca, New York.
- Cannings, Richard 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.
- Contreras, A. 2000. Changing seasons—fall migration: August–November 1999. *North American Birds* 54: 16–17.
- Elliott, L., D. Stokes, and L. Stokes. 1997. *Stokes Field Guide to Bird Songs: Eastern Region*. Time Warner Audio Books.
- Forbes, J. E., and D. W. Warner. 1974. Behavior of a radio-tagged Saw-whet Owl. *Auk* 91: 783–795.
- Hill, C. E. 1995. *The Vocal Behavior of Northern Saw-whet Owls: An Analysis of Context and Variation*. M.S. Thesis. Eastern Kentucky University. 52 pp.
- Milling, T. C., M. P. Rowe, B. L. Cockerel, T. A. Dellinger, J. B. Gales, and C. E. Hill. 1997. Population densities of Northern Saw-whet Owls (*Aegolius acadicus*) in degraded boreal forests of the southern Appalachians. In *Biology and Conservation of Owls of the Northern Hemisphere: 2nd international symposium; 1997 February 5–9; Winnipeg, MB* (J. R. Duncan, D. H. Johnson, and T. H. Nicholls, Eds.). Gen. Tech. Rep. NC-190. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Research Station. 635 pp.
- Monroe, B. L., Jr. 1994. *The Birds of Kentucky*. Indiana University Press, Bloomington, Indiana.
- Robinson, J. C. 1990. *An Annotated Checklist of the Birds of Tennessee*. University of Tennessee Press, Knoxville, Tennessee.

NEWS AND VIEWS

Spring KOS Meeting at Mammoth Cave Hotel

The Spring KOS meeting will be held at Mammoth Cave Hotel on April 26 to 28. The room release date is March 20, 2002. Mark your calendar and let's make this the best attended meeting yet.

KOS Burt L. Monroe, Jr. Avian Research Grant Fund

Persons that need money (*i.e.*, up to \$500) to assist them in conducting research on birds in Kentucky should contact the KOS Burt L. Monroe, Jr. Avian Research Grant Fund Committee c/o Blaine Ferrell, Ogden College, Western Kentucky University, Bowling Green, Kentucky 42101 (email: blaine.ferrell@wku.edu) for a set of guidelines and an application form.

Kentucky Bird Records Committee

Rare bird sightings and birds observed out of season should be well documented and the documentation should be sent to Lee McNeely, Secretary of the KBRC, P.O. Box 463, Burlington, Kentucky 41005, for consideration by the committee for official record status.