

BIRD FINDING ON ROAN MOUNTAIN, MITCHELL COUNTY, N.C.

ELOISE F. POTTER and HARRY E. LeGRAND JR.

Botanists have long recognized Roan Mountain and its neighbors in northwestern North Carolina and adjacent eastern Tennessee as the home for many extinct, rare, and endangered plants (Cooper et al. 1977). Although Roan Mountain, which lies astride the line between Carter County, Tenn., and Mitchell County, N.C., is a favorite gathering place for Tennessee naturalists, Tar Heels tend to do their mountain bird watching elsewhere. There are less than a dozen references to Roan Mountain in more than 40 volumes of *Chat*.

In recent years the late Fred W. Behrend and other observers have found a number of unusual birds on Roan Mountain, but in most cases the accounts published in *Migrant* and *American Birds* do not clearly state whether the birds were in North Carolina or Tennessee. Following reports of Magnolia Warblers (*Dendroica magnolia*) on the Roan in late June and early July 1975 (Eller 1975, Herndon 1977), we decided North Carolinians should have a Breeding Bird Foray on the Mitchell County side of the mountain. Margery Plymire of Linville, N.C., and Tom Haggerty of Boone, N.C., helped us conduct a 1-day survey on 7 June 1979. We saw no Magnolia Warblers, but we did find a singing Hermit Thrush (*Catharus guttatus*)—the first known breeding season occurrence of this species south of Virginia.

THE ROAN

Rising to 6286 feet, Roan Mountain is the highest peak in the small but lofty Unaka Mountain Range, also known as the Iron Mountains. Its spruce-fir forest and spectacular rhododendron bald, now part of Pisgah National Forest, are situated in Mitchell County and are accessible by a paved U.S. Forest Service road from Carver's Gap, the point on the state line where NC 261 from Bakersville meets TN 143 from the town of Roan Mountain. The Appalachian Trail follows the state line in a generally east-west direction across the Roan, continuing eastward from Carver's Gap to Grassy Ridge Bald and Jane Bald.

The paved Forest Service road passes just to the south of Roan High Knob, the highest point on the mountain, where asphalt gives way to gravel roads leading to a series of parking lots serving overlooks, comfort stations, camping and picnicking sites, the Information Center, the Rhododendron Gardens, and relatively easy hiking trails. From the loop at the end of the gravel road west of the Information Center, a trail leads to an observation platform on Roan High Bluff. All of the roads and visitor facilities described above lie on the North Carolina side of the mountain.

On a clear day the Roan offers a view of some 50,000 square miles covering portions of six states and including the peaks of about 100 mountains over 4000 feet high (U.S. For. Serv. 1976). No wonder late nineteenth century tourists rode the steep narrow roads in stage coaches and carriages from the nearest railroad station to the Cloudland Hotel on Roan Mountain. After the hotel closed in 1900, the stands of mature spruce and fir were harvested, and the rhododendron root-stock was dug for the nursery trade. From the straggly remains grew the neat clumps that dot the grassy meadows of the 600-acre Rhododendron Gardens today.

THE FORAY

The morning of the Roan Mountain Breeding Bird Foray, 7 June 1979, we met at Carver's Gap at 0630 and spent a few minutes watching an Alder Flycatcher

(*Empidonax alnorum*) singing in a small stand of alders at the intersection of NC 261 and the Forest Service road. Then we drove one car to the parking lot at the Rhododendron Gardens and began hiking the loop road. Almost immediately LeGrand heard a Hermit Thrush singing. The bird was a great distance away, apparently in the direction of Roan High Bluff. As we walked the trail to the observation platform, we passed the persistent singer without seeing it. The song seemed to come from first one place and then another, but we never saw any movement. At times we thought there were two different birds. Haggerty stalked the bird with extraordinary patience and eventually found it perched in the top of a Fraser Fir (*Abies fraseri*) almost directly over the trail. All members of the party were able to see the bird and identify it satisfactorily. As we watched the singing bird, we became convinced that all the songs we had heard came from this one thrush. Although the bird appeared to be on territory, we found no mate, young, or other evidence of breeding.

Upon returning from Roan High Bluff, we visited the Rhododendron Gardens and then headed for Carver's Gap. Haggerty chose the hiking trail, and the rest of us walked down the paved road. After eating lunch at the gap, we retrieved the car from the top of the mountain and hiked the Appalachian Trail to Jane Bald. By midafternoon we had finished surveying the readily accessible portions of Roan Mountain in Mitchell County.

In all, we recorded 27 species, of which only the Hermit Thrush was unexpected. The absence of hawks and vultures was undoubtedly the result of poor visibility; clouds hid the Roan's fabled vistas throughout the day. The name of each species is followed by the number of individuals seen or heard. An asterisk (*) indicates one or more birds apparently on territory.

Common Flicker 1, Hairy Woodpecker 1, Alder Flycatcher 5*, Barn Swallow 3, Blue Jay 3, Common Raven 3, Common Crow 2, Red-breasted Nuthatch 8*, Winter Wren 15*, Gray Catbird 10*, Brown Thrasher 1*, American Robin 15 (mostly on balds), Hermit Thrush 1*, Veery 25*, Golden-crowned Kinglet 18*, Solitary Vireo 8*, Chestnut-sided Warbler 15*, Common Yellowthroat 3*, Canada Warbler 10*, Scarlet Tanager 1*, Rose-breasted Grosbeak 1*, Pine Siskin 4, American Goldfinch 25, Rufous-sided Towhee 12*, Vesper Sparrow 2* (on grassy balds), Dark-eyed Junco 50* (one nest with three eggs), Song Sparrow 3*.

The major disappointment of Roan birding is that the spruce-fir forests are second growth and only of medium height. This probably explains our failure to find Brown Creepers, Black-throated Green Warblers, Blackburnian Warblers, and a few other species generally found in mature spruce-fir forests.

SPECIES OF SPECIAL INTEREST

Several unusual species have been reported from Roan Mountain during the breeding season, and additional field work is needed to clarify their status.

Saw-whet Owl. Simpson (1968) reported hearing a Saw-whet Owl (*Aegolius acadicus*) cooing on Roan High Bluff the night of 13 April 1968. If there is a positive breeding record for Roan Mountain, we are not aware of it.

Alder Flycatcher. Traill's Flycatchers were reported from Roan Mountain (no site given) on two occasions in June 1970 (Smith 1970)—before the species was split into Alder and Willow. Smith and Finucane found three on 21 June, and Smith and Eller found two on 25 June. In the light of subsequent events, the birds appear to have been Alders, the vanguard of a southward movement that has resulted in breeding season reports as far south as southern Haywood County, N.C., and positive evidence of breeding from the vicinity of Carver's Gap (Eller 1978, LeGrand 1979). We found five singing males during the Foray. Three of our birds were along the Appalachian Trail between Carver's Gap and Jane Bald, where nesting occurred in 1978. These birds were,

as in the previous year, in the dry shrubby growths dominated by Green Alder (*Alnus crispa*), also called Mountain Alder. A fourth bird was heard just to the south of Roan High Bluff in a clearcut area of spruce-fir saplings and deciduous shrubs. The fifth one was, as mentioned earlier, in habitat considered typical for the species—the small alder thicket beside NC 261. Thus, during the 1970s the Alder Flycatcher appears to have become an established breeder in the North Carolina mountains at several high-elevation bogs, shrub balds, and stands of spruce-fir saplings. The Haywood County site, incidentally, is not at the main overlook for Graveyard Fields but along a gravel access road leading to a parking lot that serves the adjacent Shining Rock Wilderness Area.

Olive-sided Flycatcher. Rick Phillips and Fred Alsop saw one Olive-sided Flycatcher (*Nuttallornis borealis*) on 17 and 19 June 1977 (Eller 1977). They reported no evidence of nesting.

Black-capped Chickadee. One or two Black-capped Chickadees (*Parus atricapillus*) were reported on several dates in June and July of 1978 (Eller 1978). The absence of sightings prior to 14 June suggests that the birds were post-breeding wanderers rather than local breeders.

Hermit Thrush. Although we found no proof of breeding on 7 June, the possibility of nesting in the Roan Mountain area should not be discounted. The Hermit Thrush is known to breed in the mountains of Virginia (Larner 1979). The species has been recorded in summer as far south as Mount Rogers on the Smyth-Grayson County line, where it was first reported in June 1966 (Scott 1966). This isolated population appears to be increasing (Scott 1975), and the Roan is only 50 to 60 air miles SW of Mount Rogers.

Magnolia Warbler. Herndon (1977) reported Magnolia Warblers as summer visitors on Roan Mountain on 4 July 1959, 28 July 1962, and 30 June through 16 July 1975. In 1975 one to three singing males were found on several occasions in the vicinity of the Rhododendron Gardens and the gravel loop road. No females or young were seen, but Eller (1975) reported seeing "adults carrying food" on 14 July. Surprisingly, this important observation was not mentioned by Herndon (1977). Cairns (Pearson et al. 1942, p. 316) reportedly found Magnolia Warblers breeding in Buncombe County, N.C., during the late 1800s. Also, Joseph and Walter Hall (1972) saw one on Mount Mitchell in nearby Yancey County, N.C., on 5 June 1972. Recent summer records indicate that the Magnolia Warbler might be breeding sporadically in North Carolina, though positive evidence is still lacking. Because reports of the species in the southern Appalachians in summer have increased within the past decade, it seems inevitable that breeding populations will become established in the state's spruce-fir forests if present trends continue.

Purple Finch. Rick Phillips and Fred Alsop found one to two singing Purple Finches (*Carpodacus purpureus*) on 16 and 19 June 1977 (Eller 1977). This species was reported nesting in Highland County, Va., in June 1975 (Larner 1979). There are summer records of single Purple Finches from several sites in the Virginia mountains, including Mount Rogers, dating back to 1966 (Scott 1975).

Pine Siskin. Since about 1940 there have been persistent reports of Pine Siskins (*Carduelis pinus*) in summer from the southern Appalachians (Stupka 1963, Larner 1979, and others), including Roan Mountain (Herndon 1977 and others). Although Pine Siskins have been recorded on the Roan every month of the year, proof of breeding is still lacking. Typically, the four birds we saw on 7 June flew overhead in a flock; however, social behavior is not, for this species, inconsistent with breeding. Palmer (1968, p. 434) notes that other siskins may accompany the food-bearing male and even perch in the nest tree, but they do not trespass upon the small defended area around the nest. Social behavior during nesting undoubtedly contributes to the difficulty of

obtaining proof of breeding in the southern Appalachians—proof that appears to be long overdue.

Red Crossbill. This erratic species was first reported on the Roan in summer when Behrend and Dubke (Herndon 1977) found seven Red Crossbills (*Loxia curvirostra*) on 15 July 1962. There are now reports from Roan Mountain and vicinity for every month of the year, but no evidence of local breeding.

White-winged Crossbill. Flocks of up to 100 White-winged Crossbills (*L. leucoptera*) were reported from Roan Mountain in the winter of 1970 (Behrend 1970a), and 40 were still present on 25 May (Behrend 1970b). Although there is not even a hint that this species may breed in North Carolina or Tennessee, there is a summer record from the mountains of Virginia (Larner 1979).

Roan Mountain offers the bird student easy access to a wide variety of high montane habitats: spruce-fir forest, hardwood forest, rhododendron bald, grassy bald, and the southernmost known Green Alder thicket in the United States. Unlike our other alder (*A. serrulata*), this northern plant is not confined to wet places and grows on rocky slopes. Indeed, Roan's most significant feature to ornithologists lies in the open-country habitats (the last three listed above), which are scarce on other well-known mountains in the state. The Roan is a likely nesting site for northern species that are in the process of extending their breeding ranges southward in the Appalachian Mountains. In addition, there are good overlooks for autumn hawk and eagle watching, and the grassy balds regularly attract wintering Snow Buntings (*Plectrophenax nivalis*) (Browne 1977).

It's time for Tar Heel birders to claim the Roan as their own.

ACKNOWLEDGMENTS

We appreciate the help Margery Plymire and Tom Haggerty gave us on the Foray. Having the use of Mrs. Plymire's car in addition to LeGrand's greatly facilitated coverage of the area.

LITERATURE CITED

- Behrend, F.W. 1970a. The season, eastern mountain region: White-winged Crossbill. Migrant 41:47.
- . 1970b. The season, eastern mountain region: White-winged Crossbill. Migrant 41:72.
- Browne, M.M. 1977. Status of Snow Buntings wintering in the Southeast. Chat 41:59-66.
- Cooper, J.E., S.S. Robinson, J.F. Funderburg. 1977. Endangered and Threatened Plants and Animals of North Carolina. N.C. State Mus., Raleigh.
- Eller, G. 1975. Appalachian region: Magnolia Warbler. Am. Birds 29:973.
- . 1977. The season, eastern mountain region. Migrant 48:107-108.
- . 1978. The season, eastern mountain region. Migrant 49:95-96.
- Hall, J., and W. Hall. 1972. Appalachian region: Magnolia Warbler. Am. Birds 26:860.
- Herndon, L.R. 1977. Summer visitors on Roan Mountain. Migrant 48:13-14.
- Larner, Y.R., Chmn. 1979. Virginia's Birdlife: An Annotated Checklist. Va. Soc. Orn.
- LeGrand, E. 1979. A report on an Alder Flycatcher colony at Roan Mountain with comments on the status of the species in the southern Appalachians. Chat 43:35-36.
- Palmer, R.S. 1968. Pine Siskin. Pages 424-447 in Life Histories of North American Cardinals, Grosbeaks, Buntings, Towhees, Finches, Sparrows, and Allies (A.C. Bent et al.; O.L. Austin Jr., Ed.). Part 1. U.S. Natl. Mus. Bull. 237.

- Pearson, T.G., C.S. Brimley, and H.H. Brimley. 1942. Birds of North Carolina. N.C. Dept. Agri., Raleigh.
- Scott, F.R. 1966. Results of the Abingdon foray, June 1966. Raven 46:71-76.
- _____. 1975. The Mount Rogers foray of June 1974. Raven 46:75-87.
- Simpson, M.B., Jr. 1968. The Saw-whet Owl: breeding distribution in North Carolina. Chat 32:83-89.
- _____. 1976. Breeding season records of the Magnolia Warbler in Grayson County, Virginia. Raven 47:56.
- Smith, C.R., Ed. 1970. The season. Migrant 41:68-72.
- Stupka, A. 1963. Notes on the Birds of Great Smoky Mountains National Park. Univ. Tenn. Press, Knoxville.
- U.S. Forest Service. 1976. Roan Mountain Gardens. Pamphlet. (Available from U.S. Forest Service, P.O. Box 128, Burnsville, N.C. 28714.)

Route 3, Box 114 AA, Zebulon, N.C. 27597, and Department of Zoology, Clemson University, Clemson, S.C. 29631.