

ALABAMA'S APPALACHIAN COTTONTAIL

By Barry Hart, Alabama Natural Heritage Program, The Nature Conservancy

Deep in the hills and low mountains of eastern and north-central Alabama, there lives a mammal that few people have searched for or seem aware of its presence. I'm not referring to the elusive and haunting presence of a mountain lion or black bear but rather to an animal that many of us grew up pursuing for sport, food, and pelts. It's a cottontail but not the common eastern cottontail that we all know so well. The rabbit I'm in pursuit of is the little known (that is, in Alabama) Appalachian cottontail (also referred to as the wood rabbit, brush rabbit, or mountain cottontail).

The Appalachian cottontail is one member of a complex of two "somewhat" biologically distinct forms. The species was first described in 1895 from specimens collected in New London County, Connecticut and was named the New England cottontail. This name held for all populations range-wide until 1992 when individuals west and south of the Hudson River, New York were described as a different species; the Appalachian cottontail. This split has since been challenged and now most authorities have reverted to calling all populations the New England cottontail. There are, however, some biological differences that the southern populations possess that probably warrant some form of recognition from those north of the Hudson. But, for now, it is probably best to refer to this rabbit as the New England cottontail "complex". For the purpose of this discussion (and in the spirit of regional allegiance), I will refer to our southern populations as the Appalachian cottontail.

After all, I don't think the rabbit will mind.

The range of the Appalachian cottontail has a somewhat discontinuous distribution along the Appalachian Mountains and associated plateau and hill country from southern New York to northern portions of Georgia and Alabama. The occurrence in Alabama marks the southwestern most extent of the cottontail's range. A. H. Howell first reported the species from the state in a 1921 publication. This account was based on three specimens collected in 1912 to 1914 with one rabbit each from "Erin and Dean, at the foot of the Talladega Mountains, in Clay County, and Ardell, in the rough hill country along Sipsey Fork, Cullman County." Accounts of additional specimens from

Alabama were not recorded until 1979 when two specimens collected from Lawrence County in the Black Warrior Wildlife Management Area were submitted to the U.S. National Museum of Natural History. Also, there are anecdotal reports of specimens taken from the area of the Choccolocco Wildlife Management Area. To date, however, this nears the extent of what is known of the Appalachian cottontail in Alabama.

Distinguishing Appalachian cottontails from eastern cottontails based on external appearances alone are quite difficult, even presenting

problems for the most experienced of mammalogists and rabbit hunters. In general, the Appalachian cottontail differs in appearance from the eastern cottontail in its smaller size; short, rounded ears that are black edged and heavily furred inside; black patch between the ears; never having a white blaze or spot



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on the forehead; pinkish buff coat that is overlain with a black wash (a penciled effect). The definitive method of distinguishing among the two cottontails is to examine skull characteristics.

In the field, one can help minimize the possibility of confusing the two cottontails by focusing search efforts in particular habitats. While there is some overlap of habitat use, Appalachian cottontails are most associated with a dense cover of heaths such as blueberries or sparkleberry (*Vaccinium*), mountain laurel (*Kalmia*), and Rhododendron within dense forests of high elevations. In his publication on the mammals of Alabama, A. H. Howell described the general habitat for this species as "chiefly mountain slopes and rough foothill country."

It was once thought that the Appalachian cottontail was quite rare throughout its range. After several states began implementing hunter surveys, valuable information has been compiled on the species' distribution and status within areas where information was absent. We are also learning that the species is more common in some areas within its range. The fact that so little is known about the species in Alabama is most likely an artifact of its: 1) elusive behavior (highly nocturnal and shy); 2) occupancy of rough, brushy and mountainous habitat; 3) close similarity to the eastern cottontail hence, misidentifications; 4) spotty distribution.

A project is now underway in Alabama to help determine the Appalachian cottontail's status and distribution by utilizing hunter involvement and participation. The success of this project is primarily dependent upon specimen submittal from rabbit hunts into areas where the cottontail is known to occur as well as into areas that currently support suitable habitat. In the eastern part of the state, surveys are primarily focused in mountainous and hilly areas of Calhoun, Cleburne, Clay, and Talladega Counties (especially along the Talladega Mountains and Choccolocco Mountain and Wildlife Management Area). In north-central Alabama, efforts are focused in Lawrence, Winston, and Cullman Counties (particularly in the Black Warrior WMA and Bankhead National Forest). Interestingly, the Appalachian cottontail has never been reported from the plateau and mountainous region of the northeast corner of the state despite the abundance of seemingly suitable habitat. Promising results should come from this area. Hunter surveys should be focused in the Skyline area of Jackson County as well as along plateau escarpments and within incised ravines in Dekalb and Cherokee Counties.

Since rabbit is a delicacy and much effort is often expended in a hunt, it may be difficult for an individual to part from a kill. While it is desirable to have an intact carcass (including the skin), it is not as critical as receiving the head. Again, skull examination is a definitive method for distinguishing between eastern cottontails and Appalachian cottontails.

In addition to receiving specimens (or heads), the success of this survey is dependent upon accurate transcription of information. The most important aspect of data recording for this project is precise locality information of rabbits collected (in detail so that someone could read your directions and walk to the spot of the kill), date of collection, a general description of the habitat (for example, woodland/field edge; jumped from mountain laurel scrub near creek; etc.), and your name and contact information.

Your participation in this study will provide valuable information that will help us determine the status and **distribution** of one of Alabama's secretive and elusive animals. If you are interested or know of someone that may have an interest in participating in this survey, please contact Barry Hart of the Alabama Natural Heritage ProgramSM at (334) 834-4519, ext. 24 or send an e-mail message to bhartl@zebra.net. (Mailing address is: Huntingdon College, Massey Hall, 1500 East Fairview Avenue, Montgomery, AL 36106)

References

Chapman, J. A., K. L. Cramer, N. J. Dippnaar, T. J. Robinson. 1992. Systematics and biogeography of the New England cottontail, *Sylvilagus transitionalis* (Bangs 1895), with the description of a new species from the Appalachian Mountains. *Proceedings Biological Society Washington*. 105: 841-866.

Howell, A. H. 1921. A biological survey of Alabama. I. Physiography and life zones. II. The mammals. *North American Fauna* No. 45. USDA Bureau of Biological survey, pp. 1-88.

AWF & AFC TEAM UP FOR SEEDLING GIVE AWAY



Approximately 90,000 tree seedlings beneficial to wildlife will be given away in late February by the Alabama Wildlife Federation (AWF) and the Alabama Forestry Commission (AFC). Mixed packages of 25 seedlings containing sawtooth oak, water oak, white mulberry, persimmon, Allegheny chinkapin, and other species that provide soft or hard mast beneficial to a variety of wildlife, will be given away through AFC personnel and AWF volunteers across the state. The seedlings have been provided by the AFC which grows the seedlings at the Hopper Nursery in Cullman, Alabama.

To reserve your pack of 25 wildlife seedlings, contact the Alabama Wildlife Federation in Montgomery at 334-832-9453 and provide your name, address, phone number and county where you live. In mid-February, we will notify you by mail of the date, time, and location for picking up the seedlings in your county. Supplies are limited in each county, so secure your pack early.