

## Southern Appalachian Creature Feature Podcasts

### Bat roosts

Greetings and welcome to the Southern Appalachian Creature Feature.

Biologists are concerned about Rafinesque's big-eared bats because of declining populations. They tend to forsake the caves and mines we often think of as bat roosts, preferring instead abandoned buildings and tree cavities, especially across the southern portion of their range, which covers the Southeastern United States. One of the issues thought to be contributing to the decline is the loss of abandoned buildings and tree cavities. One approach to this problem has been to construct artificial roosts for the bats.

Artificial roosts for Rafinesque's big-eared bats haven't been used extensively in the Southern Appalachians, however the North Carolina Wildlife Resources Commission is trying them out in Haywood County. Next to the site of a recently destroyed abandoned house previously used by the bats, the biologists erected two artificial roosts. One is a proven design by Bat Conservation International. Though proven, the cost of materials, labor, and difficulty of construction in remote areas can be prohibitive. To address those problems, the biologists created their own design, using simply a length of culvert to simulate a hollow tree, capped, wrapped with insulation, and lined with carpet.

The two structures were placed next to each other near the old home site. Although they haven't yet been used by bats, biologists did find Rafinesque's bats roosting in a pair of nearby trees, and still hope that the artificial structures will be used once the bats become more accustomed to them. Biologists placed data recorders in both the natural and artificial cavities to log temperature and humidity, and will use the information to improve the design of their artificial structures.

For WNCW and the U.S. Fish & Wildlife Service, this is Gary Peeples.