



Is There a Jewel in Your TREASURE Forest?

by Robert W. Hastings,
Alabama Natural Heritage Program

Male red-cockaded woodpecker nestling.

Alabama landowners who take pride in their certification as TREASURE Forest stewards may also take pride in possibly providing ideal habitat for one of nature's avian jewels, the red-cockaded woodpecker (*Picoides borealis*). This small, black and white bird endemic to the open, mature, and old growth pine forests of the southeastern United States is a special part of our natural heritage. Forestlands managed according to TREASURE Forest principles may also enhance the survival and population of this rare woodpecker, as well as other desirable wildlife.

The nesting and foraging habitat of the red-cockaded woodpecker (RCW) is distinctive, and part of the reason for its population decline. It is the only North American woodpecker that creates nest cavities in living pine trees, especially longleaf pine but also loblolly, shortleaf, slash, and pond pine. Nesting and roosting cavities are excavated in mature pines large enough to have sufficient

resin-free heartwood for the cavity to be sap-free, generally in trees over 80 years old. The flow of sap around the entrance hole is encouraged by removing the bark and by "resin wells" chipped through the bark. The resulting flow of sap around the entrance helps protect the nest from predators such as rat snakes, and also gives the RCW cavity a distinctive candle-like appearance. Forests where all mature pines are removed will not provide suitable nesting habitat for red-cockaded woodpeckers.

The birds do not migrate, but are territorial, living in groups of two to six birds, including a breeding pair and several male offspring from previous years, which help care for new eggs and young. Each group uses an area of mature pine forest 75-200 acres in size for feeding, and each individual roosts in a separate tree cavity. Their foods consist mostly of spiders and insects, including beetles, ants, roaches, and other insects that occur in or on pine trees. The foraging area must be open, with scattered mature

pinus and little or no midstory vegetation. Thus, their habitat must include several large mature pine trees, and be open park-like or savanna. Where hardwood trees or other midstory vegetation is not controlled by fire or other methods, an area will be abandoned by the woodpeckers.

Due to loss of suitable habitat, the red-cockaded woodpecker has experienced a drastic decline. This prompted the listing of the species as endangered in 1970, entitling it to federal protection under the Endangered Species Act (ESA). Its habitat has been reduced to about 3% of its former size due to intensive timber harvesting, agriculture, development, and sustained fire suppression over the past two centuries. This has resulted in a decline in numbers of RCWs of approximately 99%.

Some landowners consider the presence of this "jewel" undesirable because of its endangered species status and the land management restrictions that it may require. However, with a few relatively

minor compromises, the landowner can continue to manage forest lands using most types of timber management activities.

In order to encourage landowners to protect habitat for this endangered species, Alabama and other states, in cooperation with the US Fish and Wildlife Service, have implemented programs called "Safe Harbors." Under a Safe Harbor agreement, the landowner agrees to manage his land in such a way as to ensure the survival and enhancement of RCW populations, but will not incur any new restrictions if the population expands beyond the baseline level existing when the agreement was signed. That baseline level may even be zero if potential RCW habitat is present but RCWs do not actually occupy the land.

These agreements have been very popular with forest landowners in other states, and are considered a "win-win" program. The RCW population is protected while the rights of the landowner are also respected. The adjacent table provides information regarding the current success of the program. The Alabama program has only recently been approved, so data are not yet available regarding its success.

For additional information regarding the Safe Harbor agreement or to enroll property in the program, contact:

Photo by Derrick Hamrick



Red-cockaded woodpecker bringing food to nest.

Alabama Natural Heritage Program
 Huntingdon College, Cloverdale Campus
 1500 East Fairview Avenue
 Montgomery, Alabama 36106
 Phone (334) 833-4064
 or

Alabama Department of Conservation and
 Natural Resources
 Division of Wildlife & Freshwater Fisheries
 64 North Union Street, Suite 584
 Montgomery, AL 36104
 Phone (334) 242-3469. 🏠

Photo by Bob Hooper



Active RCW cavity.
 Fall 2006



Photo by Stan Stewart

Pine forest providing ideal foraging habitat for RCW with pine basal area of 60 square foot per acre.

State	Date Signed	Baseline RCWs (# of Active Clusters)	# of Landowners	Acres Enrolled	Safe Harbor RCWs (# of Active Clusters Above Baseline)
North Carolina	1995	56	97	51,582	8
Texas	1998	31	23	15,232	4
South Carolina	1998	278	102	396,980	17
Georgia	2000	103	18	129,906	22
Virginia	2000	5	2	2,986	0
Louisiana	2005	13	3	14,192	0
Totals		486	245	610,878	51

Red-cockaded woodpecker Safe Harbor data (as of January 2005)