

A Landowner's Perspective: The True Value of Your Forest Habitat

By Joseph Scanlon, M.D.

Few of us TREASURE Forest owners can really appreciate the ecological value of our forests. It is easy to appreciate the many forms of terrestrial animals that benefit from the forest cover, but how about the aquatic? We are beginning to understand why it is important to preserve the wetlands, the riparian borders of our streams, and why we should not allow livestock to wade unrestrained into the creeks that pass through our property.

How many aquatic animals die when the creeks are polluted by soils? In many cases it is due to sedimentation from the runoff by the soil itself, rather than pesticides, that cause the greatest destruction to streams and their biota. Most planned alterations of streams and the filling of wetlands can spell disaster for the diverse aquatic life that inhabits them. Even the federal and state fish and wildlife agencies have become involved in the restoration of some of our streams that have previously been degraded by human interventions.

We are extremely blessed in Alabama. There are more than 77,000 miles of natural freshwater streams, of which 46,970 miles are permanent and 30,030 are intermittent with flows during the wetter seasons in Alabama . . . much of it running through heavily forested lands. We have more aquatic species of freshwater fish, mussels, snails, and crayfish than any other state in the Union. As a result, many species are threatened by alterations in our wetlands and on stream banks without proper buffer zones.

I have developed a considerable interest in our forests since my wife, Maurite, has become part-owner of a "TREASURE Forest." Additionally, I have had a lifelong interest in fish – not the kind you eat, but rather the kind you might admire for their beauty and fascinating behaviors. Most Alabamians don't realize that there are more than 306 species of native freshwater fishes and 13 nonnative species in this state . . . some found in no other

state! We also have more species of mussels than any other state, and the result of all this is that we also have the greatest number of endangered species.

For the past several years I have been studying one of these fishes. Called the "stippled studfish," it is a top-water minnow that is found mostly in the Tallapoosa drainage system in Alabama. Two other closely-related fish are the "southern studfish" which is found in the Coosa system, and the "northern studfish" that lives in the Tennessee drainage. No other state has these three studfish.

Although the stippled studfish (*Fundulus bifax*) was previously found in two Tallapoosa locations in Georgia, it has not been collected there since 1991. A study of the stream map of Alabama easily shows that the stippled studfish is found only in areas that remain heavily forested, perhaps explaining why it has been collected from the Tallapoosa in Alabama. A good example of this is Hillabee Creek and its tributaries which lie south of the Talladega National Forest. This is a relatively unpopulated area with very minimal agriculture and lots of trees. It does appear that the stippled studfish requires trees and high quality water if it is to continue to exist in Alabama.

Alabama forests are priceless treasures that ensure a healthy environment, for us, and all the other creatures living in the forest and streams that flow through them. I hope that this short article will help shed a new light on *your* TREASURE! 🌲

Editor's Note: Cedar Oaks Ranch, located in Bullock County, is owned by best friends Jane James and Maurite Scanlon, who is the wife of Dr. Scanlon. This TREASURE Forest, a former Helene Mosley Memorial Award winner, was featured in the Summer 2000 issue of Alabama's TREASURED Forests magazine. Special thanks to Joe Addison with the Alabama Department of Conservation and Natural Resources for his technical editing.

