

Southeast Amphibian Research and Monitoring Initiative



Worldwide recognition of declining amphibian species and populations has led the Department of the Interior (DOI) to establish the National Amphibian Research and Monitoring Initiative (ARMI). This program of amphibian monitoring, research and conservation began in 2000. The U.S. Geological Survey (USGS), the science and research bureau for DOI, was given lead responsibility for planning and organizing the program in cooperation with the National Park Service, Fish and Wildlife Service, and Bureau of Land Management.

Why Study Amphibians?

They are environmental indicators-their moist, permeable skins are sensitive to environmental changes and toxins.

They have a biphasic life cycle - many species need aquatic habitats for reproduction and larval development, and terrestrial habitats for growth and shelter.

Healthy amphibian populations serve as indicators of good habitat quality for other wetland and terrestrial species.



The southeastern US has 58 species of frogs.



The southeastern US has 86 species of salamanders.

The Southeastern Initiative

The objectives of Southeast ARMI are to determine the status and trends of amphibian populations on DOI lands in the southeastern United States and U.S. Caribbean, and to provide information on environmental relationships and population fluctuations and declines.

The southeastern states far exceed any other region of the nation in the diversity and abundance of amphibians. With more than 140 species of amphibians, it has well over half of all the species known from the U.S., and large areas such as the Okefenokee Swamp in Georgia may have literally millions of amphibians per square mile. Habitat diversity is equally great, ranging from the high mountain peaks of the Great Smoky Mountains, to the humid forested lowlands of the coastal plain, to the vast marshes of south Florida.

Amphibian Declines

There are credible reports of declines or disappearances from many regions and habitat types. Habitat loss has been, and continues to be, the most significant cause of decline. Other suggested causes for declines:

- environmental contaminants, pollution, acid precipitation
- introduction of exotic predators
- disease agents and parasites
- effects of increased ultraviolet radiation

Current Southeast ARMI Monitoring Sites:

St. Marks National Wildlife Refuge, FL Lower Suwannee/Cedar Keys National Wildlife Refuge, FL Harris Neck National Wildlife Refuge, GA Savannah National Wildlife Refuge, SC & GA

Past Southeast ARMI Monitoring Sites:

Okefenokee National Wildlife Refuge, GA & FL Great Smoky Mountains National Park, NC & TN