



## Carolina Gopher Frog Conservation

From the pond to the hatchery tanks and back to the pond. In simple terms, this describes the Carolina Gopher Frog head-start program on the Francis Marion National Forest. But there is far more to it than that.

The Carolina Gopher Frog is currently listed as endangered by the state of South Carolina and is under consideration by the U.S. Fish and Wildlife Service for federal protection under the Endangered Species Act. The natural range of the Carolina Gopher Frog includes the entire coastal plain of

South Carolina. Recent estimates suggest there are less than 10,000 individuals remaining in the wild, with habitat loss identified as the primary contributor for declining numbers. In 2019 the Francis Marion National Forest partnered with the Bears Bluff National Fish Hatchery and conservation efforts are in full swing.

A head-start program involves capturing at-risk species in the wild, raising them in captivity, and then releasing them back to the location they were captured. This process is designed so that the most vulnerable stages of the frog's life cycle, from egg to tadpole to juvenile frog, will occur in the controlled environment of the hatchery. Once metamorphosis is complete, the juvenile frogs are released back into their natural environment.

It all begins in a handful of seasonal, isolated wetlands on the Francis Marion National Forest. The ideal breeding pond has an open canopy, void of predatory fish, isolated from inflow and outflow, and the surrounding vegetation is maintained by frequent fire. The frog eggs are collected from these areas, brought to the hatchery, and placed in one of 15 large tanks. Each 410-gallon tank will be home to 50 Carolina Gopher Frog tadpoles as they complete the metamorphosis process over the next 3-5 months.

Upon the completion of their metamorphosis, the juvenile frogs are placed in individual containers and transported in large coolers for a staged release back in the pond ecosystem the eggs were harvested from. In 2019, 243 Carolina Gopher Frogs were released, followed by 483 in 2021. Unfortunately, conditions were too dry in 2020, and there weren't any eggs to harvest. By increasing their holding capacity by 50%, the Bears Bluff National Fish Hatchery personnel are hoping to provide a temporary home for 750 tadpoles in 2022. If environmental conditions allow, those 750 tadpoles, turned juvenile frogs, will be released on the Francis Marion National Forest.

