



USDA Forest Service - Southern Region
National Forests in Mississippi
De Soto Ranger District
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First New Breeding Population of Mississippi Gopher Frogs Found in 25 Years

The gopher frog was thought to be extinct west of the Mobile River in Alabama until a new population was discovered in south Mississippi, on the De Soto Ranger District. The District began working with the U.S. Fish and Wildlife Service in 1988 to protect this last remaining population of the gopher frog in Mississippi. This geographically distinct population segment was listed as Endangered under the Endangered Species Act in 2002. The now named, Mississippi Dusky Gopher Frog (*Rano capito sevosa*) is considered the most imperiled amphibian in the Southeast.



In February 2013, three gopher frogs were heard calling and three egg masses were discovered at Pony Ranch Pond, which lies nearly one mile away and across a drainage from the location of the last remaining wild population of gopher frogs, Glen's Pond. No gopher frogs have ever been heard nor gopher frog egg masses ever found at Pony Ranch Pond. This is the first naturally reproducing population of gopher frogs known other than Glen's Pond, which was discovered in 1988. These gopher

frogs made it there in their own, with no translocations occurring. One female was caught leaving Pony Ranch Pond and was identified as being a natural metamorph from Glen's Pond 2008 breeding event.

The Mississippi gopher frog's habitat includes both upland, sandy, areas covered with longleaf pine forest; and isolated, temporary, wetland breeding sites within the forested landscape. Adult frogs spend most of their lives underground in forests with an open canopy and abundant ground cover. They use active and abandoned gopher tortoise burrows, abandoned mammal burrows and holes in and under old stumps as their underground retreats. Mississippi gopher frog breeding sites are isolated ponds that dry out completely at certain times of the year. Frequent fires are necessary to maintain the open canopy and ground cover vegetation of the aquatic and terrestrial habitats of the Mississippi gopher frog.



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The De Soto Ranger District has performed much longleaf restoration and active management in the areas surrounding Pony Ranch Pond. This was the first area targeted for timber



treatments following the District's Healthy Forest Restoration Act decision titled "Ecosystem Restoration for Gopher Tortoise and Red Cockaded Woodpecker Habitat" which was signed in 2008. In addition to the longleaf restoration and thinnings, the District has regularly performed prescribe burns to the area. In 2010, District personnel used heavy equipment to clear trees and brush from the pond basin and installed a partial berm around the pond. This increased the hydroperiod of the pond and allowed for more herbaceous vegetation to colonize the pond.

The De Soto Ranger District has performed timber treatments around three other potential gopher frog ponds in recent years. All the surrounding upland habitat surrounding active and potential gopher frog ponds are actively managed through prescribed fire. This reduces the buildup of hazardous fuels on the forest floor and helps maintain the longleaf ecosystem herbaceous understory desired by the gopher frog.

Timber prescription planning for longleaf restoration and thinnings has already begun around two other potential gopher frog ponds. These ponds are geographically isolated from other ponds and are being considered for future translocation sites. All of the managed gopher frog ponds, other than Glen's Pond, have been manipulated and improved by the Forest Service using a variety of equipment to achieve their desired future condition. This is to increase the hydroperiod, allow more sunlight to reach the pond surface, and increase the amount of herbaceous vegetation found in and around the pond.

About one minute in to the attached recording, you can hear them calling. It sounds like an old man snoring.



**Gopher Frogs Calling
Pony Ranch Pond**

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