

# SFI Biodiversity Species Fact Sheet

## Bog Turtle (*Glyptemys muhlenbergii*)

Globally Critically Imperiled/Vulnerable Animal Species; State Rank: S2 (imperiled) Global Rank: G3 (vulnerable)

### Identification

Bog turtles are small brownish-black turtles, about 3 – 4.5 inches long, with prominent yellow to orange blotches or spots on both sides of their head. The spots are located just above the tympanum, or ear, of the turtle. The tympanum is located just behind the eye and looks like a circle. The blotches above the tympanum, just behind the eye are a key identifying feature. There are also specks of yellow-orange color on the limbs, neck, and head. The underside of the bog turtle's shell can also be blotchy on the back portion towards the tail. Unlike spotted turtles, there are no spots on the shell, and spotted turtles don't have blotches on their head. Painted turtles have streaky rather than blotchy color patches on the head, and these streaks are not limited to blotches behind the eye.



### Biology-Natural History

These turtles are long-lived, up to 60 years in the wild, and emerge from hibernation in late March or April. In Pennsylvania, nesting occurs in June to early July. Female turtles will typically make a nest on bunch grasses that form hummocks, or a small mound above the ground. Each nest will have 3 to 5 eggs laid in May – June. Turtles hatch in mid-August or early September. These turtles are omnivorous, feeding on insects, slugs, worms, salamanders, berries, skunk cabbage, and carrion. In mid-September, turtles will move into upland habitat that is denser, and hibernate under the roots of trees, shrubs, rock walls, or abandoned burrows.



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### Distribution and Habitat

There are two distinct populations in North America. The endangered northern population stretches from Maryland to Vermont. Two hundred and fifty miles to the south is the southern population, which, while not endangered is protected to prevent northern turtles from being collected and sold as southern turtles. Bog Turtles are specialists and depend on early successional groundwater or spring-fed fen wetlands with mucky soils. Bog Turtles are semi-aquatic, and use both the land and water for foraging, nesting, basking, hibernating, or sheltering. Bog Turtles favor low growing grasses and sedges with lots of light that are interspersed with networks of standing or slow-moving water. This allows turtles to thermoregulate by cooling themselves in water or mud and warming themselves in the sunlight.



### Conservation Concerns

Habitat loss and fragmentation through development and road building are key factors in the decline of this species. In-filling, or encroachment of early successional wetlands by trees, taller shrubs, or invasives also results in loss of habitat. Historically, turtles would relocate to emergent or early wetlands as natural succession occurred and trees encroached; but roads and development prevent this natural movement. Water pollution from fertilizers, herbicides, road salts and changes in pH degrade habitat. Lastly, collecting wild turtles for the pet trade has also reduced populations.

### Management Practices

Fines up to \$5,000 with possible jail time can be levied for illegal collection and possession of this species. Anyone who is aware of illegal turtle collection, or knows of wetlands with Bog Turtles should contact the DCNR Bureau of Forestry at 717-787-3444. Management of existing wetlands includes maintaining water quality and preventing shading from trees or invasives. Improving habitat connectivity through public private partnerships is also critical.