



**S T R A U G H A N**  
**E N V I R O N M E N T A L**  
**S E R V I C E S , I N C .**

# Rare, Threatened, and Endangered Species Survey – Bog Turtles US Route 301 (Delaware)

**Location:** New Castle County, Delaware

**Client:** Delaware Department of Transportation

**Description:** The Delaware Department of Transportation (DelDOT) is proposing improvements to US Route 301 from the Maryland state line north to the C&D Canal in New Castle County, Delaware. Straughan Environmental Services, Inc. (SES) conducted a bog turtle survey in the vicinity of the proposed work. The bog turtle (*Clemmys muhlenbergii*), a federally listed threatened and Delaware listed endangered species, is an elusive small turtle that inhabits spring-fed emergent and scrub-shrub wetlands with deep mucky soils in the Mid-Atlantic region.

SES conducted a field survey to identify bog turtles by wading, mucking, and crawling through potential habitat to spot basking turtles. If no turtles were found on the initial survey, the team lifted vegetation and probed deep into tunnels to find turtles.

SES scientists are qualified in Delaware to support Phase 2 Surveys. This qualification requires demonstrated experience conducting visual surveys for reptiles and amphibians and performing wetland evaluations.

This survey helped DelDOT to continue with its proposed road improvements, while avoiding impacts to potential populations of an RTE species.