

DRAFT – Eastern Indigo Snake -- DRAFT

Effects Determination Guidance for Endangered & Threatened Species (EDGES)

South Georgia Coastal Plain Counties

Species Covered by This EDGES: Eastern indigo snake (*Drymarchon couperi*) - Threatened

The Eastern indigo snake (EIS) in Georgia is closely associated with the gopher tortoise (*Gopherus polyphemus*), a reptile that excavates extensive underground burrows that provide the snake shelter from winter cold and summer desiccation. Gopher tortoises are a characteristic species of the longleaf pine and wiregrass community, which includes sandhills, dry flatwoods, and turkey oak scrub. Historically, this community was found in open-canopied forest that allowed abundant sunlight penetration and conditions favorable for a rich growth of herbaceous vegetation. Little of this habitat still exists; many tortoises have been forced into artificial habitats, such as roadsides and old fields that retain the three key habitat



requirements: sandy soil for burrowing, sunlight, and abundant herbaceous vegetation.

During the warmer months, EIS during the day forage on the edge of wetlands where frogs and other snakes typically are abundant. In Georgia, adult EIS may range 1-4 mi from the overwintering sandhill, although they typically return to the same sandhills in winter. Breeding occurs November - April, and females often place eggs in the moist sand of tortoise burrows. Threats to EIS include loss and fragmentation of sandhill habitats that support tortoises, removal of prescribed fire, which maintains suitable understory habitat, and declining gopher tortoise populations.

This EDGES covers maintenance of existing structures and new development, including subdivisions, commercial development, roads, water supply infrastructure, and sewer mains, pipe and powerlines, stream restoration and stabilization (including mitigation banks) and similar projects. It does not cover new drinking water reservoirs, airports, or similar large-impact projects.

Endangered Species Act Consultation Checklist:

Applicant:

1. IPAC indicates EIS may occur in the project area.
 - a. No.....No effect. Provide IPaC information to the Savannah District with application/PCN.
 - b. Yes.....Go to #2.

2. The Fish and Wildlife Service’s Georgia Field Office (FWS-GA) provided documentation stating project impacts to EIS were likely to be minimal (FWS-GA signed letter or sticker, T&E survey where FWS-GA provided concurrence with negative findings, or similar documentation).
 - a. No.....Provide completed EDGES Applicant Coordination Slip, with supporting documentation, and a soil map with the project site clearly marked, to the Savannah District with 404 application/PCN.
 - b. Yes.....Provide FWS-GA project review documentation and/or survey data to the Savannah District with application/PCN.

Savannah District:

3. A soil map, with the site clearly marked (provided by applicant), shows suitable soils for gopher tortoise burrows on site (see list of suitable soils list below).
 - a. No.....NLAA. Consultation complete. FWS-GA concurrence not needed.
 - b. Yes.....Go to #4.

4. There are gopher tortoise burrows on site.
 - a. No.....NLAA. Consultation complete. Further review from FWS-GA not needed.
 - b. Yes or Don't Know.....Go to #5.

5. The area has an open tree canopy AND abundant forb groundcover (see photos below) OR is on a right-of-way, fence row, orchard edge, golf course, old field, or pastureland.
 - a. NoNLAA. Consultation complete. FWS concurrence is needed, in writing, for JPNs, but is assumed for other Savannah District actions if FWS-GA does not respond.
 - b. Yes.....May affect. Consult with FWS-GA



Best Gopher Tortoise Soils	Moderate Gopher Tortoise Soils	Marginal Gopher Tortoise Soils
Bonifay	Bonneau	Ailey
Centenary	Fuquay	Albany
Foxworth	Hurricane	Cowarts
Lakeland	Luch	Norfolk
Lucknow	Mandarin	Orangeburg
Troup	Meldrim	Tifton
Valdosta	Ridgewood	Vaucluse
	Stilson	
	Uchee	