

The proposed project is not likely to have an effect on the red-cockaded woodpecker.

### **8.5 Florida hartwrightia**

This plant flowers from September to November. Focused surveys for this species will be conducted at that time.

### **8.6 Flooplain tickseed**

This plant flowers from August to November. Suitable habitat for this species may not occur in the project review area. If suitable habitat is identified, focused surveys for this species will be conducted during the flowering period.

### **8.7 Purple honeycomb-head**

This plant flowers from August to October. Habitat for this species includes wet savannas and pitcherplant bogs. Focused surveys for this species will be conducted at that time.

### **8.8 Eastern indigo snake**

The soil types present at the project site indicate that suitable habitat may be present for the eastern indigo snake and the gopher tortoise. Surveys for indigo snakes overwintering in gopher tortoise burrows were conducted following visual encounter survey methods that are effective for this species in the southern Georgia portion of its range (Stevenson et al. 2003, Bauder et al. 2017). Specifically, all active/inactive tortoise burrows (n=118) were visited on three dates between December 2018 - March 2019 in an effort to locate basking snakes and shed skins; burrows with fresh snake tracks were examined with a tortoise burrow camera (to look for snakes inside burrows). Additionally, all active/inactive tortoise burrows were scoped with a burrow camera (in late March or April/May) in an effort to document burrow commensals, including indigo snakes.

No eastern indigo snakes or eastern indigo snake shed skins were found during visual encounter surveys, and no fresh snake tracks were located at burrows. A single pygmy rattlesnake (*Sistrurus miliarius*), the shed skin of an eastern coachwhip (*Coluber flagellum*) and two observations of gopher frogs (*Rana capito*) were observed during the surveys.

In addition to the above visual encounter surveys, all active/inactive gopher tortoise burrows on-site were visited on 2-4 April 2019. As part of a tortoise survey, most subadult-and-adult-sized burrows were scoped with a tortoise burrow camera at this time (see section 8.9 gopher tortoise below). No indigo snakes or shed skins were found during this effort. A map of indigo snake survey areas and gopher tortoise burrow locations is provided in Appendix D.

The indigo snake is an extremely vagile species that often moves between upland and wetland habitats in search of food (Stevenson et al. 2010, Breininger et al. 2011). Individual snakes studied in southern Georgia had large home ranges, for some large males up to 3,500 acres in size (Hyslop et al. 2014). A lack of indigo snake observations during focused surveys doesn't demonstrate that the species is never present or transient on the site (even if the species doesn't winter on-site it is possible that snakes from adjacent tracts, if present that is, may occasionally visit the site to forage. However, there are no recent credible sightings known for the property. The proposed project is not likely to have an effect on the eastern indigo snake.