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 Gopher Tortoise account below). No indigo snakes or shed skins were found during this effort.

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 Twin Pines 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 Twins Pines site to forage). However, there are no recent credible sightings known for the property (i.e., from TTL and other staff who have spent considerable field time on-site).

STATE-LISTED SPECIES

Gopher Tortoise (Gopherus polyphemus)

The gopher tortoise is a federal candidate for listing and is state-listed as Threatened by the Georgia Department of Natural Resources.

Gopher tortoise survey methods closely followed those recommended by Smith et al. (2009). From a review of soil maps and vegetation, combined with initial field reconnaissance, it became apparent that, on-site, gopher tortoise burrows were limited to habitats underlain by the soil type classified as Mandarin Fine Sand (MAA). Mandarin soils are fine to loamy sands and are somewhat poorly-drained; seasonally, the water table may be within 1.5-2 m of ground surface (we observed water ca. 1.5 - 2 m below ground surface in most burrows located at site Loncala-A during January, 2019). Mandarin is classified as a suitable soil, but not as a preferred soil, for the tortoise (U.S. Department of Agriculture Natural Resources Conservation Service, 2013).

To locate burrows, we walked line transects, with observers spaced ca. 5 m apart, through all areas of potential habitat. Except for eight burrows on the Adirondack tract that we first located in March 2019, we flagged and collected geospatial data for all active (i.e., intact burrows with fresh tortoise tracks) and inactive (i.e., intact burrows, but lacking fresh tracks) tortoise burrows on the Twin