Group	Name	Status
Birds	Red-cockaded Woodpecker (Picoides borealis)	Endangered

## 4.2 Gopher Tortoise

The Gopher tortoise is a large brownish-gray land turtle. The gopher tortoise grows slowly, with female shells (carapace) reaching at least nine inches in length while male carapaces can be slightly smaller. The gopher tortoise has large flipper-like, heavily scaled front legs and strong toenails for digging while the back legs are muscular. In North America, there are four extant species (desert tortoise, Texas tortoise, Bolson tortoise and the gopher tortoise), all occurring in deep sand habitats.

The largest populations of gopher tortoises occur in deep, dry sandy soils with a moderately open tree canopy such as the longleaf pine-scrub oak-wiregrass sand hills that are frequently burned. This habitat is ideal for digging deep burrows and allows sufficient sunlight to reach the ground to provide thermo-regulation necessary for nesting and incubation of the eggs. This open canopy also allows abundant herbaceous vegetation necessary for their preferred herbivorous diet.

Clear cuts that are created by timber harvesting activities may support a small population for a few years, but as the canopy closes, the tortoises move toward areas with a more open canopy. Dense hardwood and unburned pine/hardwood areas are not suitable habitat. While agricultural fields provide support for a few individuals, it is considered marginal habitat.

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 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, TTL walked line transects, with observers spaced approximately 5 meters apart, through all areas of potential habitat. TTL 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 Chip Mill property.

TTL identified 31 active and inactive gopher tortoise burrows in close proximity to the railroad spur right-of-way as shown on Figure 6. Site photographs are provided in Appendix A.