Pines site during the summer-fall of 2018 (for a grand total of 118 active/inactive burrows) (Figures 10 and 11).

On the Twin Pines site, the sandy, well-drained environments that support gopher tortoises have historically been site-prepped and bedded and are now in planted pine, usually slash pine. Tortoises are not especially common or widespread on Twin Pines site, occurring only in 4-5 fairly small and discrete areas of sandy, open-canopied plantation habitat; individual tortoise colonies support ca. 10-15 adult tortoises, or less.

On 2-4 April 2019, we revisited the 118 burrows and (except for 17 burrows that were now abandoned) we measured each burrow with calipers (50 cm inside the burrow entrance); burrow width is related to tortoise carapace length and thus one can estimate the size of the tortoise occupying a particular burrow from its width (Martin and Layne 1987). We classified gopher tortoise burrow widths to size class as follows: juvenile burrows are 0-7.85 cm in width; subadult burrows 7.86-25.7 cm wide; adult burrows are 25.8+ cm wide (these widths correspond to carapace lengths of 0-12 cm, 12.1-24 cm, and 24+ cm, respectively.

Also on 2-4 April, to obtain an accurate tortoise population estimate for the Twin Pines site we scoped gopher tortoise burrows using a burrow camera system (burrow camera built by Emmett Blankenship, Environmental Management Systems, Inc., Canton, GA) (Figure 12). (Note: 19 burrows that were less than 14 cm in burrow width were not scoped because of their small size; however, they were closely examined using a mirror or flashlight and in doing so we observed tortoises in 5 of these burrows; we scoped all remaining burrows).

With the burrow camera (or using flashlights/mirrors), we observed gopher tortoises in 23 adult-sized burrows, 11 subadult-sized burrows, and in 1 juvenile-sized burrows. For another 4 active adult-sized burrows, 11 active subadult-sized burrows, and 2 active juvenile burrows, we could not determine conclusively whether or not the burrow was in fact occupied by a tortoise.

Four adult gopher frogs and one Florida pinesnake were observed during these surveys. Tortoise survey data is provided in Table 5.