Gopher Tortoise Conservation Area

The federally-threatened gopher tortoise suffers from high predation, doesn't reproduce until age 10 or older, and produces small numbers of offspring, few of which survive to adulthood. Yet the greatest threat to this terrestrial animal is habitat loss.

Gopher tortoises need a lot of room, and although they can survive in several habitats, they thrive in longleaf pine forest habitat. Tortoises feed on the forests' grass-like plants, legumes, and fleshy fruits...they nest and bask in the forests' open sunny areas...and they dig deep burrows in the forests' well-drained, sandy soils, to escape fire, predators, and bad weather.

Longleaf pine forests are rapidly diminishing in fast-growing areas like Mobile County, Alabama, where the human population has soared 94 percent in recent years.

To preserve the tortoise's habitat and hence slow the species' decline, Alabama Department of Transportation (ALDOT) biologists searched for a self-sustaining "conservation area" that would restore and permanently preserve the tortoise's habitat. They found an ideal site on County Road 63 in northwest Mobile County-600 acres of longleaf pine forest with dry, sandy soils, and a relatively small population of resident tortoises which could grow under the right circumstances.

The owner was interested in preserving gopher-tortoise habitat and was willing to sell the land at a reasonable price if he could harvest most of the site's timber, and he agreed to thin the timber to 10-15 trees per acre--optimal habitat for gopher tortoises.
In March 2003, ALDOT, FHWA, and the U.S. Fish and Wildlife Service agreed on the methods of moving the gopher tortoises to the conservation bank. Together, the partners established "success criteria" and developed guidelines on everything from where to place the tortoise traps...to how to do blood-testing (some tortoises have upper respiratory tract disease)...to how to control fire ants (they destroy tortoise eggs) and eradicate invasive cogon grass...to how to thin and burn the site's wetland sections for the tortoises to use as foraging areas and migration corridors during dry months.

During the tree-thinning process, ALDOT biologists used Global Positioning System technology to locate tortoise burrows. Then they scanned the burrows with a telescopic video camera -- a "gopher cam"-- to see if the burrows were occupied. Finally, they marked the burrows with color-coded flags for easy identification. Relocated gopher tortoises are released at unoccupied burrows, which are checked just before the release and temporarily fenced.

The ALDOT estimates the 600-acre site could support one tortoise per 1.5 acre in the upland sections, or approximately 346 tortoises. The first 25 tortoises to be relocated will be fitted with radio collars so their movements can be monitored.

Gopher tortoises aren't the only wildlife species that will benefit from this innovative project. Since the federally-endangered indigo snake and numerous other species share the tortoises' burrows (the burrows maintain a constant temperature year-round), Alabama's conservation bank will permanently protect their habitat as well.

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http://www.fhwa.dot.gov/aldiv/tortoise.htm