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Canaveral National Seashore

308 Julia Street Titusville, FL 32796

321 267-1110 phone 321 264-2906 fax

Canaveral National Seashore Fire Management









Florida scrub jay

Eastern indigo snake

gopher tortoise

tortoise hatchling

Park Implements Prescribed Fire to Improve Habitat for Protected Species

Canaveral National Seashore has a number of federally Threatened and Endangered species. Two of those include the Florida scrub jay which is found only in Florida, and the Eastern indigo snake. Another associated species is the gopher tortoise which is designated a Species of Special Concern. Considered a "keystone species," the tortoise burrows provide refuge for dozens of other animal species. The scrub jay, gopher tortoise, and indigo snake are seriously threatened by loss of habitat caused by human development and fire suppression.

These species live in coastal scrub vegetation which consists of several live oak species and other various shrubs with scattered openings. Scrub jays feed on the live oak acorns, and bury the nuts in the sandy openings. Gopher tortoises dig burrows in the sandy soil providing critical habitat for many species including the indigo snake.

Oak scrub is a fire adapted community that under natural conditions would burn every five to twelve years. However some sections of the park have not burned in 30-50 years. This has eliminated many of the openings and trees have doubled their normal height of 6-8 feet. Overgrown scrub allows blue jays to move into the area and prey on nests. In addition, migrating cooper hawks can hide in the dense vegetation and ambush the scrub jays. In the fall of 1992, 1/3 of the breeding scrub jays in the area were lost to hawks.

On February 21 the park conducted its first prescribed burn (named Scrub Jay 1) to restore openings and reduce the height of the canopy. Two months prior to ignition, mechanical reduction was utilized to remove trees too large to carry the fire. Since the area lies adjacent to Merritt Island Wildlife Refuge, the agencies worked together to conduct the burn. The total area burned was 752 acres.

The project successfully reduced the size of the canopy to less than five feet and created open sandy areas for the tortoises and jays to utilize. Researchers conducting studies on the gopher tortoise recorded numerous burrows after the fire. The park is also conducting a telemetry study with Towson University to determine the survivorship rate of neonate (newly born) gopher tortoises in the area that was burned. At least four families of scrub jays were seen foraging in the area. The park has begun color banding jays to document changes in the jay population.