GEORGIA

# MARINE CORPS LOGISTICS BASE **ALBANY**

## NATURAL RESOURCES PROGRAM OVERVIEW

Marine Corps Logistics Base (MCLB) Albany is in the Upper Coastal Plain of Georgia within the historic range of longleaf pine. A hallmark of MCLB Albany is the juxtaposition of forested lands around its industrial, administrative, and residential areas. Preservation of natural diversity began with base architect Colonel A. E. Dubber, who oriented the chief administrative buildings and installation entrance near a century-old live oak and who preserved many of the residual longleaf pine forests present on MCLB Albany. The installation natural diversity is maintained by active prescribed burning, invasive species control, and longleaf pine and native groundcover restoration programs.

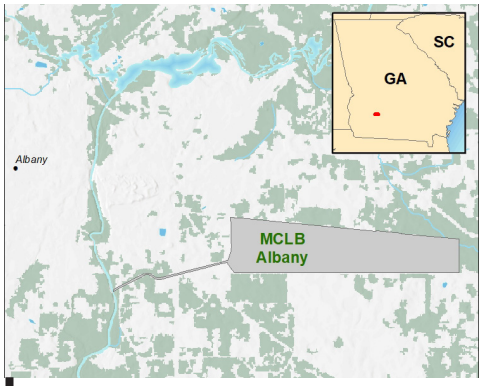
The foundation for managing natural resources on MCLB Albany is the Integrated Natural Resources Management Plan, a long-term strategic plan required by the Sikes Act Improvement Act of 1997. Implementation of this plan not only sustains the installation's natural environment but also the military training environment.

MCLB Albany's mission is to provide facilities, infrastructure, and installation support services for its tenant organizations, including its largest tenants—Marine Corps Logistics Command and Marine Depot Maintenance Command. MCLB Albany's forestlands are predominately used for land navigation training exercises and recreation. The Natural Resources Program's efforts ensure that these areas remain accessible to these activities.


A century-old live oak at the MCLB Albany entrance.

** All photographs are sourced from the USMC unless noted otherwise.*

*Top photos (from left): 88-acre cypress wetland Indian Lake; a lime sink on MCLB Albany; ,blue-gray gnatcatcher on MCLB Albany.*




## FACTS AT A GLANCE

**LAND AREA** | 3,326 ACRES

**WETLANDS** | 185 ACRES

**GLOBALLY RARE ECOSYSTEM**
- Longleaf Pine

**KEY HABITATS**
- Pine Forest
- Cypress Pond
- Forested Wetlands

**FEDERALLY LISTED SPECIES**
- Endangered: 1
- Threatened: 1
- Candidate: 2

**PROGRAMS**
- Forest Management
- Recreational Programs
- Longleaf Pine Restoration
- Invasive Species Management

# PROGRAM HIGHLIGHTS

## FOREST MANAGEMENT

Forest management on MCLB Albany includes timber harvesting/thinning, longleaf pine restoration, and prescribed burning. The installation uses an integrated approach that provides sustained timber yield while protecting and enhancing the forest communities. Converting several of MCLB Albany's slash and loblolly pine stands to re-establish the imperiled longleaf pine ecosystem provides benefits to many species, including a variety of rare, threatened, and endangered plants and animals, and enhances recreational opportunities on base.

Mature longleaf pine stand on MCLB Albany.

Prescribed burning is an integral component of MCLB Albany's forest management program. It is used to reduce forest fuels that could generate a high intensity fire, protecting both natural resources and installation infrastructure. Prescribed fire is generally applied on forest stands every 2–3 years due to the rapid growth of the undergrowth and midstory. The installation has transitioned to a greater percentage of burns now conducted during the growing season to control hardwoods and to encourage flowering and seeding of native groundcover.

Natural Resources staff installing wood duck boxes on Indian Lake.

## INVASIVE SPECIES CONTROL

Over 30 different invasive plants can be found on MCLB Albany. The installation employs a variety of tactics to control invasive species including herbicides, prescribed fire, and mechanical removal, with 300 acres of invasives treated to date.

Over time, the MCLB Albany Natural Resources program found that traditional prescribed burning and wildfire management p ractices that caused ground disturbance were encouraging the spread of invasive species on the installation. Plowed firebreaks and utility rights-of-way were associated with the spread of exotic invasive species such as Japanese climbing fern and popcorn tree. To combat this spread, the installation modified methods of burning to incorporate wet lining and ultimately reduce the need for plowed firebreaks. They also increased the use fires during the growing season to reduce reliance on mechanical and chemical means of hardwood control. By controlling the spread of invasive plants and the growth of woody understories, growing season fires are also reducing catastrophic wildfire risk for the installation.

Wildflowers growing on MCLB Albany.

A green firebreak along a stand that was treated for invasive plants.

## OUTDOOR RECREATION

Hunting, fishing, and wildlife viewing are popular forms of outdoor recreation on MCLB Albany. Hunting is an important component of outdoor recreation on MCLB Albany, and the Natural Resources program has an active program to support hunters. Three ponds and Indian Lake provide fishing opportunities on the installation, including the Buddy Fishing Tournament—an annual fishing rodeo that is open to the public. A 1,200-foot-long wooden boardwalk at Indian Lake, an 88-acre cypress pond, provides wildlife viewing opportunities for waterfowl, neotropical migratory birds, alligators, and other wildlife. Bird watchers have helped identify over 140 species of birds on the installation. By providing natural recreational opportunities on the installation, MCLB Albany promotes public awareness of vital natural resource issues, including management of federally listed wildlife species, and improves the quality of life for DoD personnel.

## Conservation Partnerships

Quail hunting is an integral part of the culture of southwest Georgia. MCLB Albany has partnered with Quail Forever to provide youth quail hunting opportunities on the installation. MCLB Albany provides quail hunting courses and facilities, and Quail Forever provides guides, hunting dogs, firearms, and firearm instructions to expose young hunters to this sport. Quail Forever also provides quail conservation outreach and education to MCLB Albany youth participants.

Male and female bobwhite quail in a field of purple spring violets. (USFWS photo)

# FEDERALLY LISTED SPECIES

### ENDANGERED SPECIES

**Wood Stork**
*Mycteria americana*

### THREATENED SPECIES

**American Alligator**
*Alligator mississippiensis*

### CANDIDATE SPECIES

**Eastern Diamondback Rattlesnake**
*Crotalus adamanteus*

**Gopher Tortoise**
*Gopherus Polyphemus*

Photo credits: American alligator—P. Block, DoD PARC; wood stork—C. Eberly, DoD Partners in Flight;Eastern diamondback rattlesnake—C. Peterson, DoD PARC; gopher tortoise— R. Browning, USFWS.

### WOOD STORK

Wood storks intermittently use wetlands on MCLB Albany for roosting and foraging, particularly during the summer months. Wood storks can be found foraging in the shallow water around Indian Lake, Horseshoe Pond, and in drainage ditches. MCLB Albany is enhancing habitat for wood storks through prescribed fire and removing invasive plants in wetland areas.

### EASTERN DIAMONDBACK RATTLESNAKE

A small population of Eastern diamondback rattlesnakes are found on MCLB Albany. Vehicle mortality is a major concern for this species due to the highly dissected nature of forested stands on MCLB Albany and the large home ranges of this snake. In response, MLCB Albany created road signage, a snake identification pamphlet in conjunction with the Department of Defense Partners in Amphibian and Reptile Conservation, and conducts educational outreach programs to encourage appreciation for this species

### GOPHER TORTOISE

The gopher tortoise is native to dry habitats within the coastal plains. They feed on low plant growth and dig burrows that provide habitat for a wide range of wildlife. Only a small number of gopher tortoises can be found on MCLB Albany due to extensive development around the installation.

# CONSERVATION SUCCESSES

## NATIVE GROUNDCOVER RESTORATION

MCLB Albany has approximately 1,500 acres of forested lands that provide wildlife habitat, a venue for recreational and training activities, and commercial timber. The base's remnant longleaf forest areas have rich assemblages of native groundcover, but other forested areas on the installation—including slash pine plantations, newly established longleaf pine stands, and former agricultural lands—have dense understory and lack groundcover species diversity. MCLB Albany is restoring the native ground cover within the installation forests using a holistic approach that includes controlled burning of the understory and planting native grasses and forbs. The habitat that has been enhanced through groundcover restoration is home to diverse wildlife species, including many of the rare species present on the installation—for example, gopher tortoise, eastern diamondback rattlesnake, northern bobwhite, and Bachman's sparrow. More than 90 percent of the habitat on the installation has been improved.

In addition to the forest stands, MCLB Albany has converted an unused driving range, geothermal well sites, and some utility rights-of-way to native groundcover. These conversion help reduce maintenance costs by eliminating the need to mow the sites frequently. The restoration of the groundcover improves wildlife habitat, improves recreational opportunities, and provides a quality environment for the navigation training mission.

**250 ACRES** of longleaf pine restored

**300 ACRES** of invasive plant species treated

**OVER 50% OF PRESCRIBED BURNS** occur during the growing season

**50 ACRES** of native groundcover planted, improving habitat on base

**Top Photo:** One of MCLB Albany's groundcover restoration sites. The site was originally overgrown with invasive plants but has been restored to longleaf pine and fire tolerant hardwood savannah. The native groundcover has responded very well.

## CLIMATE CHANGE RESILIENCY

MCLB Albany is the first installation to achieve net-zero within the Department of Defense, and is pro-active in its energy reduction programs. The energy reduction program includes harnessing energy from landfill gas generators to achieve energy savings by utilizing Borehole Thermal Energy Storage (BTES) systems. The MCLB Albany Natural Resources staff recognized an opportunity to make the BTES systems more environmentally friendly by transitioning pasture utility rights-of-way to native groundcover comprised of grasses and forbs beneficial to wildlife. In addition, MCLB Albany's efforts to plant longleaf pine trees and native groundcover will contribute towards sequestering carbon. Over the last five years MCLB Albany has planted over 100,000 tree seedlings and 50 acres of native grasses and wildflowers.

A 15-year-old longleaf pine stand on MCLB Albany.