

Document title

# Environmental Training: Endangered Species

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Applies to: Progress Energy Carolinas, Inc.; Progress Energy Service Company, LLC; North Carolina Natural Gas Corporation

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## NETS

Database Code: EV631IG

Objectives: Upon completion of this study, the participant should:

1. know the definition of endangered and threatened species and the species likely to occur in CP&L’s service area;
2. understand the responsibilities and best management practices related to the Memorandum of Understanding CP&L has with the State of North Carolina to protect rare plants in CP&L power line rights of way;
3. know the circumstances when CP&L activities might impact rare plant species;
4. know what bird species are endangered and threatened so that no nests, either “active” or “inactive” will be disturbed;
5. be familiar with activities that could cause harm to protected species like the red-cockaded woodpecker and the bald eagle;
6. have a general awareness of the characteristics of a bald eagle and red-cockaded woodpecker nests;
7. have a general awareness of the permit to manage sea turtles at Brunswick;
8. understand notification requirements under the ESA

Source: Environmental Services Section

Designed for: Field, plant, and facility personnel

Prerequisites: Review of Environmental Compliance Manual's chapter on Endangered Species ([EVC-SUBS-00011](#))

Materials Required: Environmental Compliance Manual

References: Endangered Species Act of 1973 (federal)  
Endangered Species Act Amendments of 1978, 1979, 1982 (federal)  
50 Code of Federal Regulations, Parts 17, 402, and 424  
N.C. Endangered Species Act (General Statutes 113-331 to 113-337)  
S.C. Endangered Species Act (S.C. Code of Laws Title 50, Chapter 15)

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## **Section 1.0 Introduction**

The Endangered Species Act (ESA) was passed in 1973 to protect fish, wildlife, and plants which are in danger of becoming extinct. The Act prohibits the taking of any species which has been listed by the U.S. Fish & Wildlife Service as an endangered or threatened species. "Taking" under the ESA means killing, trapping, harassing, hunting, collecting, or harming the plant or animal in any way. Severe penalties are possible for violations of the Endangered Species Act.

### **1.1 General Training Summary**

This module is designed primarily to make CP&L employees and contractors aware of the circumstances when CP&L activities might impact an endangered or threatened species and to familiarize them with their responsibilities under the ESA. In most cases, employees are not responsible for identifying endangered and threatened plants and animals in the field. However, they are responsible for recognizing situations when they should call Environmental Services or their Environmental Coordinators before proceeding with their work. In addition, the presence of endangered and threatened species must always be considered by employees who plan and manage activities such as new construction projects or forestry operations. The training also provides best management practices for populations of rare plants identified under power lines in CP&L's service area.

### **1.2 Training Objectives**

Upon completion of this study, the participant should:

- Objective 1      know the definition of endangered and threatened species and be familiar with the species likely to occur in CP&L's service area;
- Objective 2      understand the responsibilities and best management practices related to the Memorandum of Understanding CP&L has with the State of North Carolina to protect rare plants in CP&L power line rights of way;
- Objective 3      know the circumstances when CP&L activities might impact rare plant species;
- Objective 4      know what bird species are endangered and threatened so that no nests, either "active" or "inactive" will be disturbed;
- Objective 5      be familiar with activities that could cause harm to protected species like the red-cockaded woodpecker and the bald eagle;
- Objective 6      have a general awareness of the characteristics of a bald eagle and red-cockaded woodpecker nests;
- Objective 7      have a general awareness of the permit to manage sea turtles at Brunswick;
- Objective 8      understand notification requirements under the ESA

### 1.3 Basis for Study

There are 53 federally-listed endangered and threatened species in North Carolina and 34 in South Carolina. In addition, each state maintains more extensive lists of plants and animals that are considered to be endangered, threatened, or rare within each state's boundaries.

### 1.4 Audience

Carolina Power & Light Company employees—especially field personnel, environmental coordinators, land managers, and facility planners—engaged in activities that impact CP&L lands, rights-of-way, and waters should be familiar with the requirements of the Endangered Species Act and the circumstances when CP&L activities could impact an endangered or threatened species.

## Section 2.0 Endangered Species Overview

### 2.1 Identification of Endangered and Threatened Species (Objective 1) in CP&L's Service Area

A federally-listed endangered species is any type of animal or plant that is considered to be in danger of extinction throughout all or a significant portion of its range. A threatened species is a plant or animal that is likely to become endangered throughout all or a significant portion of its range. The U.S. Fish & Wildlife Service has the primary responsibility for identifying, listing, and ensuring the protection of endangered and threatened species.

North Carolina and South Carolina also develop lists of plants and animals that are considered to be rare or endangered within each state. In North Carolina, the Natural Heritage Program maintains files containing locations for rare, threatened, and endangered plants and animals. In South Carolina, the South Carolina Heritage Trust maintains state endangered and threatened species files. It is difficult to map locations for all threatened and endangered species in CP&L's service area. However, Environmental Services Section (ESS) personnel can make requests to both state agencies to obtain information for a particular location within CP&L's service area prior to initiating activities that could impact endangered species. In addition, ESS can be contacted to conduct biological surveys of any proposed new construction or land management site.

Remember: All CP&L employees have the responsibility to comply with the Endangered Species Act (ESA). Engineers, land managers, and planners have the responsibility to consider the presence of endangered or threatened species **early** in the planning and design phases of any proposed new construction project, land management activity, or operational change affecting CP&L lands and rights-of-way and adjacent waters. Early planning is essential. Surveys may need to be conducted during the entire growing season to ensure there are no endangered plants present. The surveys may require up to a year to complete.

## 2.2 Management of Rare Plants on CP&L Power Lines

**(Objectives 2 and 3)**

In 1989, CP&L entered into a management agreement with the North Carolina Department of Environment, Health, and Natural Resources to identify, mark, and maintain populations of rare plants occurring on the Company's power line rights-of-way. Included in the agreement are plants which are listed as endangered, threatened, or of special concern, as well as additional plant species which lack formal legal protection but are considered to be endangered in North Carolina.

In 1993, a formal Memorandum of Understanding (MOU) was signed between CP&L and the Department regarding the management of these rare plants. This MOU commits CP&L to the preservation and protection of these sites.

To protect rare plants on CP&L lands, the following responsibilities were established:

- ESS personnel are responsible for identifying rare plant sites and for providing information on these locations and associated management practices. ESS serves as the liaison with the North Carolina Natural Heritage Program and South Carolina Heritage Trust.
- Personnel from each Customer Services Region or Transmission Area are responsible for installing, maintaining, and monitoring stakes and signs at the sites.
- Construction and maintenance personnel, including contractors, are responsible for familiarizing themselves with any identified rare plant sites in their work area and the management practices which have been designed to avoid harming these areas [see Environmental Compliance Manual's chapter on Endangered Species (EVC-SUBS-00011) for detailed information].
- Construction and maintenance personnel (CP&L employees and contractors) are responsible for reading and complying with any signs posted alongside or within the right-of-way regarding rare or sensitive species. If there is a question about whether the sign applies to the right-of-way or the adjacent property, maintenance personnel should contact the CP&L environmental coordinator or ESS to clarify the situation before proceeding. By ignoring signs, you could impact endangered or threatened species located on federal property such as military bases.

These rare plants require special attention and protection; for example, use of herbicides, heavy equipment, and mowing is prohibited during the active, "above ground" period of the plants growing cycle. However, the plants are growing in the right-of-way because they thrive in open conditions where they are not "shaded" out by competing vegetation. For this reason, mowing should not be delayed for long periods of time. Generally, late fall (after frost) and winter are preferred seasons to perform maintenance along those segments of power lines that contain rare plants. If you have questions about proper management of a particular site, contact ESS or your environmental coordinator.

Currently, there are no plants under power lines in South Carolina that are managed by any special agreement with the State.

**2.3 Endangered and Threatened Birds and Their Nests**

**(Objectives 4-6)**

Two animal species from the endangered species list, the red-cockaded woodpecker and the bald eagle, are covered in greater detail in this module because nest sites have been identified on CP&L property. It is important that you know how to identify their nests so you can avoid violations of both the Endangered Species Act and the Migratory Bird Treaty Act.

**The Red-cockaded Woodpecker**



- The red-cockaded woodpecker (RCW) is the only woodpecker that constructs a nest cavity in the trunk of a living pine tree.
- Nest cavities are almost always found in old-growth (greater than 60 years old) pine trees; usually longleaf
- RCWs are generally located in Coastal Plain areas in association with longleaf pine stands. The largest populations of RCWs are located in the “Sandhills” regions of North and South Carolina.
- Cavity trees have been identified on CP&L property at the Robinson and Darlington facilities and along U.S. 1 near the Harris Nuclear Plant.
- Nest cavities are often surrounded by excavations in the bark that make the sap run giving the trunk of the tree around and below the cavity a whitish coloration. Some people say this sap flow makes the tree look like a candlestick.
- RCWs do not nest in power line

poles. Other types of woodpeckers may nest in poles. These other woodpecker species and their nests are protected by the Migratory Bird Treaty Act but they are not protected by the Endangered Species Act.

**Bald Eagle**

- The bald eagle constructs massive stick nests (up to 6 feet in width) in large “super dominant” trees (generally, extremely tall trees that stick up above the surrounding trees).
- An eagle nest has been identified on CP&L property along the Pee Dee River near the Blewett and Tillery hydroelectric plants. It is possible that nests could occur around any body of water throughout the service area.

- Eagle nests have not been identified on power line support structures in North or South Carolina. Large nests on power line supports, especially in coastal areas, are probably osprey nests. Ospreys are protected by the Migratory Bird Treaty Act; however, they are not considered to be endangered or threatened. However, before proceeding to trim or relocate any large nest on a power line support structure, contact ESS or your environmental coordinator.

Nests of endangered and threatened species should not be disturbed under **any** condition. This includes creating a disturbance during the nesting season that could cause the adult bird to abandon the nest. This is considered “harassment” under the Endangered Species Act and can be considered a “taking” of an endangered species. Examples of harassment include operating a chain saw around a red-cockaded cavity tree or an eagle nest site or conducting a transmission line helicopter maintenance survey within close proximity to an eagle nest.

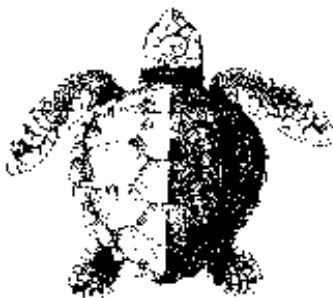
Nests of protected species, like the red-cockaded woodpecker and the bald eagle, are protected whether they are active or inactive. Cutting down a red-cockaded woodpecker cavity tree or a bald eagle nest tree even after it is no longer in use is a violation of the Endangered Species Act.

## 2.4 Permits

### (Objective 7)

The only Endangered Species Permit CP&L currently holds is issued annually by the North Carolina Wildlife Resources Commission to capture and relocate sea turtles from the Brunswick Nuclear Plant's intake canal and to release these turtles back to Environment. A brief report must be filed with the North Carolina Wildlife Resources Commission within 10 days of a capture and release and an annual report filed of the total captures and releases for the year. This permit is obtained by Brunswick plant staff. No other endangered or threatened species may be moved, captured, or handled by CP&L employees or contractors.

### Loggerhead Sea Turtle



**2.5 Notifications**

**(Objective 8)**

All CP&L employees have the responsibility to immediately report to ESS any observations of a dead or injured bald eagle around electric generating facilities or associated structures. ESS personnel will report your observation to state and/or federal wildlife officers. Under no circumstances may you take any part of a dead eagle (or any other bird) including feathers, talons, beaks, etc. This is a violation of the ESA and the Migratory Bird Treaty Act!

Failure to comply with the ESA can result in substantial penalties. Civil penalties can be as high as twenty-five thousand dollars (\$25,000) per violation and criminal penalties can go up to fifty thousand dollars (\$50,000) and/or one year in jail. There is a citizen suit provision in the ESA that allows environmental groups or individuals to sue for violations of the Act, and the ESA contains a "bounty hunter" provision that allows the government to pay rewards to any person who furnishes information leading to an arrest, penalty, or loss of property. Both CP&L and its contractors may be held accountable and individual Company employees can be held personally responsible.

All guns, traps, nets, other collecting equipment, vessels, vehicles, aircraft, and other means of transportation used to aid the delivery, receiving, carrying, shipping, exporting or importing of endangered organisms are subject to confiscation by and forfeiture to the United States government upon conviction of a criminal violation of this Act.

For assistance with endangered and threatened species of plants or animals, see the Contacts section of the Environmental Compliance Manual ([EVC-SUBS-00030](#)).

**Section 3.0 Test Your Understanding**

- A. Timber is being harvested in an area where there are known bald eagle nesting sites and nests. Can the harvest proceed? What should be done?
- B. In the Sandhills region of CP&L service area there are known colonies of red-cockaded woodpeckers. Some of the trees are danger trees near a power line. Can the tree be harvested?
- C. A dead bald eagle is found near a power line. Your son is in the Cub Scouts. Can you pluck feathers from the dead eagle and give them to your son?
- D. What is the Memorandum of Understanding between CP&L and the State of North Carolina?
- E. What endangered bird species may be encountered in CP&L's service area?
- F. Who has responsibility for "staking" the rare plant sites along power lines?