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February 16, 2009

Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Subject: Duke Energy Carolinas, LLC  
William States Lee III Nuclear Station - Docket Nos. 52-018 and 52-019  
AP1000 Combined License Application for the  
William States Lee III Nuclear Station Units 1 and 2  
Response to Request for Additional Information  
Ltr# WLG2009.2-04

Reference: Letter from L.M. Tello (NRC) to B.J. Dolan (Duke Energy), *Request for Additional Information Regarding the Environmental Review of the Combined License Application for William States Lee III Nuclear Station, Units 1 and 2*, dated January 21, 2009

This letter provides the Duke Energy response to the Nuclear Regulatory Commission's (NRC) request for the following additional information (RAI) item listed in the reference letter:

RAI 117, Terrestrial Ecology

The response to this NRC request is addressed in the enclosure which also identifies any associated changes that will be made in a future revision of the William States Lee III Nuclear Station application.

If you have any questions or need any additional information, please contact Peter S. Hastings at 980-373-7820.

Bryan J. Dolan  
Vice President  
Nuclear Plant Development

DD93  
NRO

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Enclosure:

1. Response to RAI 117, Terrestrial Ecology

AFFIDAVIT OF BRYAN J. DOLAN

Bryan J. Dolan, being duly sworn, states that he is Vice President, Nuclear Plant Development, Duke Energy Carolinas, LLC, that he is authorized on the part of said Company to sign and file with the U. S. Nuclear Regulatory Commission this supplement to the combined license application for the William States Lee III Nuclear Station and that all the matter and facts set forth herein are true and correct to the best of his knowledge.

*Bryan J. Dolan*  
Bryan J. Dolan

Subscribed and sworn to me on *February 16, 2010*

*Kim N. Slays*  
Notary Public

My commission expires: *April 19, 2010*



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xc (wo/enclosure):

Loren Plisco, Deputy Regional Administrator, Region II  
Stephanie Coffin, Branch Chief, DNRL  
Robert Schaaf, Branch Chief, DSER.

xc (w/enclosure):

Linda Tello, Project Manager, DSER  
Brian Hughes, Senior Project Manager, DNRL

**Lee Nuclear Station Response to Request for Additional information (RAI)**

**RAI Letter Dated:** January 21, 2009

**Reference NRC RAI Number:** ER RAI-117

**NRC RAI:**

Provide a copy of the applicant's corporate policy on Avian Protection and its Avian Protection Plan.

The response to RAI 84 states that Duke Energy will follow corporate policy on Avian Protection and its Avian Protection Plan to reduce adverse impacts to migratory birds caused by site storm water basins, settling ponds, lagoons and other water storage facilities, however, the response did not provide any details on the corporate policy or the Avian Protection Plan

**Duke Energy Response:**

A copy of the Duke Energy Avian Protection Plan is provided as an attachment to this response.

**Associated Revisions to the Lee Nuclear Station Combined License Application:**

None.

**Associated Attachments:**

Attachment 117-1. Duke Energy Corporation Avian Protection Plan.

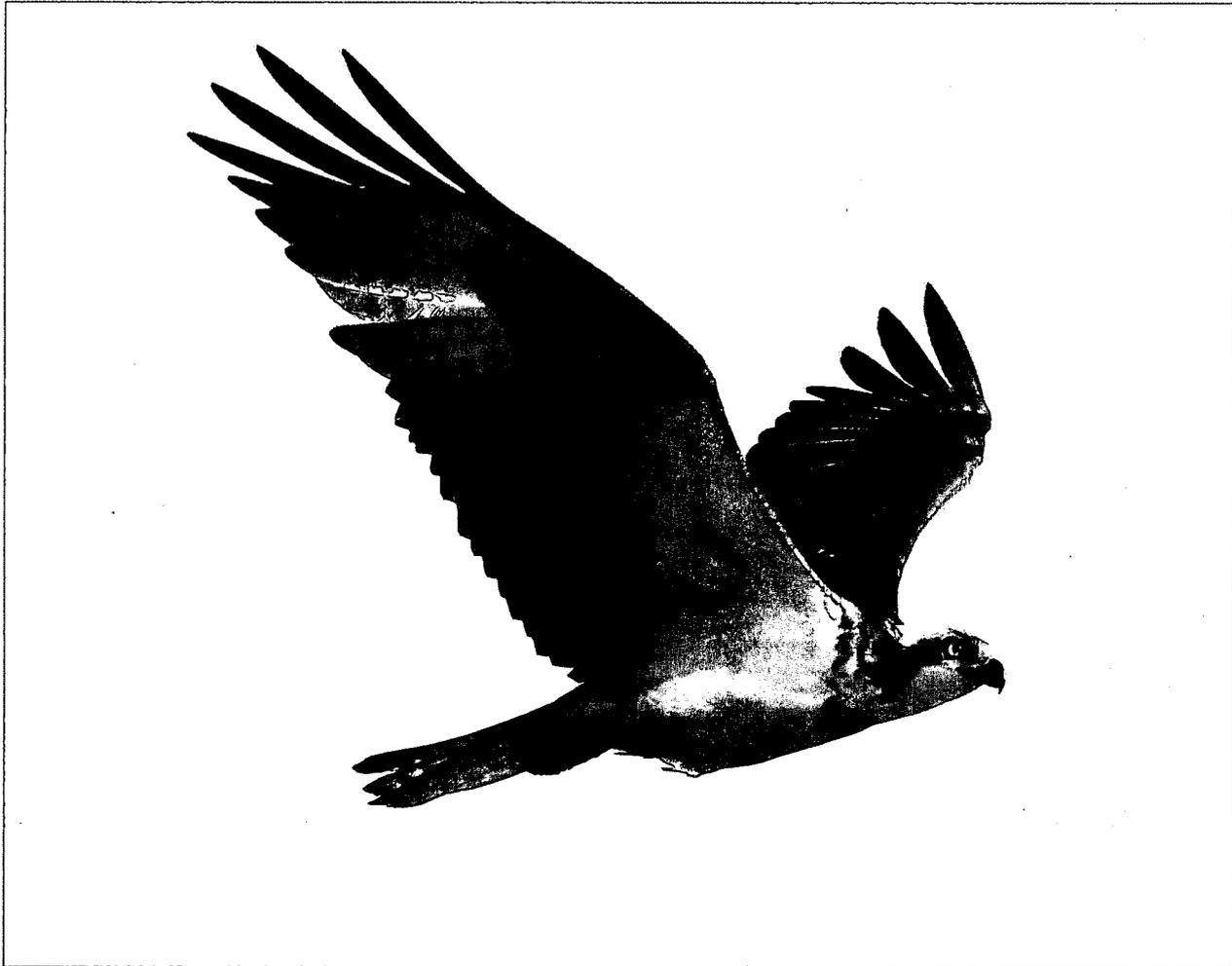
Attachment 117-1. Duke Energy Avian Protection Plan  
[Attachment 117-1 contains a cover page and a 38 page document]

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# *Duke Energy Corporation*

## *Avian Protection Plan*

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*Prepared by:*  
**Environment, Health, and Safety**  
**Scientific Services - Biological**  
13339 Hagers Ferry Rd  
Huntersville, NC 28078

**Final Draft**  
**January 2009**

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## STATEMENT OF PURPOSE AND PHILOSOPHY

State and federal laws protect all species of native birds in the Duke Energy service territory. Interactions of birds with generating facilities, transmission and distribution lines, substations, and other structures and equipment are potentially harmful or fatal to birds. In addition, bird interactions can result in outages, violations of bird protection laws, grass and forest fires, or raise concerns by employees, resource agencies and our customers.

The purpose of the Avian Protection Plan is to ensure compliance with requirements of all bird protection regulations and laws. In addition to protecting migratory birds it is the corporation's intent to manage bird interactions with power structures and thereby reduce system interruptions that are caused by birds.

## INTRODUCTION

Duke Energy Corporation is one of the five largest electric utilities in the United States, based on market capitalization and generating capacity. We have nearly 4 million electric customers and our regulated generating capacity in the US totals about 28,000 MW. Duke Energy's service area spans 5 states (North Carolina, South Carolina, Indiana, Ohio and Kentucky) and 47,000 square miles.

As we strive to meet the demands of our customers we constantly look for ways to minimize our impacts to the environment. It is the responsibility of every employee and contractor to adhere to all federal, state and local laws that were designed to protect our environment. The Migratory Bird Treaty Act of 1918 (MBTA), administered by the US Fish and Wildlife Service, is the driving legislation that provides regulatory protection to birds throughout the Duke Energy-Carolinas and Midwest service area as well as the entire United States. The MBTA prohibits the "take" of essentially all birds (except pigeons, English sparrows and European starlings). "Take" is a broad term that includes killing, harming or harassing birds, bird nests, eggs or young. The MBTA is a strict liability statute which means that proof of intent is not required in the prosecution of a 'taking' violation. Utilities such as Duke Energy have the potential to incur fines from accidentally or incidentally 'taking' birds during their normal daily operations.

Duke Energy developed an Avian Protection Plan based on the guidelines set forth in "Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006." Duke's Avian Protection Plan is designed to help the corporation and its employees ensure compliance with requirements of bird protection laws, manage bird interactions with power structures, reduce regulatory risk, and thereby reduce costly system interruptions that are caused by birds. The plan is divided into eleven elements:

- ☞ Training
- ☞ Construction design standards
- ☞ Avian reporting system
- ☞ Mortality reduction measures
- ☞ Quality control
- ☞ Key resources
- ☞ Permit compliance
- ☞ Nest management
- ☞ Risk assessment methodology
- ☞ Avian enhancement operations
- ☞ Public awareness

## **KEY TERMS**

Below are several terms and their definitions that are used throughout this document. These will be helpful when reading this document.

Avian - Relating to or characteristic of birds.

Depredation - Damage or loss.

Migratory birds - All birds listed in 50 CFR 10.13. This includes 836 species. Generally speaking, in the United States this means all birds except English sparrows, European starlings, and common pigeons (rock doves).

Raptor - A bird of prey (e.g., hawk, eagle osprey, vulture).

## TRAINING

Business units shall ensure that Duke Energy's field personnel and contractors receive training on the proper handling of encounters with migratory birds and their nests. Duke Energy field employees and contractor managers should receive Migratory Bird Training or a refresher course each year. Instructor led training is required a minimum of every three years. Refresher training can be done via a Migratory Bird Training computer based training (CBT) slideshows. The slideshows are also available in hardcopy for those employees who do not have access to a computer. Additional training materials include a flowchart (Appendix A) and an information handout (Appendix B). Handouts and the CBT slideshow are also available in Spanish.

In addition to formal training, Duke Energy provides each field office with posters (Appendix C) to remind employees of their responsibility and the corporation's responsibility to comply with migratory bird laws and how to access the 24-h Migratory Bird Hot Line. Business units should post the 24-h Migratory Bird Hotline number in prominent locations and encourage employees to use this in-house service whenever the need arises. Wallet cards (Appendix D) with basic instructions and resource phone numbers are distributed to each employee who receives Migratory Bird Training.

Corporate EHS, Scientific Services shall review and update Duke's avian protection activities and avian interaction training material as scheduled or on a regular basis.

## PERMIT COMPLIANCE

Corporate EHS, Scientific Services shall ensure that Duke Energy Corporation obtains the necessary avian permits and complies with all requirements set forth in those permits. Duke Energy currently holds both federal and state depredation permits. Our United States Fish and Wildlife Service (USFWS) depredation permit currently covers North Carolina, South Carolina, Indiana, Ohio and Kentucky. Additionally we have state permits from both North and South Carolina. Currently, state permits are not required in Indiana, Ohio, and Kentucky.

Our permits allow relocation of active nests that pose a risk to birds or generation of electricity and allows disposal of small, inactive bird nests. In addition, employees are allowed temporary possession to bury a dead bird or transport an injured bird to a veterinarian or rehabilitator. We are also authorized to use non-lethal control techniques such as perch guards, vulture effigies, etc. to discourage birds from nesting or roosting in undesirable areas. Our permit requires that we keep records of bird incidents throughout the year and provide this annually to the USFWS and state agencies. All three permits require annual application and records of all avian interactions from the year for renewal.

In addition Corporate EHS, Scientific Services shall assess bird interactions with Duke Energy's operations to detect high interaction areas and communicate those to management. EHS shall work cooperatively with all areas of the corporation to reduce avian interactions.

Regulatory References are listed below for your information.

Migratory Bird Treaty Act of 1918 (as amended in 1936, 1974, 1978, 1989)

50 CFR 21.41 (permit)

50 CFR 13.46 (record keeping statute)

50 CFR 13.47 (authorizes federal inspection of records)

North Carolina Wildlife Resources Commission - Special Migratory Bird Permit

South Carolina Department of Natural Resources - Letter of Authorization; Depredation

## **CONSTRUCTION DESIGN STANDARDS FOR AVIAN SAFE UTILITY FACILITIES**

Energy Delivery shall implement the use of raptor-safe standards in the construction of new transmission and distribution lines and in the retrofitting of existing transmission and distribution lines where necessary. Distribution, Transmission, and Corporate EHS, Scientific Services shall work together cooperatively to identify bird habitats and bird species that may be impacted by proposed power line corridors. This information shall be included in the siting and construction decision making processes.

See Chapters 5 and 6 of “Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006” for avian-safe utility line and pole designs.

## NEST MANAGEMENT

Bird nests, both for species covered and not covered under the Migratory Bird Treaty Act, are responsible for the expenditure of tens of thousands of dollars of labor yearly to protect birds from electrocutions and strikes as well as at the same time provide a dependable supply of electricity to our customers.

Nests of wrens and bluebirds in electric service panels and meter boxes of new homes are the most common bird issues encountered by Duke Energy. When Duke Energy technicians arrive on site to provide electric service to these new homes they commonly encounter bird nests where the meter needs to be installed. When the meter box cannot be installed at a later date (after the young have fledged) our linemen are trained to relocate these nests to an artificial nest box (Appendix F) and place the box as close to the original nest site as practical.

Woodpeckers also use our power poles for nesting. Our linemen are trained to check for woodpecker nests prior to removing a pole. If an active woodpecker nest is discovered we encourage the crew to leave the pole until after the birds have fledged. If this is not possible, electric components and lines may be relocated to a new pole erected beside the old pole. The old pole is allowed to remain until after nesting season and even longer if it does not pose any operational threat or safety concern. Another option is to carefully cut out the section of pole that contains the woodpecker nest and affix it to the new pole. The preferred approach is to leave the pole alone until after the birds have fledged and then take the necessary steps to repair/replace the pole.

Duke Energy frequently installs nesting platforms adjacent to power poles and transmission towers frequented by ospreys in order to keep these birds from nesting on the poles/towers proper. Preferably after the nesting season, we deploy a bucket truck to remove the nest from the power pole and place it on a newly installed nesting platform. These relocated nests are monitored for success monthly from March through September of the following nesting season. Ospreys returning from their migrations have readily adapted to the new platforms and by installing perch guards we decrease the attractiveness of the original nest site.

## AVIAN REPORTING SYSTEM

A key aspect of Duke Energy's avian reporting system is the establishment of a 24-h in-house Migratory Bird Hotline for the Carolinas and a separate Migratory Bird Hotline for the Midwest. Both hotlines are manned 24-hours per day, 7-days per week. Anytime an employee or contractor encounters a bird issue, regardless of magnitude, they are encouraged to call the hotline for guidance.

When an employee or contractor encounters a bird (dead or live) or bird nest (active or inactive) that poses a risk to the bird or Duke's electric system reliability in order to follow the appropriate regulatory reporting pathway they are asked to determine if it is a small bird (such as a wren, or bluebird, etc) or a large bird (such as a hawk or osprey, etc.). They are not required to identify the bird species. If dealing with a large bird issue employees are advised to call the Carolinas or Midwest Migratory Bird Hotline so that a biologist can provide specific guidance. If dealing with a small bird issue employees may move the nest or bury the bird and record the incident on their work ticket. Employees and contractors always have the option to call the hotline for guidance on any bird issue.

Avian biologists who receive calls on the Migratory Bird Hotlines record these calls in either the Carolinas or Midwest Duke Energy LAN based Migratory Bird Database. Both databases are backed up weekly as routine backups are made of each LAN share.

When a field crew records a bird incident on their work ticket they must use an outage code for animal and also describe the incident in the comments field. All outage work tickets are entered into the Outage Link database. Biologists query the Outage Link database for any reference to birds or their nests. This information is combined with information from the LAN based Migratory Bird databases and annual reports (Enclosure G) are generated for state and federal agencies. Reports are maintained for a minimum of five years as required by federal law.

Duke Energy's reporting process is documented in flowcharts (Appendix A). These are available in both English and Spanish. Each employee receives detailed instruction on the process when trained and receives a copy of the flowchart. Additionally, copies are available on the portal in the [EHS Compliance Manual](#).

## **RISK ASSESSMENT METHODOLOGY**

Not all of Duke Energy's powerlines and associated power poles/towers pose threats to birds. Duke Energy owns and operates thousands of miles of powerlines some of which already meet avian safe standards and some that pose little risk to birds. Duke Energy's approach to assessing risk includes identifying and prioritizing areas of high risk for bird/powerline interaction. These risk factors include the line's proximity to wetland areas, lakes, rivers, national wildlife refuges, established migration corridors, state and local wildlife management areas and other areas that provide good habitat to migratory birds. Lines that traverse these areas that present a collision or electrocution risk are identified and prioritized based on the risk present. Problem poles are also identified where bald eagles or other raptors might perch or where ospreys might build a nest. An example would be a pole immediately adjacent to a large river that provides a good nesting and feeding vantage point for the raptor. These poles are identified and prioritized. High risk lines and/or poles are retrofitted to avian safe standards.

## MORTALITY REDUCTION MEASURES

Duke Energy biologists and engineers participate in applied research and in industry trade groups to reduce the detrimental effects of bird interactions with power lines and corporate operations. On-going efforts to reduce avian mortalities are described below.

**Large nest relocation:** Distribution poles and transmission towers near lakes and rivers provide excellent nesting and feeding sites for large birds such as ospreys. Nests on energized poles and towers can interrupt electrical service and pose a threat to both nesting adult birds and their offspring. In cases where the location of a nest poses a threat to electrical service or birds we relocate the nest, preferably during the non-nesting season, to an adjacent nesting platform. Past experiences have shown that ospreys returning from their migrations have readily adapted to the new platforms.

**Small nest relocation:** Wrens and bluebirds are categorized as cavity nesters and frequently nest in electric service panels of new homes. These nests must be relocated to activate electric service to these customers and at the same time allow successful reproduction of these birds. Our field crews are trained to relocate these nests to a temporary nest box (see Temporary bird box section below) as close to the original nest site as practical.

**Perch guards:** In areas or circumstances where the line cannot be redesigned or rebuilt to provide adequate clearance between conductors, perch guards may be used to discourage the use of a structure by large birds, typically raptors. Perch guards can be effective in discouraging perching and provide utilities with a quick, cost effective mitigation measure to use on high risk poles.

**Artificial nest boxes:** Many times field crews will encounter a nest of a small bird in meter bases. These must be relocated in order to install the meter and connect electrical service. It is sometimes difficult to find a suitable container or structure nearby in newly developed neighborhoods with few trees or similar structures. Duke provides field crews with temporary bird boxes that easily store on their trucks and can be quickly assembled when needed. These artificial nest boxes are made of light-weight corrugated plastic and can be secured to meter boxes, downspouts, trees, etc. with tie wraps.

**Marking lines:** Marking electric conductors and neutral/static wires have been shown to significantly reduce the number of bird collisions. There are many bird marking devices available (swan flight diverters, orange spheres, Fireflies, etc.) and each has its own application and effectiveness. Marking devices have been retrofitted to existing lines in high bird use areas and are being installed on new lines where the potential for bird collisions is present. In 1999 Cinergy Corporation (which is now part of Duke Energy) sponsored a two year study to assess the effectiveness of various marking devices in reducing avian power line strikes. This study is included as Appendix G.

**Avian safe engineering standards:** Avian safe engineering standards have been incorporated into Duke Energy's engineering standards (Appendix E). These standards generally follow the Edison Electric Publication "Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006." Along with these standards, are internal criteria that are used by field engineers to assist in determining if avian safe engineering standards (Appendix E) need to be incorporated into the particular line being planned. Duke Energy biologists also assist field engineers with evaluating the applicability of using avian safe standards for both rebuilding existing lines and the siting/design of new lines.

## AVIAN ENHANCEMENT OPTIONS

In addition to reducing avian mortality associated with our electrical operations, Duke Energy also recognizes opportunities to enhance avian populations. Generation facilities proactively consult with biologists on these issues and have participated in several avian enhancement projects:-

- In 1993 employees at the Miami Fort Station in Ohio built and installed a peregrine falcon nesting box. Peregrine falcons were still on the endangered species list in 1993. Since 1997, 38 eggs have been laid and 27 successfully hatched by three different pairs of falcons.
- In 1997 the decision was made to convert the lands adjacent to Indiana's Gibson Generating Station cooling ponds into a wildlife habitat known as the Cane Ridge Wildlife Area. Duke Energy helped fund this effort and today the area is the home of the largest nesting colony of the endangered least tern east of the Mississippi River. In addition to the terns, more than 300 other species of birds have been documented in this area.
- In Kentucky, the East Bend Generating Station partners each year with the Kentucky Department of Fish and Wildlife to band wood ducks. Banding wood ducks is one of many methods used to monitor and improve waterfowl populations across the country.
- Generation facilities in North and South Carolina participate in the Wildlife and Industry Together (WAIT) program to enhance wildlife at our stations and the surrounding communities. One project involved the construction and installation of bluebird boxes at various Duke Energy facilities.
- In 1985 Duke Energy partnered with the Carolina Raptor Center to reintroduce ospreys to Lake Norman, NC. Hacking sites were erected with two young ospreys at each site. The birds were fed by Duke Energy employees until they fledged. The population has grown to approximately twenty nesting pairs in 2008 and today Duke Energy generation facilities proactively consult with biologists to erect osprey nesting platforms on their sites in places that will not interfere with operations or harm nesting birds.
- Duke Energy assisted the Indiana Department of Natural Resources (DNR) in reintroducing the bald eagle to the state. An active bald eagle nest is located at the Gibson Generating Station in Gibson County, Indiana and near the Wabash River Generating Station in Vigo County, Indiana. In addition, there are two active bald eagle nests near the Cayuga Generating Station in Vermillion County, Indiana. Duke Energy personnel work in collaboration with the DNR to monitor and evaluate endangered avian species found on or near its properties.

Avian enhancement is an ongoing way of life at Duke Energy. Duke routinely works with various state, federal, and non-profit agencies throughout its service area to help protect birds and other wildlife by managing the company's assets and habitats essential for nesting and population growth.

## QUALITY CONTROL

**Customer Questionnaires:** In May, 2006 a questionnaire was developed to evaluate the effectiveness of Duke Energy's Migratory Bird Program within the Power Delivery organization of the Carolinas. Overall, questionnaire results indicated an understanding of the program and responses indicated favorable satisfaction with each of the four areas evaluated. Feedback from customers led to the production of new Migratory Bird posters and wallet cards that included basic instructions for addressing avian issues in the field and the Migratory Bird Hotline number so that field crews can get assistance from company biologists whenever they need it.

## **PUBLIC AWARENESS**

As the general public becomes more environmentally aware it is continually important that Duke Energy operates its facilities in an environmentally responsible manner. This includes siting, engineering, constructing and operating its electric generation system in a manner that minimizes its impact on wildlife. Fatalities or injuries to high profile bird species such as osprey, bald eagles and whooping cranes or public displays of indifference toward wildlife by Duke Energy employees will be not be tolerated by Duke Energy or the public and could result in negative media coverage and/or regulatory action by the agencies. During migratory bird training sessions instructors discuss public awareness issues with Duke Energy employees. Examples of how to effectively handle high profile bird problems are discussed.

In addition, Duke will continue to work closely with resource agencies, conservation organizations, the media and the general public on bird conservation projects. These include:

- ✔ Osprey nesting platform installation and monitoring
- ✔ Osprey camera for employees to view nesting osprey at Catawba Nuclear Station
- ✔ Operation Migration (whooping crane reintroduction) support
- ✔ Eagle Viewing Days at Cayuga Generating Station with the American Eagle Foundation
- ✔ Wood duck banding at East Bend Station with the Kentucky Department of Fish & Game
- ✔ Interior least tern management at Gibson Station
- ✔ Peregrine falcon nest box installation and monitoring at various generating stations and company lands.
- ✔ Support and participation in the North American Waterfowl Management Plan
- ✔ Support and participation in various Audubon Society and state and National Wildlife Federation groups and functions

## SUMMARY

Duke Energy management and employees are committed to the tenants of the Avian Protection Plan. We will strive to:

- ✧ Ensure that our operations comply with migratory bird laws, regulations, permits, and guidelines.
- ✧ Document bird mortalities, bird injuries, and disturbances of active nests.
- ✧ Provide information, resources, and training to improve employee and contractor awareness of our responsibilities under bird protection laws.
- ✧ Identify bird habitats and bird species that may be impacted by proposed transmission and distribution corridors.
- ✧ Where necessary, use raptor-safe standards in construction of new and retrofitting of existing transmission and distribution lines.
- ✧ Assess areas of high bird interactions and implement raptor-safe improvements on existing facilities.
- ✧ Conduct applied research and participate in industry trade groups to reduce the detrimental effects of bird interactions with power lines and corporate operations.

## **KEY RESOURCES**

### NORTH CAROLINA RESOURCES

Carolina Raptor Center  
6000 Sample Rd.  
Huntersville, NC 28078  
Phone: 704-875-6521

Carolina Veterinary Specialists  
12117 Statesville Rd.  
Huntersville, NC 28078  
Phone: 704-949-1100

Duke Energy Carolinas  
Migratory Bird Hotline  
800-573-3853

NCWRC Nongame Wildlife Office  
Phone: 919-707-0060

NCWRC Wildlife Enforcement Communications  
Phone: 919-707-0040

North Carolina licensed wildlife rehabilitators  
[http://www.ncwildlife.org/fs\\_index\\_06\\_coexist.htm](http://www.ncwildlife.org/fs_index_06_coexist.htm)

USFWS (Region 3, Atlanta, GA)  
Phone: 404-679-7070

### SOUTH CAROLINA RESOURCES

Duke Energy Carolinas  
Migratory Bird Hotline  
800-573-3853

SCDNR  
Rembert C. Dennis Building  
1000 Assembly St.  
Columbia, SC 29201  
Phone: 803-734-3886

South Carolina licensed wildlife rehabilitators  
<http://www.dnr.sc.gov/wildlife/rehab.html>

USFWS (Region 3, Atlanta, GA)  
Phone: 404-679-7070

## KENTUCKY RESOURCES

Duke Energy Midwest  
Migratory Bird Hotline  
800-428-4337, ext 2473 (bird)

Kentucky Department of Fish and Wildlife Resources  
#1 Sportsman's Lane  
Frankfort, KY 40601  
800-858-1549

Kentucky rehabilitators list  
<http://fw.ky.gov/rehablist.aspx>

USFWS (Region 3, Atlanta, GA)  
Phone: 404-679-7070

## INDIANA RESOURCES

Duke Energy Midwest  
Migratory Bird Hotline  
800-428-4337, ext 2473 (bird)

IDNR  
Department of Natural Resources  
402 West Washington Street  
Indianapolis, IN 46204  
Phone: 317-232-4200

Indiana licensed rehabilitators  
<http://www.southeasternoutdoors.com/wildlife/rehabilitators/indiana-rehabilitators.html>

USFWS (Region 3, Ft. Snelling, MN)  
Phone: 612-713-5449

## OHIO RESOURCES

Duke Energy Midwest  
Migratory Bird Hotline  
800-428-4337, ext 2473 (bird)

ODNR  
Division of Wildlife  
2045 Morse Rd.  
Bldg. G  
Columbus, OH 43229-6693  
Phone: 614-265-6565

Ohio licensed rehabilitators  
<http://www.dnr.state.oh.us/wildlife/Home/resources/orphans/rehabilitators/tabid/6013/Default.aspx>

USFWS (Region 3, Ft. Snelling, MN)  
Phone: 612-713-5449

### General Supplies

Nesting platforms, etc.      Zena designs  
P O Box 137  
Odenville , Alabama 35120  
Phone: 970-663-3980  
<http://www.zenadesign.com/index.htm>

Perch discouragers      National Transformer Sales, Inc  
2613 B Discovery Dr  
Raleigh, NC 27616  
Phone: 919-850-3222

Vulture effigies      The Propper Source  
12401 Kittridge St.  
North Hollywood, CA 91606  
Phone: 404-918-9091  
<http://www.proppersource.com/>

Scary Decorations  
Phone: 800-690-4425  
<http://www.scarydecorations.com/>

Display It!  
P.O. Box 1749  
Cave Creek, AZ 85327  
Phone: 480-461-9333  
<http://www.displayit-info.com/>

Line Marking devices

Tyco Electronics Energy Division  
Customer Service  
Phone 800 327 6996  
Fax 800 527 8350  
<http://www.energy.tycoelectronics.com>

Other Avian Protection Products

Wildlife Outage Protectors  
37 Appletree Lane, P.O. Box 450  
Plumsteadville, PA 18949  
Phone: 888-414-2398  
<http://www.wildlifeoutageprotectors.com/>

Wildlife Removal

Blue Ridge Wildlife Control, LLC  
P.O. Box 9607  
Hickory, NC 28603  
Phone: 828-217-2533

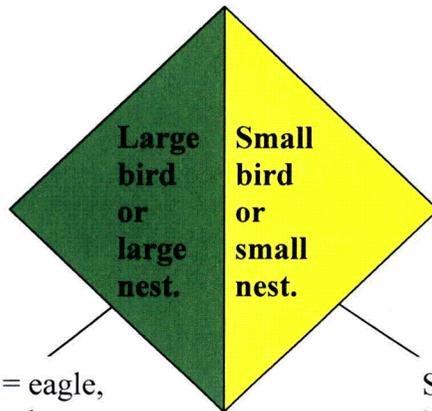
McNeely Pest Control  
3490 Reynolda Road  
Winston-Salem, NC 27106  
336-631-9494

## REFERENCES

Avian Power Line interaction Committee (APLIC). 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, D.C. and Sacramento, CA. 207 pp.

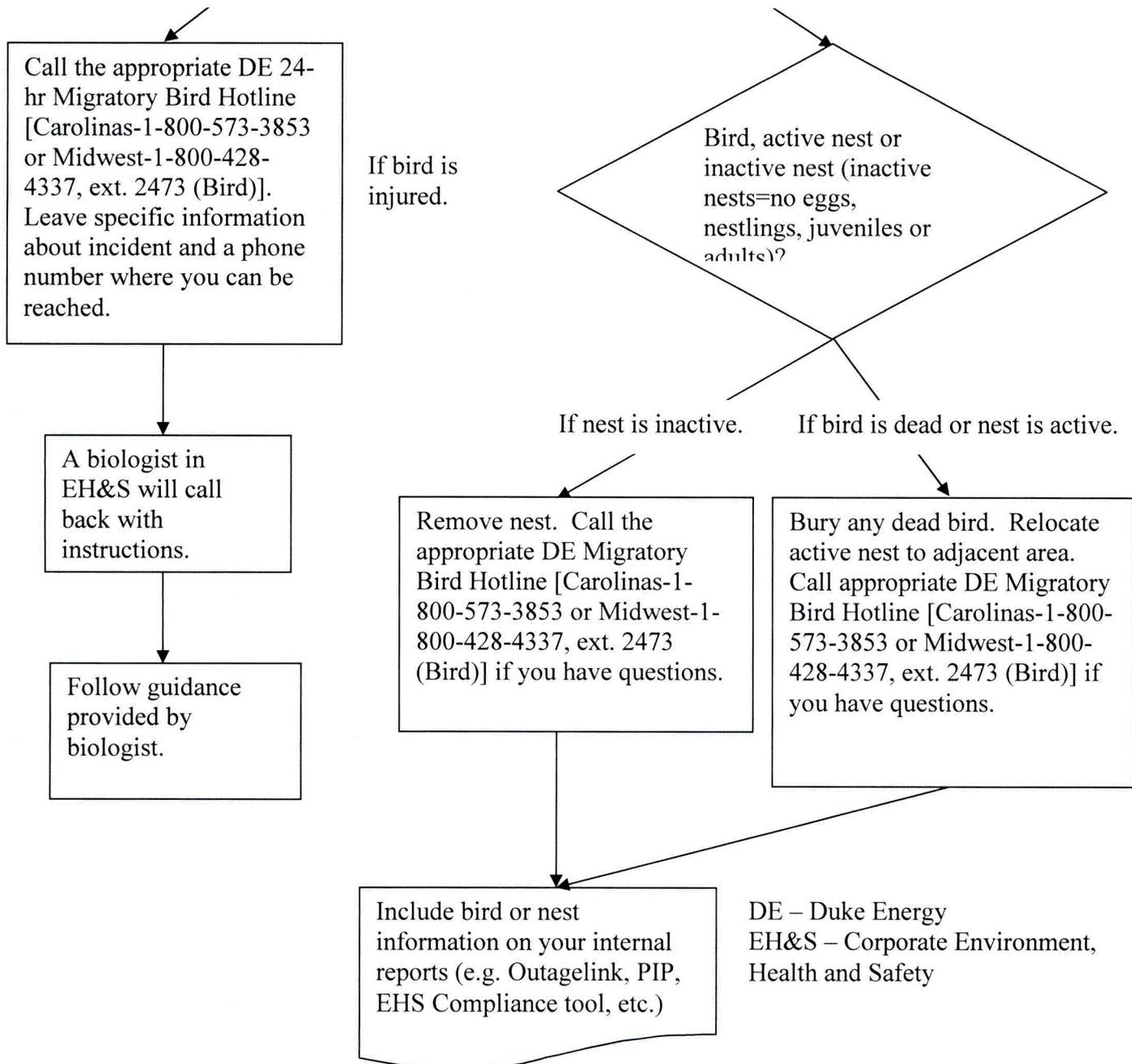
# APPENDIX A. Migratory Bird Process Flow Chart.

**Note:** Dead birds should always be handled with proper protective equipment (i.e. gloves).



Large bird (or nest) = eagle, hawk, owl, osprey, vulture.

Small bird (or nest) = wren, bluebird, woodpecker, etc.



DE – Duke Energy  
EH&S – Corporate Environment, Health and Safety

## APPENDIX B. Carolinas Migratory Bird Information Sheet.

# THE MIGRATORY BIRD TREATY ACT MANAGING MIGRATORY BIRDS AND THEIR NESTS IN THE CAROLINAS

### Introduction

Many times our jobs can bring us in contact with birds, their nests, their young and their eggs. Examples of interactions that company employees have encountered in the past are:

- Twigs and sticks from an osprey nest are found on a transmission structure
- During a substation inspection a bird nest is found near energized equipment
- A pole is slated for replacement because of woodpecker damage and the hole contains an active nest with eggs or chicks
- During an outage you discover what appears to be the remains of a migratory bird
- On the right-of-way you find a dead bird whose feathers that will make a perfect fishing lure

### HOW THE MIGRATORY BIRD TREATY ACT AFFECTS YOU

The Migratory Bird Treaty Act protects all birds in our service area with the exception of English (House) Sparrows, starlings, and pigeons. The specific language of the law states, "*The taking, killing, possessing, or transport of migratory birds or bird parts shall be designated as illegal. (Bird parts are defined as nests, feathers, and eggs). Violations of the law may result in fines and imprisonment.*"

When large nests of BIRDS such as EAGLES, OSPREY, OWLS, or HAWKS are encountered and disturbed, or may be disturbed, immediately call the EHS 24-h Migratory Bird Hot Line at **1-800-573-3853** for assistance and guidelines. When small bird nests with eggs and/or young birds are encountered and disturbed during the nesting season (February through June), carefully relocate the nest to an adjacent area. If problems occur during relocation, call the EHS Migratory Bird Hot Line at **1-800-573-3853** for assistance. Inactive small bird nests (nests without eggs or young birds) can be removed and with no reporting requirements or involvement from EHS.

Federal and state laws require Duke Energy to make immediate notification and/or record and submit an annual report documenting encounters with Migratory Birds.

### **Take the following actions:**

1. **Large Birds:** Immediately call the EHS Migratory Bird Hot Line at 1-800-573-3853 and report encounters and disturbances with large birds.
2. **Small Birds:** During nesting season, report encounters and disturbances with small birds.

Outages caused by birds are to be noted in the outage code and recorded by the dispatcher/closer. It is critical that you comply with this federal law. **Regulations forbid the transportation of dead migratory birds and/or bird body parts.**

## APPENDIX B. (continued).

### Questions and Answers

- Q.** What should I do if I encounter and **need to disturb or move** a large bird of prey (osprey, eagle, hawk, etc.) or one of their nests?
- A.** You should immediately contact the dispatcher and report the situation encountered with the large bird or nest. The dispatcher should call the Migratory Bird Hot Line at **1-800-573-3853** and report the situation to the environmental professional on call. The environmental professional on call, working through the dispatcher, will advise the crew on what action(s) to take in these situations. Note: If you do not disturb or move the bird, nest or young birds, reporting or action is not necessary.
- Q.** What should I do if I need to relocate a small migratory bird (robin, bluebird, wren, etc.) its nest or it's young during nesting season (February through June)?
- A.** Carefully relocate the nest to an adjacent area and report the relocation and also the species of bird if known.
- Q.** What should I do if I encounter and need to disturb an inactive migratory bird nest (nest without eggs or young)? (Usually will encounter inactive nest outside the nesting season – July through January.)
- A.** **Large migratory bird** - Call Migratory Bird Hot Line at 1-800-573-3853 for assistance.  
**Small migratory bird** – Inactive nests can be removed without calling for assistance or without reporting.
- Q.** What should I do if a bird causes an outage?
- A.** Restore power to the customer and document on the ECR outage record in the remarks field identifying "Birds" as the cause of the outage. If the species of bird is known, document this in the remarks field of the ECR outage record.
- Q.** What is a migratory bird?
- A.** In North America there are 836 species of migratory birds. All birds with the exception of three (English sparrows, European starlings, and pigeons-all are introduced species) are migratory birds.

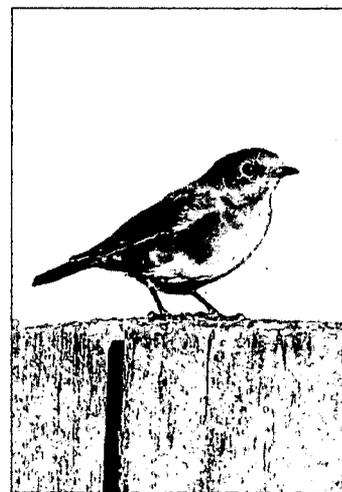
# KNOW THE LAW.



OSPREY



PILEATED WOODPECKER



BLUEBIRD

**Q.** What is special about these birds?

**A:** Each one of these birds, as well as their nests, eggs, young and even their feathers are **PROTECTED UNDER FEDERAL LAW**. In fact, every bird in the Carolinas except the English Sparrow, Starling and Pigeon is protected under Federal and State Law.

If you encounter any of these birds or their nests in your work, follow the guidance and directions issued by your department. If you have any questions or are unsure what to do in a certain situation, call the EH&S 24-hour:

**MIGRATORY BIRD HOTLINE  
1.800.573.3853**

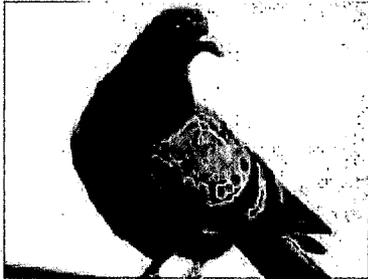


## APPENDIX D. Midwest Migratory Bird Wallet Card.

LARGE BIRDS	NESTING INFORMATION	EGG INFORMATION	PROPER PROTOCOL
Eagle	Tall, isolated trees near water; Nest (8' diameter) of large sticks.	Two 3" long, dull white eggs with rough surface.	<ol style="list-style-type: none"> <li>STOP.</li> <li>Immediately call 1.800.428.4337, ext. 2473 (BIRD).</li> </ol>
Hawk	Tall tree; Nest of sticks and twigs lined with bark or other material.	Two-four dull white to pale blue eggs; Some have brown spots.	
Owl	Old building, tree cavity or hawk's nest.	Usually two pure white to yellow-stained eggs.	
Osprey	High places near water, such as utility poles, transmission towers or dead trees. Bulky nest of large sticks.	Two-four buff-colored eggs with reddish-brown splotches.	
Vulture	Eggs laid directly on ground or on chips of rotten wood.	Two dull white, elliptical eggs with brown spots.	
Unidentified large bird	Large above-ground nest.	Any color of eggs but usually tend to be white.	
SMALL BIRDS	NESTING INFORMATION	EGG INFORMATION	PROPER PROTOCOL
Wren	Heavy shrubbery, nooks and crannies like meter boxes and electric panel boxes.	White to pale pink eggs with many brown spots.	<ol style="list-style-type: none"> <li>Mar-Sept: Note number and color of eggs. Note number of chicks. Rebrate; report to 1.800.428.4337, ext. 2473 (BIRD).</li> <li>Oct-Feb: Remove.</li> </ol>
Bluebird	Natural cavity or box like meter box. Cupped nest of grass.	Usually four-five blue to white eggs with smooth, glossy shell.	
Woodpecker	Cavity in tree or utility pole, usually high above ground.	Three-seven white eggs with smooth shell.	
Robin	Trees, shrubs, ledges of buildings. Deeply cupped nest of grass and mud.	Usually three-four glossy blue to green eggs.	
Blackbird	Less than 14' above ground. Lined with grass and feathers.	Bluish-green eggs spotted with brown, purple or black.	
Unidentified small bird	Small above-ground nest.	Eggs of any color.	
Killdeer	On open ground with gravel and small rocks.	Four flesh-colored eggs with bold black spots and speckles. Eggs are camouflaged and can be difficult to see.	<ol style="list-style-type: none"> <li>Flag nest and avoid area.</li> <li>Report to 1.800.428.4337, ext. 2473 (BIRD).</li> </ol>

MIGRATORY BIRD HOTLINE: 1.800.428.4337, extension 2473 (BIRD)

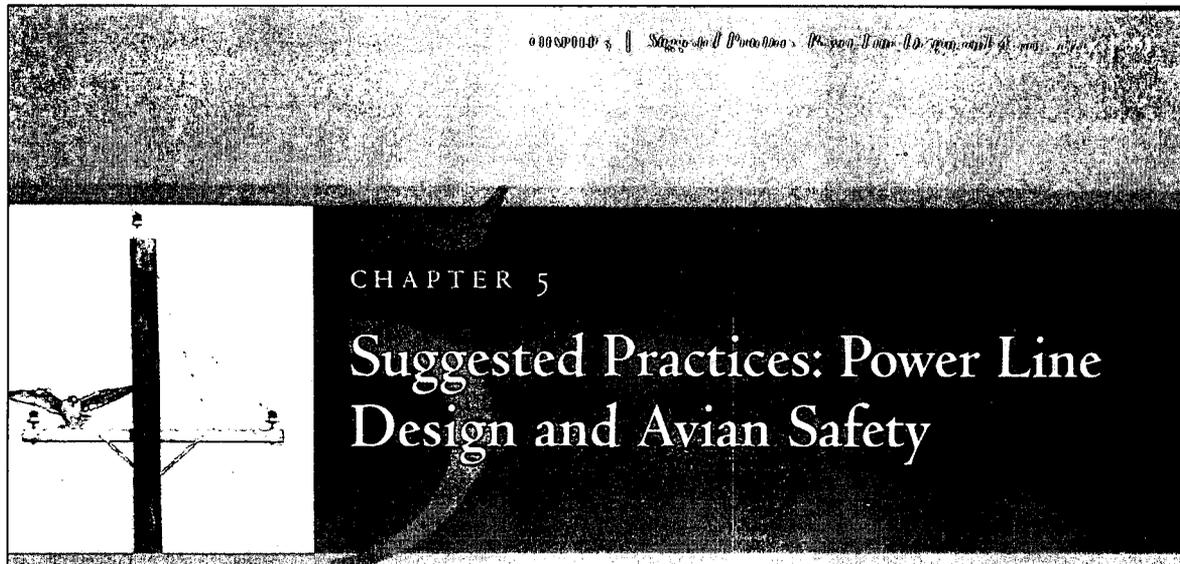


MIGRATORY BIRD PROTOCOL		
For assistance in dealing with bird issues, please call any of the following:		
Tim Hayes, Duke Energy: 317.838.1725   Cell: 317.902.2432 8:00 a.m. - 5:00 p.m.	Migratory Bird Hotline: 1.800.428.4337, ext. 2473 (BIRD) 24-hours a day, 7 days a week	Dan Arndt, Duke Energy: 317.838.0000 8:00 a.m. - 5:00 p.m.
The birds shown below are not protected under the Migratory Bird Treaty Act and it is not necessary to report any interactions related to them. If in doubt about a bird, treat the situation as if dealing with a protected bird. If you have any questions, please call.		
		
English Sparrow	European Starling	Pigeon

MIGRATORY BIRD HOTLINE: 1.800.428.4337, extension 2473 (BIRD)



# APPENDIX E. Construction Design Standards for Avian Safe Utility Facilities



## CHAPTER 5

# Suggested Practices: Power Line Design and Avian Safety

### IN THIS CHAPTER

- Introduction to Electrical Systems
- Avian Electrocutions and Power Line Design
- Suggested Practices
- Summary

This chapter address avian electrocution concerns from the engineering perspectives of design, construction, operations, and maintenance. It describes ways of designing new facilities and retrofitting existing facilities to be "avian-safe."

As communities grow, their demand for electricity increases. Additional power lines must be built to supply the additional power. The more miles of power lines there are, the greater the potential for birds to interact with electrical facilities and their inherent hazards.

Biologists and planners must have a basic understanding of power systems, power line designs, and related terminology to identify and implement successful solutions to bird electrocutions. This chapter discusses North American power lines, and the designs and configurations that present avian electrocution risks. For further reference, a glossary of terms is provided in Appendix D.

This 2006 edition of *Suggested Practices* supersedes the recommendations incorporated in the 1996 edition and includes updates

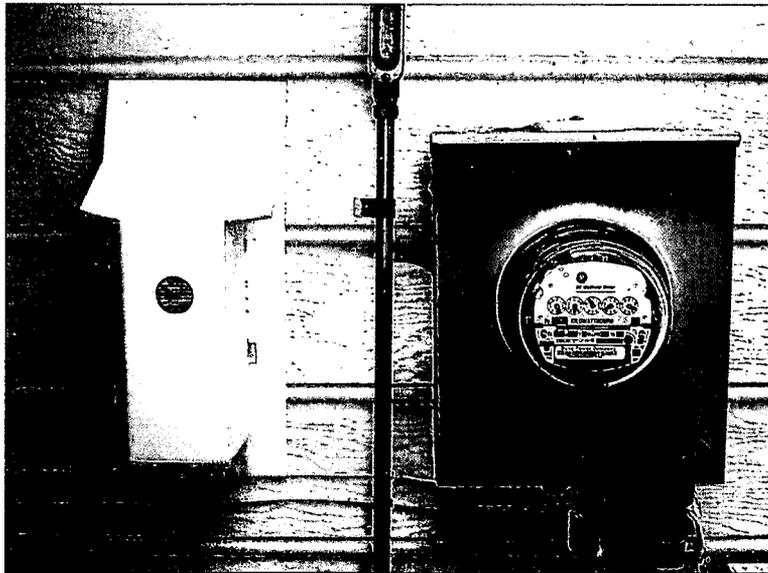
based on growing field experience and product performance testing. Despite efforts to present "state-of-the-art" recommendations, users of this manual should be aware that many wildlife protection products have not been tested or rated from an engineering perspective.<sup>20</sup> An IEEE Working Group under project P1656 is writing a guide entitled *Guide for Testing the Electrical, Mechanical, and Durability Performance of Wildlife Protective Devices Installed on Overhead Power Distribution Systems Rated up to 38 kV*.

The guide will provide technical guidance for testing wildlife guards and should be available in 2006. Utilities are encouraged to share or publish information regarding avian-safe power line construction and retrofitting experience that can be used to refine future editions of *Suggested Practices*.

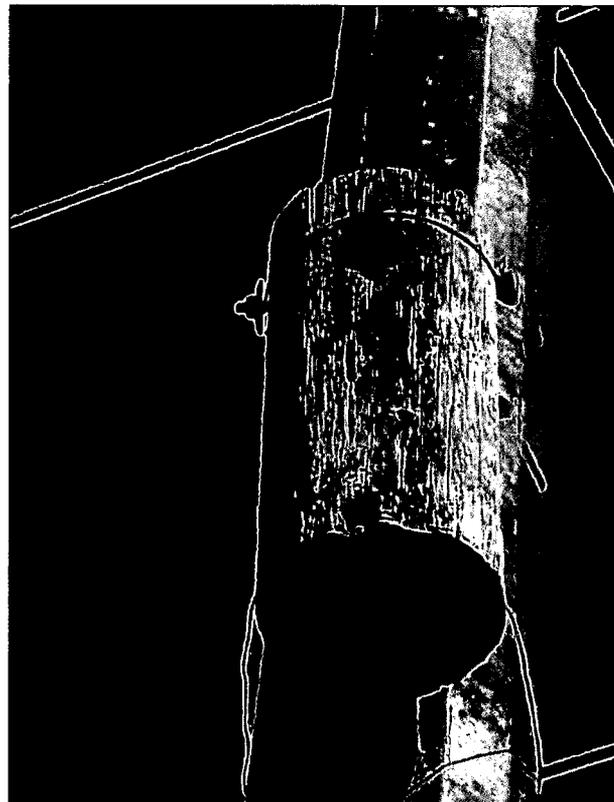
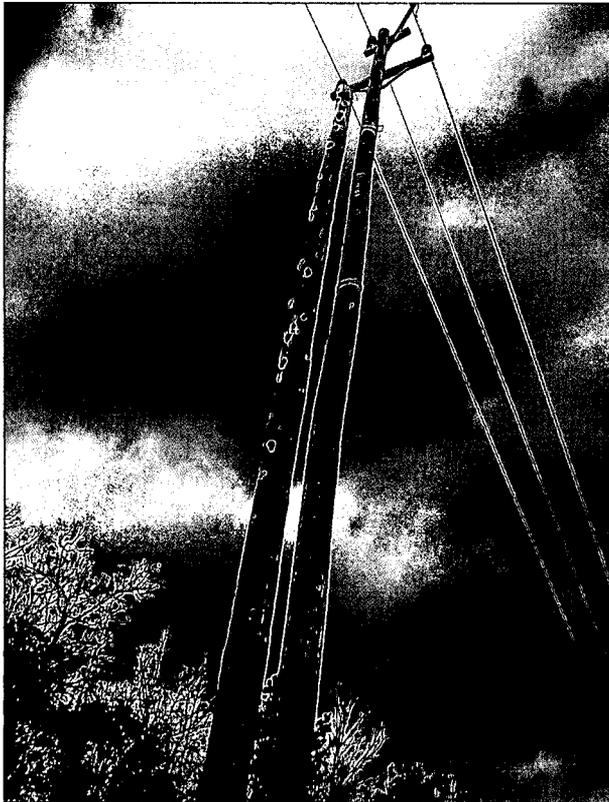
<sup>20</sup> However, the recommendations provided in this manual have been field tested by utilities and some results have been published in scientific and engineering journals.

APPENDIX F. Artificial Nest Box, Nesting Platforms and Woodpecker Nests in Poles

Duke Energy uses artificial nest boxes similar to the one pictured below when relocating small nests.

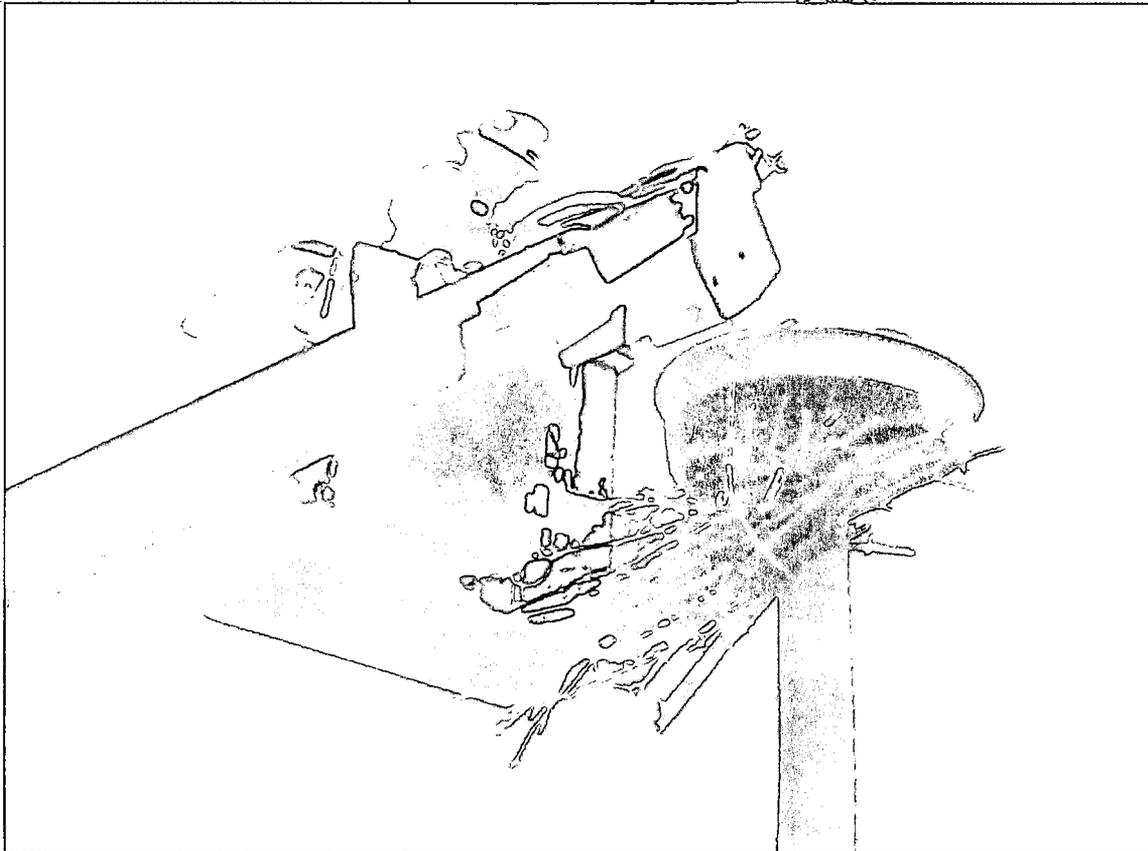
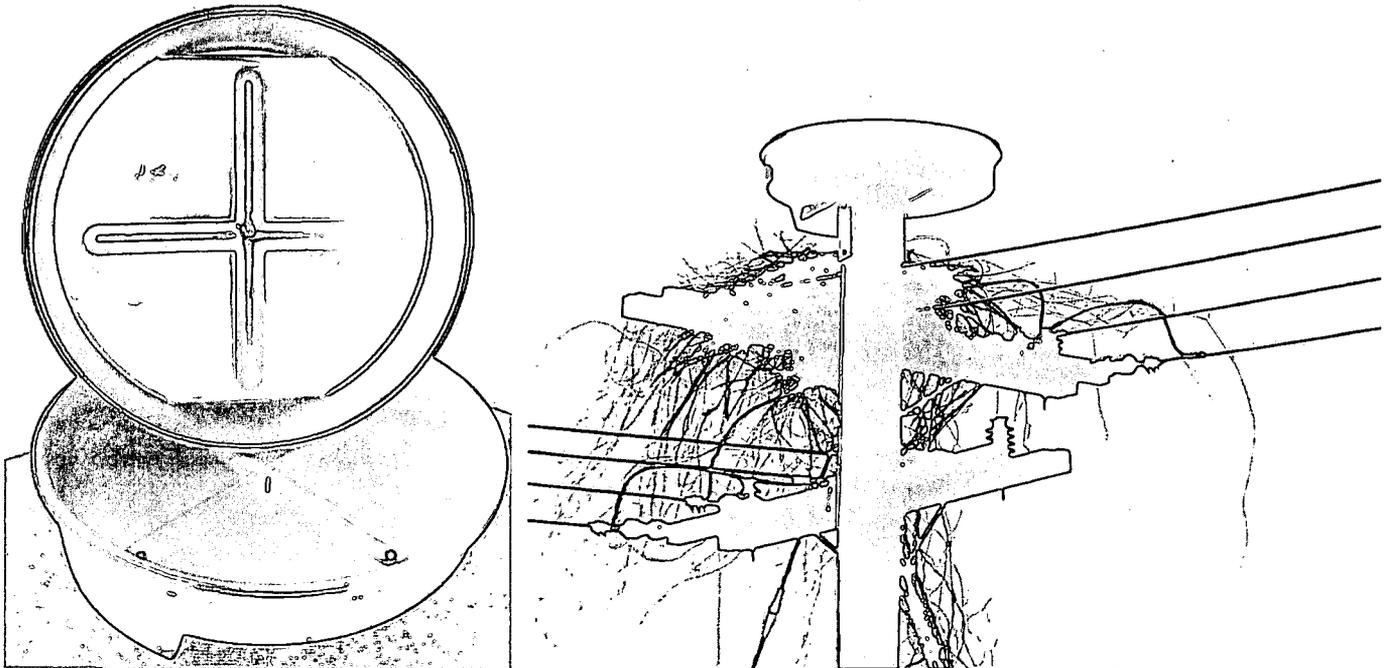


Duke Energy checks for active woodpecker nests prior to removing poles and leaves the pole until after the birds have fledged.



APPENDIX F. (continued)

Duke Energy installs nesting platforms similar to the one pictured below when nests are found on electrical poles.



# APPENDIX G. USFWS Annual Depredation Report.

## U.S. FISH & WILDLIFE SERVICE - MIGRATORY BIRD PERMIT OFFICE

P.O Box 49208  
Atlanta, Georgia 30054

### DEPREDATION - ANNUAL REPORT

**PERMITTEE:** Duke Power Company LLC d/b/a Duke Energy Carolinas, LLC

**PERMIT NUMBER:** MB000257-0

**ADDRESS:** 13339 Hagers Ferry Rd.  
Huntersville, NC 28078

**REPORT FOR CALENDAR YEAR:** 2005

**REPORT DUE DATE:**

**PHONE:** (704) 875-5457

**Email:** smreid@duke-energy.com

**Check here if reporting a change of name, address, or contact information.**

INSTRUCTIONS: Type or print the information requested below for all activities conducted under your permit during the year covered by this report, and return the completed report to the above address by the due date. Use of this form is not mandatory, but the same information must be submitted. A supplemental sheet is available if needed. Filling an annual report is a condition of your permit. Failure to file a timely report can result in permit suspension. If you had no activity under your permit during the report year state "No activity" on the form. MAKE SURE YOU SIGN & DATE THE CERTIFICATION STATEMENT BELOW BEFORE YOU SUBMIT YOUR REPORT. (50 CFR parts 13, 21, & 22)

Please provide a total quantity for each species reported. For instance, if 2 Canada geese were killed during each of 5 months, insert a Total of 10 in Killed column for Canada geese.

Species (Common Name)	Month Taken	Location (Town, county, State)	Number of birds		Numbers of		FINAL DISPOSITION (What you did with the birds, eggs, carcasses, e.g., destroyed, released, transferred to whom)
			Killed	Relocated*	Eggs Taken**	Nests Affected	
Canada goose	12	High Point, NC	1	0	0	0	removed from premises
Canada goose		<b>TOTALS:</b>	1	0	0	0	
unidentified bird species	12	Charlotte, NC	2	0	0	0	removed from premises
unidentified bird species	12	Charlotte, NC	0	0	0	7	removed inactive nest
unidentified bird species	12	Hickory, NC	1	0	0	0	removed from premises
unidentified bird species	12	Mooresville, NC	1	0	0	0	removed from premises
unidentified bird species	12	Nantahalla Area	1	0	0	0	removed from premises

**APPENDIX G. (continued).**

Species (Common Name)	Month Taken	Location (Town, county, State)	Number of birds		Numbers of		FINAL DISPOSITION (What you did with the birds, eggs, carcasses, e.g., destroyed, released, transferred to whom)
			Killed	Relocated*	Eggs Taken**	Nests Affected	
unidentified bird species	12	Winston-Salem, NC	1	0	0	0	removed from premises
unidentified bird species		<b>TOTALS:</b>	6	0	0	7	
Canada goose	1	Charlotte, NC	1	0	0	0	removed from premises
Canada goose	1	Charlotte, NC	1	0	0	0	buried
Canada goose	2	Greensboro, NC	1	0	0	0	removed from premises
Canada goose	2	Greensboro, NC	2	0	0	0	buried
Canada goose	3	Durham, NC	1	0	0	0	removed from premises
Canada goose	3	Durham, NC	1	0	0	0	bureid
Canada goose	3	Greensboro, NC	2	0	0	0	removed from premises
Canada goose	3	Charlotte, NC	2	0	0	0	removed from premises
Canada goose	3	Charlotte, NC	2	0	0	0	removed from premises
Canada goose	3	Greensboro, NC	2	0	0	0	buried
Canada goose	3	Charlotte, NC	1	0	0	0	buried
Canada goose	4	Charlotte, NC	1	0	0	0	removed from premises
Canada goose	4	Kannapolis, NC	1	0	0	0	removed from premises
Canada goose	5	Charlotte, NC	1	0	0	0	removed from premises

**APPENDIX G. (continued).**

Species (Common Name)	Month Taken	Location (Town, county, State)	Number of birds		Numbers of		FINAL DISPOSITION (What you did with the birds, eggs, carcasses, e.g., destroyed, released, transferred to whom)
			Killed	Relocated*	Eggs Taken**	Nests Affected	
Canada goose	5	Greensboro, NC	1	0	0	0	removed from premises
Canada goose	5	Mathews, NC	1	0	0	0	left remains alone
Canada goose	5	Rutherfordton, NC	1	0	0	0	removed from premises
Canada goose	5	N. Wilkesboro, NC	1	0	0	0	removed from premises
Canada goose		<b>TOTALS:</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	
hawk	6	Greensboro, NC	1	0	0	0	removed from premises
hawk		<b>TOTALS:</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	
osprey	4	Charlotte, NC	0	0	0	1	installed nesting platform
osprey	6	Salisbury, NC	0	0	0	1	relocated active nest
osprey	6	Spencer, NC	0	0	0	1	relocated inactive nest
osprey		<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	
robin	6	Mooresville, NC	1	0	0	0	removed from premises
robin		<b>TOTALS:</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	
unidentified bird species	1	Salisbury, NC	1	0	0	0	removed from premises

**APPENDIX G. (continued).**

Species (Common Name)	Month Taken	Location (Town, county, State)	Number of birds		Numbers of		FINAL DISPOSITION (What you did with the birds, eggs, carcasses, e.g., destroyed, released, transferred to whom)
			Killed	Relocated*	Eggs Taken**	Nests Affected	
unidentified bird species	1	Greensboro, NC	1	0	0	0	removed from premises
unidentified bird species	1	Charlotte, NC	2	0	0	7	removed from premises
unidentified bird species	1	Charlotte, NC	3	0	0	1	removed from premises
unidentified bird species	1	Charlotte, NC	0	0	0	8	removed inactive nest
unidentified bird species	1	Durham, NC	1	0	0	0	removed from premises
unidentified bird species	1	Durham, NC	1	0	0	0	removed from premises
unidentified bird species	1	Eden, NC	0	0	0	1	removed from premises
unidentified bird species	1	Winston-Salem, NC	1	0	0	0	removed from premises
unidentified bird species	1	Greensboro, NC	1	0	0	1	removed from premises
unidentified bird species	1	Winston-Salem, NC	1	0	0	0	removed from premises
unidentified bird species	1	Greensboro, NC	0	0	0	1	removed inactive nest
unidentified bird species	1	Hickory, NC	1	0	0	0	removed from premises
unidentified bird species	1	Hickory, NC	1	0	0	0	removed from premises
unidentified bird species	1	Rutherfordton, NC	1	0	0	0	removed from premises
unidentified bird species	1	Rutherfordton, NC	1	0	0	0	removed from premises
unidentified bird species	1	Salisbury, NC	1	0	0	0	removed from premises

**APPENDIX G. (continued).**

Species (Common Name)	Month Taken	Location (Town, county, State)	Number of birds		Numbers of		FINAL DISPOSITION (What you did with the birds, eggs, carcasses, e.g., destroyed, released, transferred to whom)
			Killed	Relocated*	Eggs Taken**	Nests Affected	
unidentified bird species	1	Eden, NC	0	0	0	0	1 removed inactive nest
unidentified bird species	2	Gastonia, NC	2	0	0	0	3 removed from premises
unidentified bird species	2	Hickory, NC	1	0	0	0	0 removed from premises
unidentified bird species	2	Charlotte, NC	4	0	0	0	1 removed from premises
unidentified bird species	2	Charlotte, NC	4	0	0	0	0 removed from premises
unidentified bird species	2	Charlotte, NC	0	0	0	0	1 removed inactive nest
unidentified bird species	2	Gastonia, NC	0	0	0	0	2 removed inactive nest
unidentified bird species	2	Greensboro, NC	4	0	0	0	0 removed from premises
unidentified bird species	2	Greensboro, NC	4	0	0	0	0 removed from premises
unidentified bird species	2	Madison, NC	1	0	0	0	0 removed from premises
unidentified bird species	2	Hickory, NC	1	0	0	0	0 removed from premises
unidentified bird species	2	Madison, NC	1	0	0	0	0 removed from premises
unidentified bird species	3	Salisbury, NC	0	0	0	0	1 removed from premises
unidentified bird species	3	Charlotte, NC	4	0	0	0	7 removed from premises
unidentified bird species	3	Charlotte, NC	0	0	0	0	1 relocated active nest with 5 eggs
unidentified bird species	3	Winston-Salem, NC	2	0	0	0	1 removed from premises

**APPENDIX G. (continued).**

Species (Common Name)	Month Taken	Location (Town, county, State)	Number of birds		Numbers of		FINAL DISPOSITION (What you did with the birds, eggs, carcasses, e.g., destroyed, released, transferred to whom)
			Killed	Relocated*	Eggs Taken**	Nests Affected	
unidentified bird species	3	Salisbury, NC	0	0	0	0	1 removed inactive nest
unidentified bird species	3	High Point, NC	0	0	0	0	3 removed from premises
unidentified bird species	3	High Point, NC	0	0	0	0	3 removed inactive nest
unidentified bird species	3	Charlotte, NC	4	0	0	0	0 removed from premises
unidentified bird species	3	Charlotte, NC	0	0	0	0	7 removed inactive nest
unidentified bird species	3	Greensboro, NC	2	0	0	0	3 removed from premises
unidentified bird species	3	Greensboro, NC	1	0	0	0	2 removed from premises
unidentified bird species	3	Greensboro, NC	0	0	0	0	2 removed inactive nest
unidentified bird species	3	Winston-Salem, NC	3	0	0	0	0 removed from premises
unidentified bird species	4	Charlotte, NC	8	0	0	0	2 removed from premises
unidentified bird species	4	Shelby, NC	0	0	0	0	1 removed from premises
unidentified bird species	4	Gastonia, NC	1	0	0	0	3 removed from premises
unidentified bird species	4	Greensboro, NC	2	0	0	0	1 removed from premises
unidentified bird species	4	High Point, NC	1	0	0	0	0 removed from premises
unidentified bird species	4	Salisbury, NC	0	0	0	0	0 nest with eggs; rescheduled work.
unidentified bird species	4	N. Wilkesboro, NC	1	0	0	0	0 removed from premises

**APPENDIX G. (continued).**

Species (Common Name)	Month Taken	Location (Town, county, State)	Number of birds		Numbers of		FINAL DISPOSITION (What you did with the birds, eggs, carcasses, e.g., destroyed, released, transferred to whom)
			Killed	Relocated*	Eggs Taken**	Nests Affected	
unidentified bird species	4	Winston-Salem, NC	3	0	0	0	removed from premises
unidentified bird species	4	Winston-Salem, NC	0	0	0	0	0 nest with 4 eggs; rescheduled work.
unidentified bird species	4	Winston-Salem, NC	0	0	0	0	1 nest with baby birds; rescheduled work.
unidentified bird species (5 tan eggs)	4	Mooreville, NC	0	0	0	0	1 relocated active nest
unidentified bird species	5	Hickory, NC	0	0	0	0	1 removed from premises
unidentified bird species	5	Winston-Salem, NC	0	0	0	0	1 nest with baby birds; rescheduled work.
unidentified bird species	5	Mooreville, NC	1	0	0	0	0 removed from premises
unidentified bird species	5	Nantahalla Area	1	0	0	0	0 removed from premises
unidentified bird species	5	Rutherfordton, NC	2	0	0	0	0 removed from premises
unidentified bird species	5	Salisbury, NC	1	0	0	0	0 removed from premises
unidentified bird species	5	Shelby, NC	6	0	0	0	0 removed from premises
unidentified bird species	5	Greensboro, NC	0	0	0	0	1 nest with baby birds; rescheduled work.
unidentified bird species	5	Winston-Salem, NC	2	0	0	0	1 removed from premises
unidentified bird species	5	Lenoir, NC	1	0	0	0	0 removed from premises
unidentified bird species	5	Troutman, NC	0	3	0	0	1 relocated active nest with 3 chicks
unidentified bird species	5	Charlotte, NC	0	0	0	0	1 relocated active nest

**APPENDIX G. (continued).**

Species (Common Name)	Month Taken	Location (Town, county, State)	Number of birds		Numbers of		FINAL DISPOSITION (What you did with the birds, eggs, carcasses, e.g., destroyed, released, transferred to whom)
			Killed	Relocated*	Eggs Taken**	Nests Affected	
unidentified bird species	5	N. Wilkesboro, NC	4	0	0	0	0 removed from premises
unidentified bird species	5	Greensboro, NC	2	0	0	6	6 removed from premises
unidentified bird species	5	Burlington, NC	1	0	0	0	0 removed from premises
unidentified bird species	5	Charlotte, NC	0	0	0	1	1 nest with baby birds; rescheduled work.
unidentified bird species	5	Charlotte, NC	0	0	0	1	1 relocated active nest with eggs
unidentified bird species	5	Cramerton, NC	0	1	0	0	0 relocated bird
unidentified bird species	5	Durham, NC	1	0	0	0	0 removed from premises
unidentified bird species	5	Durham, NC	0	0	0	1	1 nest with eggs; rescheduled work.
unidentified bird species	5	Elkin, NC	2	0	0	0	0 removed from premises
unidentified bird species	5	Gastonia, NC	2	0	0	3	3 removed from premises
unidentified bird species	5	Charlotte, NC	4	0	0	0	0 removed from premises
unidentified bird species	6	Winston-Salem, NC	0	0	0	1	1 relocated active nest
unidentified bird species	6	Lenoir, NC	4	0	0	1	1 removed from premises
unidentified bird species	6	Nantahalla Area	2	0	0	0	0 removed from premises
unidentified bird species	6	Monroe, NC	0	0	0	1	1 relocated active nest
unidentified bird species	6	Mooresville, NC	0	2	0	0	0 relocated active nest

**APPENDIX G. (continued).**

Species (Common Name)	Month Taken	Location (Town, county, State)	Number of birds		Numbers of		FINAL DISPOSITION (What you did with the birds, eggs, carcasses, e.g., destroyed, released, transferred to whom)
			Killed	Relocated*	Eggs Taken**	Nests Affected	
unidentified bird species	6	Mt. Airy, NC	6	0	0	0	removed from premises
unidentified bird species	6	N. Wilkesboro, NC	3	0	0	0	removed from premises
unidentified bird species	6	Reidsville, NC	3	0	0	0	removed from premises
unidentified bird species	6	Rutherfordton, NC	9	0	0	0	removed from premises
unidentified bird species	6	Salisbury, NC	3	0	0	0	removed from premises
unidentified bird species	6	Salisbury, NC	0	2	0	2	relocated active nest
unidentified bird species	6	Shelby, NC	1	0	0	0	removed from premises
unidentified bird species (3 eggs wht w/brn spts)	6	Midland, NC	0	0	0	1	relocated active nest
unidentified bird species	6	Kannapolis, NC	4	0	0	0	removed from premises
unidentified bird species	6	Winston-Salem, NC	5	0	0	0	removed from premises
unidentified bird species	6	Elkin, NC	2	0	0	0	removed from premises
unidentified bird species	6	Brevard, NC	1	0	0	0	removed from premises
unidentified bird species	6	Charlotte, NC	4	0	0	1	removed from premises
unidentified bird species	6	Charlotte, NC	0	0	0	1	active nest; rescheduled work.
unidentified bird species	6	Charlotte, NC	0	0	0	1	nest with baby birds; rescheduled work.
unidentified bird species	6	Durham, NC	1	0	0	0	removed from premises

**APPENDIX G. (continued).**

Species (Common Name)	Month Taken	Location (Town, county, State)	Number of birds		Numbers of		FINAL DISPOSITION (What you did with the birds, eggs, carcasses, e.g., destroyed, released, transferred to whom)
			Killed	Relocated*	Eggs Taken**	Nests Affected	
unidentified bird species	6	Burlington, NC	1	0	0	0	removed from premises
unidentified bird species	6	Eden, NC	1	0	0	0	removed from premises
unidentified bird species	6	High Point, NC	0	0	0	1	relocated active nest
unidentified bird species	6	Gastonia, NC	3	0	0	1	removed from premises
unidentified bird species	6	Greensboro, NC	4	0	0	0	removed from premises
unidentified bird species	6	Greensboro, NC	0	0	0	1	relocated active nest with 5 brown speckled eggs
unidentified bird species	6	Hendersonville, NC	4	0	0	0	removed from premises
unidentified bird species	6	Hickory, NC	6	0	0	0	removed from premises
unidentified bird species	6	High Point, NC	3	0	0	0	removed from premises
unidentified bird species	6	Durham, NC	0	0	0	1	rescheduled work
unidentified bird species		<b>TOTALS:</b>	171	8	0	98	
woodpecker	6	Mooresville, NC	1	0	0	0	buried
woodpecker		<b>TOTALS:</b>	1	0	0	0	

\*Relocated in the wild.    \*\*Taken=destroyed, addled, oiled, removed from wild.

**CERTIFICATION:** I certify that the information in this report is true and correct to the best of my knowledge. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_