2015

Survey of Bald Eagle and Osprey Nests between Eaton's Ferry and the Carolina Sub-station, Roanoke Rapids, NC, January 2015

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Project Partners:

Dominion
The Center for Conservation Biology

The Center for Conservation Biology is an organization dedicated to discovering innovative solutions to environmental problems that are both scientifically sound and practical within today's social context. Our philosophy has been to use a general systems approach to locate critical information needs and to plot a deliberate course of action to reach what we believe are essential information endpoints.

BACKGROUND

Objectives

The Center for Conservation Biology (CCB) conducted a single aerial survey to identify bald eagle and osprey nests within the immediate vicinity of the current power line project between Eaton's Ferry and the Carolina sub-station, near Roanoke Rapids, NC. Efforts were made to identify all bald eagle nests in the immediate vicinity of the power line right-of-way, with particular emphasis on nests that have management buffer overlaps with project boundaries and osprey nests that occur on Dominion Power structures. In addition to the nest survey, efforts were made to identify private structures that encroach upon Dominion's right-of-way.

METHODS

Study Area

The survey area included the line 22 right-of-way between Eaton's Ferry and the Carolina sub-station, and the surrounding land within approximately 1000 feet of the right-of-way.

Nest Survey

All forested components and suitable nesting structures on and within 1000 feet of the line 22 right-of- were surveyed for evidence of nesting Bald Eagles and Ospreys. A high-wing Cessna 172 aircraft was used to systematically overfly the land surface at an altitude of approximately 100 m to detect eagle and osprey nests. The survey flight consisted of a flight down the right-of-way to identify nesting activity on line structures, and flights to the north and south of the right-of-way to identify nesting activity within forests in the immediate vicinity of the right-of-way (fig 1). All nests detected were plotted on recent aerial imagery layers on GPS enabled tablet computers and given a unique alpha-numeric code. Each nest was examined to determine its structural condition, nesting activity, and nesting structure. The nest survey was conducted on 21 January 2015.

SURVEY FINDINGS

Bald Eagles

Two bald eagle territories were observed to be active within the survey area. The nests of both territories occur very close to the line 22 right-of-way, and have primary management buffers that overlap with line 22 poles (fig 2 and fig 3). Nest HA-14-04 was observed to be active with two adult eagles on the nest. Nest HA-15-01 was observed to be in good condition with recent work on the nest. One pair of adult eagles was observed perched near nest HA-15-01.

Line work would likely be visible and would occur within the primary 330 foot management buffer of both nests. Current USFWS management guidelines suggest landscape buffers and a 660 foot buffer for power line construction work that will be visible from the nest. Since similar work is being conducted within 1 mile of the nests the buffer by be reduced to "as

close as existing tolerated activity of similar scope" (USFWS 2007). It is recommended Dominion contact the local U.S. Fish and Wildlife Service Field Office for additional guidance.

Ospreys

Eight osprey nests were observed, all on power line towers/poles (see attached spread sheet and photos). All nests were constructed during previous years and are not currently active. After speaking with David Allen, at the North Carolina Wildlife Resources Commission, it was determined North Carolina follows the USFWS guidelines and allows inactive osprey nests to be removed without a permit at any time. Inactive nest are defined as nests without eggs or young. Once eggs or young are present, nests are protected under the Migratory Bird Treaty Act. For further information please contact David Allen at 252-448-1546.

Structures

Efforts were made to identify private structures that may encroach upon Dominion's right-of-way, and are not visible on current aerial imagery. Seven deer stand/blinds were observed that may encroach up right-of-ways (see attached spread sheet and photos).

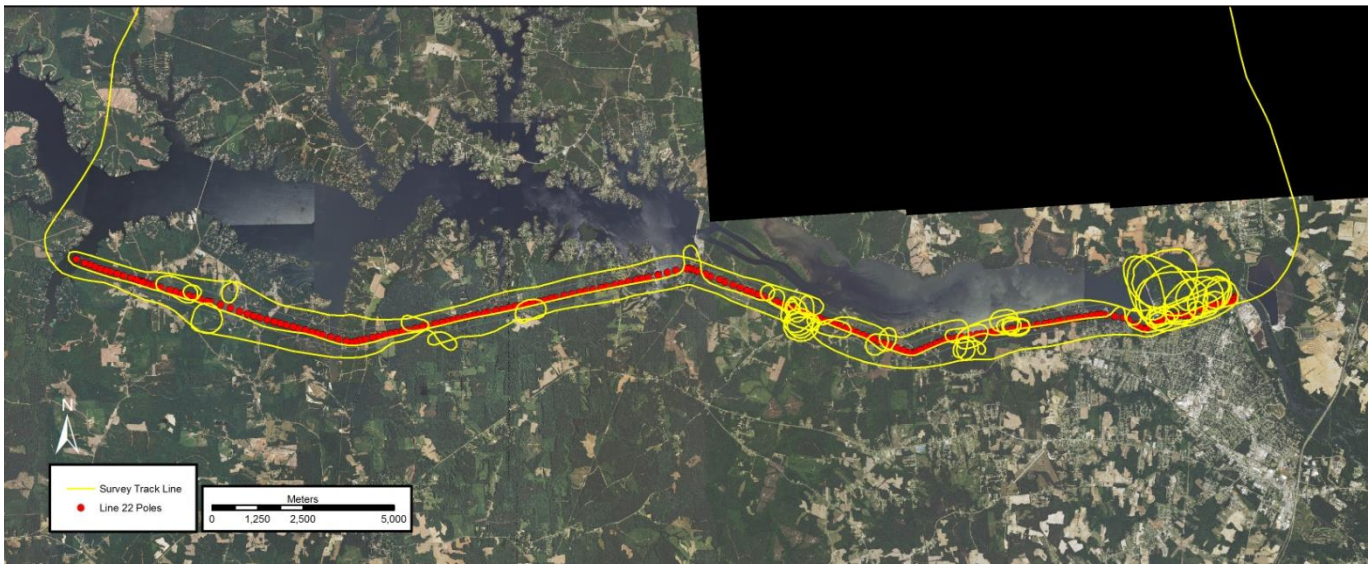

Figure 1. Flight track of nest survey.

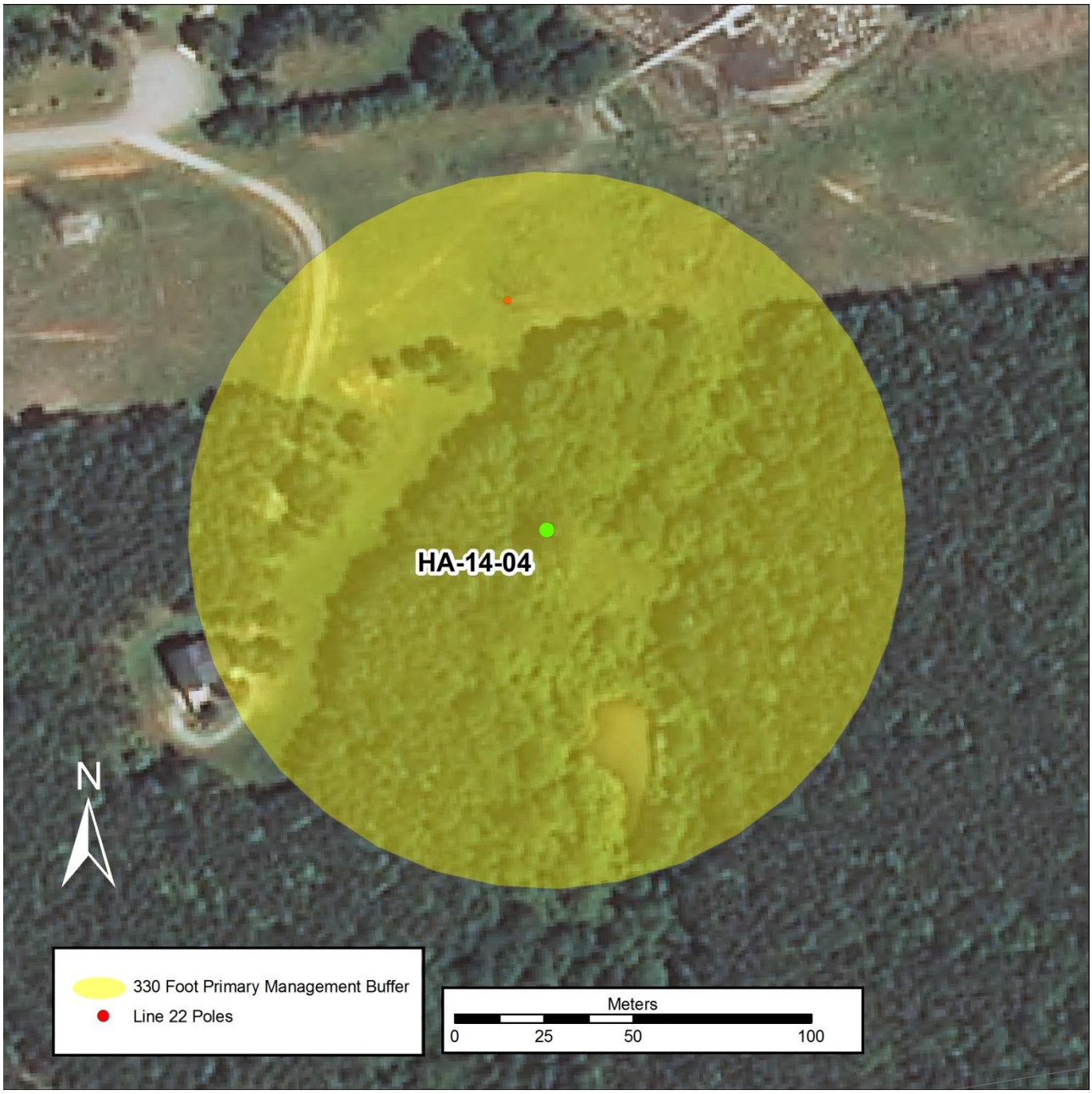

Figure 2. Map of bald eagle nest HA-14-04 with 330 foot primary management buffer.

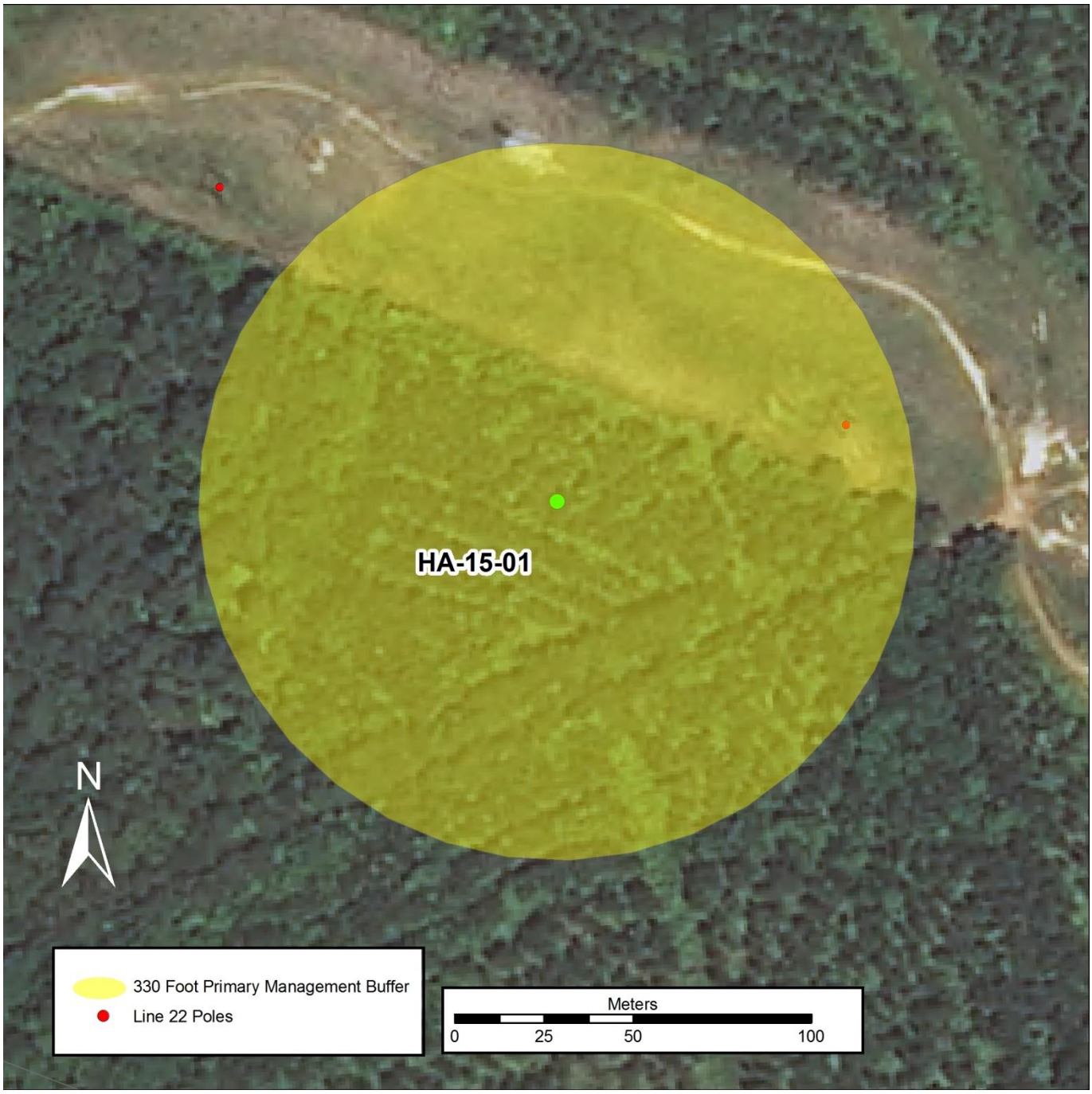

Figure 3. Map of bald eagle nest HA-15-01 with 330 foot primary management buffer.

LITERATURE CITED

U.S. Fish and Wildlife Service. 2007. National Bald Eagle Management Guidelines. http://www.fws.gov/midwest/eagle/pdf/NationalBaldEagleManagementGuidelines.pdf

Appendix I. Table of observations

Observation Number	Observation Structure	Species	Nest Structure	Comment	Nearest Line 22 Structure	Nearest Distance (Meters)	X_WGS84_D_	Y_WGS84_D_
OSPR_15_1	Nest	Osprey	2141/8	Old osprey nest	22/2602, 90/5 Pending Replacement	29.7	-77.653758	36.477707
OSPR_15_2	Nest	Osprey	2141/6, 239/63	Old osprey nest	22/2606, 90/9 Pending Replacement	57.2	-77.659088	36.476194
OSPR_15_3	Nest	Osprey	2141/3, 239/60	Old osprey nest	22/2610, 90/13 Pending Replacement	83.7	-77.666375	36.475455
OSPR_15_4	Nest	Osprey	213/54, 225/54	Old osprey nest	22/2620, 90/23 Pending Replacement	50.0	-77.679926	36.475402
D_1	Deer Stand/Blind			Deer Stand/Blind	22/2639 Pending Replacement	21.3	-77.713442	36.474094
D_2	Deer Stand/Blind			Deer Stand/Blind	22/2637 Pending Replacement	9.0	-77.710207	36.474380
D_3	Deer Stand/Blind			Deer Stand/Blind	22/2641 Pending Replacement	47.7	-77.718520	36.473463
OSPR_15_5	Nest	Osprey	213/27, 225/27	Old osprey nest	22/2663 Pending Replacement	44.6	-77.752650	36.471029
D_4	Deer Stand/Blind			Deer Stand/Blind	22/2686 Pending Replacement	84.2	-77.790665	36.484044
OSPR_15_6	Nest	Osprey	213/15, 225/15	Old osprey nest	22/2682 Pending Replacement	57.5	-77.783600	36.481602
OSPR_15_7	Nest	Osprey	213/12, 225/12	Old osprey nest	22/2686 Pending Replacement	40.9	-77.791275	36.484212
D_5	Deer Stand/Blind			Deer Stand/Blind	22/2743 Pending Replacement	78.1	-77.901499	36.478729
D_6	Deer Stand/Blind			Deer Stand/Blind	22/2745 Pending Replacement	87.1	-77.903743	36.478415
OSPR_15_8	Nest	Osprey	22/2777	Old osprey nest	22/2777 Pending Replacement	0.0	-77.965896	36.488246
HA_15_01	Nest	Bald Eagle	Loblolly	Active eagle nest,pair near nest	22/2677 Pending Replacement	83.6	-77.776394	36.478278
C_1	constuction			Logging, log landing	22/2665 Pending Replacement	35.6	-77.756586	36.472283
HA_14_04	Nest	Bald Eagle	Loblolly	Active eagle nest,pair on nest	22/2648 Pending Replacement	65.3	-77.731005	36.471707
D_7	Deer Stand/Blind			Deer Stand/Blind	22/2679 Pending Replacement	19.8	-77.779253	36.479929