

*Received by
Administrator via e-mail
on 11/12/19 PGN*

MEMORANDUM

To: Sarah Allen
From: Sarah Barnum
Date: May 14, 2019
Re: **SRP Raptor Nest Survey – Foot Survey Results**

As describe in a memo dated February 7, 2019, a two-step survey was used to search for raptor nests potentially present in the Seacoast Reliability Project (SRP) corridor, consisting of an initial helicopter survey in February, followed by a foot survey after spring hawk migration was essentially complete, but prior to full leaf-out. The purpose of the helicopter portion of the survey was to identify existing nests from the previous nesting season, as some species reuse nests, or returning raptor pairs may be likely to place new nests in nearby suitable locations. As described in a memo dated February 22, 2019, no raptor nests were observed during the helicopter survey.

The foot portion of the survey was conducted on May 7 and 9, 2019, by Sarah Barnum, CWB®. On May 7, the survey was conducted between 12:00 and 16:00 under overcast skies with a light breeze and temperatures between 60° and 70°f. On May 9, the survey was conducted between 9:45 and 15:30 under sunny skies with a moderate breeze and temperatures between 55° and 65°f. All survey was conducted from the right-of way (ROW), and relied on visual scans of the canopy, where leaf-out was just beginning (see attached photos), with binoculars and the unaided eye. The presence of birds in general, and raptors in particular was noted, and locations where raptors were observed were more intensively scanned. The survey effort was focused along sections of the corridor with minimal development and disturbance sources, as these were deemed to have a higher potential to host a raptor nest. Surveyed sections are identified in Table 1 below, by Construction Structure numbers, along with notes on the surrounding habitat and avian species observed during the survey.

In summary, no raptor nests were observed. Two broad-winged hawks were observed circling and calling near Structure 51 on May 7, but did not land or otherwise display interest in a specific location that would suggest a nest. Both birds arrived from west/northwest and flew off to the northeast, and scanning of the immediate area did not identify a nest in any of the surrounding trees. On May 9, a single red-tailed hawk (RTHA) was observed circling low from Structures 110 to 109, another single RTHA was observed soaring/circling at Structure 86, and over a period of about 15 minutes one to three RTHAs were observed between Structures 103 and 105. Two of these birds were observed circling singly and together, and appeared tolerant of each other, likely indicating they were a pair. One bird eventually perched in a tree along the ROW edge, then became agitated and took off from its perch, joining two other RTHAs circling above, and all three circled up higher until they were lost in the blue. The ROW in this location borders on a large hay field which would provide good hunting

habitat for RTHAs. Scans of the trees at the edge of the ROW in this location did not identify a nest, although there were a few larger wolf trees in this location that would be suitable nest trees.

Table 1. ROW sections surveyed for raptor nests, including location, date, and surrounding habitat. Most bird observations were by ear, but all raptors were also visually observed.

Location	Date/Time	Habitat	Birds Observed
Structure 15 - 12	May 7, 12:00-12:40	RR tracks and HW dominated forest with low density single family home development to east, predominantly SW forest to west	Turkey vulture (4) Herring gull American Crow Chipping Sparrow Winter wren Ovenbird Black-and-white warbler Tufted titmouse
Structures 28 - 34	May 7, 13:15 – 14:00	This section straddles Mill Rd and abut RR tracks, but is offset from tracks by a topography and a forest buffer; surrounded by mixed forest with large HWs	Black-throated green warbler Black-and-white warbler Northern parula Ovenbird Blue-headed vireo Tufted titmouse Black-capped chickadee Ruby-crowned kinglet Chipping sparrow American redstart Yellow warbler Common raven American goldfinch Red-bellied woodpecker
Structures 49 - 56	May 7, 14:30 – 16:00	This section includes an early successional parcel with a few large trees, and was otherwise surrounded by SW dominated mixed forest. Low density single family housing to the south.	Broad-winged hawk (2) Blue jay American goldfinch Black-and-white warbler Pine warbler Prairie warbler Eastern towhee Tufted titmouse Black-capped chickadee Wild turkey (sign)
Structures 72 - 81	May 9, 14:15 – 15:30	This section is surrounded by mixed forest.	Scarlet tanager American goldfinch Chipping sparrow Tufted titmouse Black-capped chickadee Barred owl – hooting in the distance
Structures 88 - 85	May 9, 12:30 – 13:10	This section is surrounded by mixed forest, dominated by larger HWs to southwest.	Red-tailed hawk American goldfinch Red-winged blackbird Field sparrow

Location	Date/Time	Habitat	Birds Observed
			Ovenbird Eastern towhee Northern cardinal Gray catbird Black-capped chickadee Common yellowthroat Nashville warbler Blue-winged warbler
Structures 56 – 51 Note: entry for other end of this section (Str 50) denied by land owner	May 9, 13:30 – 14:00	This section is surrounded by mixed forest, dominated by larger HWs to southwest.	Black-capped chickadee Common yellow throat White-throated sparrow Chipping sparrow Tufted titmouse Great-crested fly catcher Northern cardinal
Structures 100 - 106	May 9, 10:45 – 11:45	This section is surrounded by mixed forest, and crosses a hayfield. There are larger HW trees on the hayfield edge.	Red-tailed hawk (3) Common yellowthroat Blue jay Black-capped chickadee Tufted titmouse Song sparrow House finch Eastern towhee Black-and-white warbler Gray catbird American goldfinch Pine warbler Red-bellied woodpecker
Structures 110 - 107	May 9, 9:45 – 10:20	This section is surrounded by mixed forest, and low density single family housing on both sides of the ROW.	Red-tailed hawk Eastern bluebird Northern cardinal Baltimore oriole Chipping sparrow Black-capped chickadee Blue jay



Photo 1. Illustration of leaf-out conditions on May 7, 2019 in SRP ROW



Photo 2. Illustration of leaf-out conditions on May 9, 2019 in SRP ROW