

Wheeler Ridge: Northern Spotted Owl Surveys

FINAL Report

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Submitted to: Wheeler Ridge, LLC
Ben Alworth, Project Manager
4597 Stemilt Hill Rd
Wenatchee, WA 98801
Contract: Wheeler Ridge: Northern Spotted Owl Surveys
Project #1806

PREPARED BY:

WASHINGTON CONSERVATION SCIENCE INSTITUTE

Andrea L. Lyons, MS; William L. Gaines, PhD; James Begley, MS

Table of Contents

1.0 INTRODUCTION AND OBJECTIVE	3
1.1 Background	3
2.0 METHODS and RESULTS	3
3.0 LITERATURE CITED	4
TABLES AND FIGURES	5
Table 1. Northern spotted owl survey results for Wheeler Ridge Project Site.	5
Figure 1. Location of Wheeler Ridge Proposed Project Area relative to range of northern spotted owl in Washington.	6
Figure 2. Location of Wheeler Ridge Proposed Project Area and spotted owl survey route and stations. ...	7
Figure 3. Potential northern spotted owl habitat relative to the Wheeler Ridge Proposed Project Area and spotted owl survey route and stations.	8
APPENDIX A. Data forms for Wheeler Ridge spotted owl survey visits.....	9

1.0 INTRODUCTION AND OBJECTIVE

Wheeler Ridge, LLC, has proposed orchard development on private land within the Wheeler Ridge area of the Stemilt Basin, approximately 6 miles south of Wenatchee, Washington (Figure 1). The proposed development is located along the eastern edge of the range of the northern spotted owl (*Strix occidentalis caurina*) (Figure 2), in the vicinity of two historical northern spotted owl activity centers and potentially suitable spotted owl habitat.

In the summer of 2018, Washington Conservation Science Institute identified suitable habitat and conducted a series of calling surveys for northern spotted owls in the Wheeler Ridge project area. This survey program was initiated as part of the requirements set forth under Washington State Environmental Policy Act (SEPA) and the Endangered Species Act (ESA), to avoid incidental take.

1.1 Background

The proposed development site is located within Section 17 (T21N R20E). This report summarizes the results of the Activity Center Assessment and subsequent surveys. Historical spotted owl data provided by Washington Department of Fish and Wildlife indicated a single owl (unknown status) was located approximately 0.9 miles west of the proposed project area in 1996, and a single resident owl was located approximately 1.8 miles to the south in 1998. Aerial imagery indicates the latter location has been heavily harvested since then. Additional surveys were conducted throughout the Mission Ridge Road and Squilchuck State Park area for the Mission Ridge Road Construction Project in 2005 and 2006 and no spotted owls were detected (US Forest Service pers. comm.).

2.0 METHODS and RESULTS

The Wheeler Ridge spotted owl activity center assessment and survey protocol followed U.S. Fish and Wildlife Service guidelines (USFWS 2012).

Activity Center Assessment

Activity Center #1224: Resident, territorial single, 1998

The perimeter of the 1.8 mile radius home range circle for this activity center is just adjacent to the proposed project site. Aerial imagery indicates the stand that includes habitat within 0.25 mile of Activity Center #1224 has been removed so this site was not visited.

Activity Center #1189: Single – unknown status, 1996

The 1.8 mile radius home range circle for this activity center overlaps part of the proposed project area. We conducted a daytime search of spotted owl habitat within 0.5 miles of Activity Center #1189. The search effort consisted of walking through potential habitat and spot calling. No spotted owls were detected.

Station Surveys

We used a combination of spotted owl suitable habitat mapped by Davis et al. (2012), stand data collected for the Wheeler Ridge project (Schellhass 2015), aerial imagery and field validation to identify potential suitable spotted owl habitat within and adjacent to the project site. Vegetation in the project area is dominated by even-aged ponderosa pine and mixed conifer stands that lack canopy cover or old forest structure. Most of the vegetation would not be classified as nesting, roosting and foraging spotted owl habitat, although patches of suitable habitat may be found in the vicinity of the project site. Subsequent field validation indicated vegetation removal within the project site would not impact suitable spotted owl habitat. As a result, we initiated Disturbance Only Surveys. We identified areas with potential suitable habitat within ¼ mile of the project site (Figure 3). Habitat on the east side of the project site was of lower quality but was

included in the survey to ensure thorough coverage. Habitat to the west of the project site, toward Activity Center #1189, was of higher quality. We located five survey calling stations across the project area. Calling stations covered an area of approximately 560 acres (assuming approximate calling distance of ¼ mile). Six surveys were conducted within the nesting period March 1 – August 31 (Table 1). Surveys were spaced out over the nesting period, with three visits before June 30 (one per month), and the remaining three visits after June 30. No spotted owls were detected.

Other owl species detected included northern pygmy owls (*Glaucidium gnoma*), great-horned owl (*Bubo virginianus*), and flammulated owls (*Psiloscoops flammeolus*). Other wildlife heard during the surveys included common nighthawk (*Chordeiles minor*), wild turkey (*Meleagris gallopavo*), elk (*Cervus elaphus*) and coyote (*Canis latrans*).

3.0 LITERATURE CITED

Schellhass, R. 2015. Report prepared for Wheeler Ridge, LLC. Forest Stewardship Management Plan. 65 pp.

US Fish and Wildlife Service. 2012. Northern spotted owl survey protocol (January 2012).

TABLES AND FIGURES

Table 1. Northern spotted owl survey results for Wheeler Ridge Project Site.

Visit Number	Date	Complete Survey	Spotted Owls Detected?
1	26 April 2018	Yes	No
2	31 May 2018	Yes	No
3	11 June 2018	Yes	No
4	19 July 2018	Yes	No
5	26 July 2018	Yes	No
6	3 August 2018	Yes	No

Figure 1. Location of Wheeler Ridge Proposed Project Area relative to range of northern spotted owl in Washington.

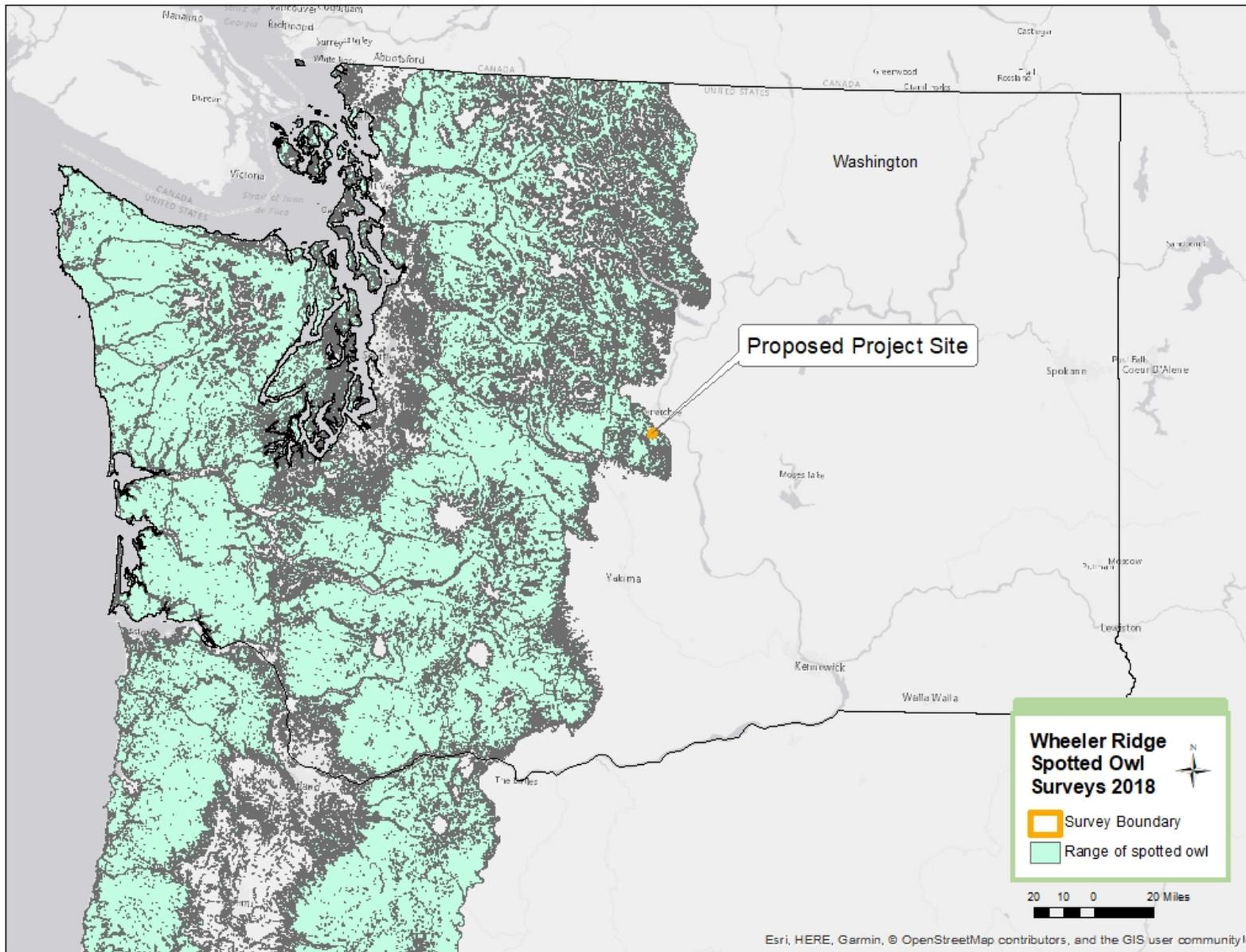


Figure 2. Location of Wheeler Ridge Proposed Project Area and spotted owl survey route and stations.

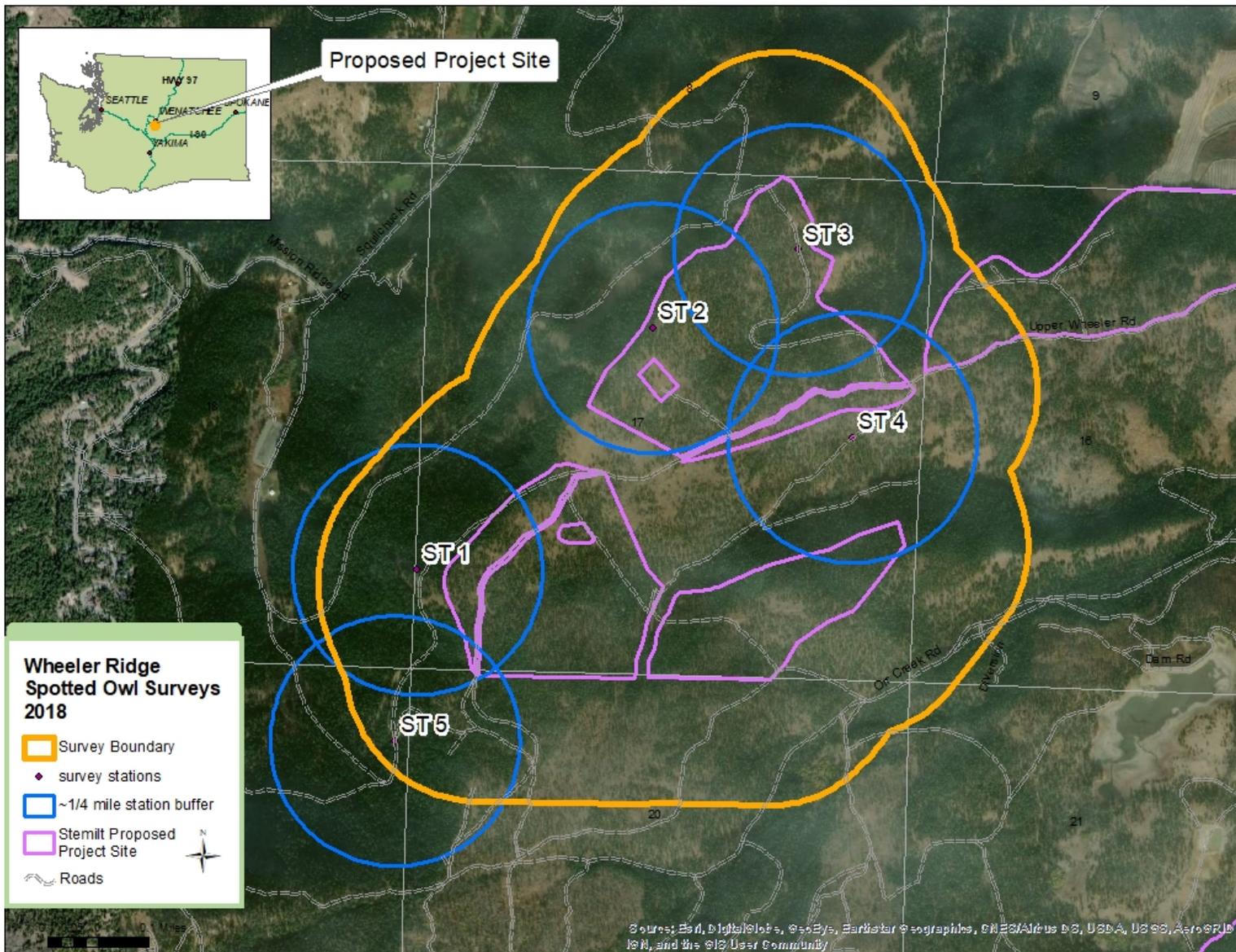
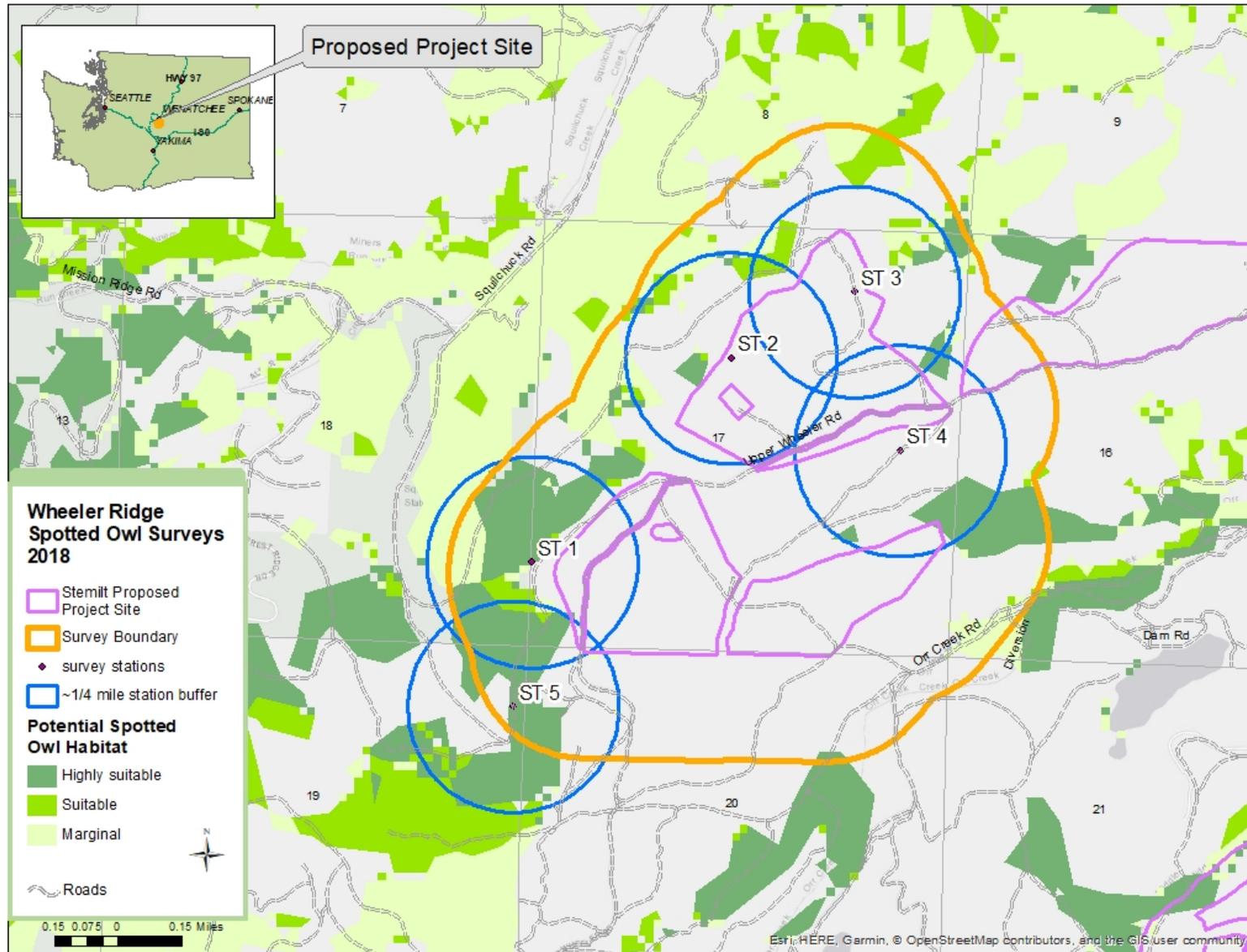


Figure 3. Potential northern spotted owl habitat relative to the Wheeler Ridge Proposed Project Area and spotted owl survey route and stations.



APPENDIX A. Data forms for Wheeler Ridge spotted owl survey visits.

Appendix 6: Template Field Data Collection Form

SITE VISIT FORM

SITE ID NUMBER: WP 1 SITE NAME Wheeler Ridge STATE: WA

VISIT #: 4 OUTING #: 1 YEAR: 2018 OUTING DATE: 19 July

LANDOWNER: Stomilt PHYSIOGRAPHIC PROVINCE _____

COMPLETE VISIT: (Y/N) Y OBSERVERS: A Lyons

TYPE OF SURVEY: ACS (SC) CC FO RV AV OPP

ACS=Activity Center Search SC=Station Calling CC=Continuous Calling FO=Follow Up Outing RV=Reproductive Visit
AV=Additional Visit OPP=Opportunistic Siting

HISTORICAL SITE CENTER LOCATION (use if historical site center is being surveyed)

T _____ R _____ Sec _____ 1/4 _____ 1/16 _____ WEATHER: Clear calm, 75°

OWLS DETECTED: (Y/N)

Station	Start	End	SPP	Obs Type ¹	Sex	Bearing/ Distance	T / R / Sec	1/4	1/16	UTM East	UTM North
4	2000	2010	Ø								
3	2019	2029	Ø								
2	2043	2053	Ø	dog							
1	2104	2114	Ø								
5	2120	2130	Ø								

ØB witnessed owl before started call bit breezier on this side

¹ObsType - V=Visual A=Audio S=Sign

Appendix 6: Template Field Data Collection Form
SITE VISIT FORM

SITE ID NUMBER: WR 1 SITE NAME Wheeler Ridge STATE: WA

VISIT #: 5 OUTING #: 1 YEAR: 2019 OUTING DATE: 26 July

LANDOWNER: Stemilt PHYSIOGRAPHIC PROVINCE: _____

COMPLETE VISIT: (Y/N) Y OBSERVERS: A Lyons

TYPE OF SURVEY: ACS (SC) CC FO RV AV OPP
ACS=Activity Center Search SC=Station Calling CC=Continuous Calling FO=Follow Up Outing RV=Reproductive Visit AV=Additional Visit OPP=Opportunistic Siting

HISTORICAL SITE CENTER LOCATION (use if historical site center is being surveyed)
 T _____ R _____ Sec _____ 1/4 _____ 1/16 _____ WEATHER: Still, Warm 80° c 9pm
Partly cloudy

OWLS DETECTED: (Y/N)

Station	Start	End	SPP	Obs Type ¹	Sex	Bearing/ Distance	T / R / Sec	1/4	1/16	UTM East	UTM North
2	2056	2106	Ø								
3	2116	2126	Ø								
4	2135	2145	Ø								
1	2001	2011	Ø								
5	2016	2026	Ø								

Pygmy
 lots of nighthawks
 airplane

¹ObsType = V=Visual A=Audio S=Sign

