Eddy Gulch Late-Successional Reserve Northern Spotted Owl, Northern Goshawk and Landbird Survey Report 2008

Submitted to Sam Cuenca District Wildlife Biologist Scott Salmon River Ranger District, Klamath National Forest

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INTRODUCTION

The goals of the Eddy Gulch Late-Successional Reserve Fuels / Habitat Protection Project are to provide community fire protection, habitat protection and late-successional habitat development within the boundary of the Eddy Gulch Late-Successional Reserve (LSR). To assist the Klamath National Forest in attaining these goals we collected bird monitoring data in 2007 and 2008 for Northern Spotted Owls, Northern Goshawks and landbirds within the Eddy Gulch LSR project area.

Objectives

Overall, our objectives for bird monitoring are to:

(1) Conduct Northern Spotted Owl (NSO) surveys in order to provide current present/absence and activity center locations for planning of habitat improvement projects;

(2) Conduct Northern Goshawk surveys in order to provide current present/absence and nest site locations for designated Northern Goshawk Management Areas; and

(3) Conduct point counts as a baseline for establishing landbird monitoring routes on the Klamath National Forest.

In this report we summarize our 2008 survey efforts and results from the 2007-08 surveys conducted in Eddy Gulch Late Successional Reserve. Details regarding the 2007 survey effort can be found in Herrera and Miller 2007.

METHODS

Northern Spotted Owl Surveys

This season we completed the second year of the two-year visit schedule for the six

transects established in 2007 and a one-year survey schedule for the new Butcher Gulch transect (Table 1). A total of 69 survey stations (Maps 1-7) were visited following the U.S. Forest Spotted Owl survey protocol (1993). Partial survey visits (i.e. not all call stations) were completed for the Klamath, Sixmile and Whites transects on 21 and 22 May due to road closures from heavy snow drifts. Additional and partial survey visits were also completed in a few instances in an attempt to locate a NSOs that had not been detected during a follow-up visit or for additional survey coverage. Age determinations for visual observations were made based on tail shape, pattern and wear (Pyle 1997).

| | Butcher's Gulch | Canyon | Klamath | Music Creek | Russian North | Sixmile | Whites I | Whites II |
|-----------------------|-----------------|------------|-----------|-------------|---------------|-----------|-----------|-----------|
| Survey Type | (BUGU) | Mtn.(CANY) | (KLAM) | (MUSI) | (RUSS) | (SIXM) | (WHIT) | (WHIT) |
| Visit 1 Survey | 30-Apr-08 | 21-May-08 | 11-Jun-08 | 20-May-08 | 19-May-08 | 10-Jun-08 | 10-Jun-08 | 11-Jun-08 |
| Visit 1 Follow-up | - | - | - | - | 20-May-08 | 11-Jun-08 | - | - |
| Visit 2 Survey | 21-May-08 | 11-Jun-08 | 24-Jun-08 | 9-Jun-08 | 9-Jun-08 | 23-Jun-08 | 24-Jun-08 | 25-Jun-08 |
| Visit 2 Follow-up | - | - | - | 10-Jun-08 | - | - | - | 26-Jun-08 |
| Visit 3 Survey | 11-Jun-08 | 25-Jun-08 | 22-Jul-08 | 24-Jun-08 | 24-Jun-08 | 23-Jul-08 | - | - |
| Visit 3 Follow-up | - | 10-Jul-08 | - | - | - | 24-Jul-08 | 21-Jul-08 | 22-Jul-08 |
| Visit 4 Survey | 25-Jun-08 | - | - | - | - | - | - | - |
| Visit 5 Survey | 9-Jul-08 | - | - | - | - | - | - | - |
| Visit 6 Survey | 22-Jul-08 | - | - | - | - | - | - | - |
| Addition Survey Visit | - | 22-Jul-08 | | 21-Jul-08 | 21-Jul-08 | - | - | - |
| Additional Follow-up | - | 23-Jul-08 | | - | - | - | - | - |
| Partial Survey Visit | - | 9-Jul-08 | 21-May-08 | - | - | 22-May-08 | 20-May-08 | 21-May-08 |

Table 1. Eddy Gulch LSR Northern Spotted Owl survey dates completed in 2008.

Northern Goshawk Surveys

As directed by the Klamath National Forest, we conducted surveys using the Survey methodology for northern goshawks in the Pacific Southwest Region (USDA Forest Service 2000). The stand search method was used to search four Goshawk Management Areas within the boundary of the Eddy Gulch LSR (Maps 7-12). Multiple survey dates (Table 2) were required to complete a single visit to MC/SAR8 and PR/SAR11 areas due to the intensity of the method and extremely difficult terrain.

Table 2. Eddy Gulch LSR Northern Goshawk survey dates completed in 2008.

| RSL Site Name | KNF Site Name | Survey Dates | | | | |
|---------------|---------------|--------------|--------|--------|--------|-------|
| MC | SAR8 | 9-Jul | 10-Jul | 11-Jul | 6-Aug | 7-Aug |
| PR | SAR1 | 13-Aug | 14-Aug | 18-Aug | 19-Aug | |
| SB | SAR11 | 20-Aug | | | | |
| WF | SAR13 | 12-Aug | | | | |

Point Counts

We collected data on landbirds using 5-minute variable radius point counts (Ralph et al. 1993 and Fancy 1997). Eight point count routes with a total of 141 survey stations were completed within the LSR in 2008 (Table 3). A relevé vegetation survey (Ralph et al. 1993) was conducted at each point count location (Map 13). The 1C01T and SAA routes were selected because of preexisting survey information; 11 June 1998 and 10 June 1992, 7 July 1992, 21 June 1993 and 22 June 1994 respectively. The remaining routes were selected in an attempt to

maximize the survey area covered within the project boundary.

| Count survey dates completed in 2008. | | | | | |
|---------------------------------------|-----------|-----------|--|--|--|
| Route | Number of | Survey | | | |
| Name | Points | Date | | | |
| 1C01T | 12 | 24-Jun-08 | | | |
| SAA | 30 | 26-Jun-08 | | | |
| EDD11 | 20 | 27-Jun-08 | | | |
| EDD12 | 14 | 28-Jun-08 | | | |
| EDD5 | 13 | 29-Jun-08 | | | |
| EDD2 | 18 | 1-Jul-08 | | | |
| EDD9 | 18 | 2-Jul-08 | | | |
| EDD1 | 16 | 3-Jul-08 | | | |

| Table 3. | Eddy Gulch | n LSR | landbird | Point |
|----------|---------------|--------|-----------|-------|
| Count si | irvev dates i | comple | eted in 2 | 008 |

RESULTS

Northern Spotted Owl Surveys

Over the two years of surveys we located seven Spotted Owl activity centers (Table 4), one Spotted Owl with unknown protocol status (KL 0257) and an incidental Spotted Owl location (KL 1014). Details for activity center locations are provided below.

Table 4. NSO Activity Center locations resulting from 2007 and 2008 survey effort (UTM coordinates are Zone 10, NAD 83 datum).

| NSO Number | Protocol Status | Year | Landmark | Easting | Northing |
|------------|-----------------|---------------|------------------------|---------|----------|
| KL 1013 | Pair Status | 2008 | Matthews Creek | 486268 | 4557388 |
| KL 1028 | Pair Status | 2007 and 2008 | Shadow Creek | 495900 | 4564550 |
| KL 1030 | Pair Status | 2007 | East Fork Whites Gulch | 496829 | 4568580 |
| KL 1034 | Pair Status | 2007 | West Fork Eddy Gulch | 488499 | 4568197 |
| KL 1041 | Pair Status | 2007 and 2008 | South Fork Music Creek | 500452 | 4574568 |
| KL 1047 | Pair Status | 2007 and 2008 | North Russian Creek | 499239 | 4581059 |
| New NSO # | Resident Single | 2007 and 2008 | West Fork Whites Gulch | 493013 | 4568768 |

KL 1013: Pair Status. Pair Status was determined by the visual location of an afterhatch-year male (color-banded Orange/Green:Silver) and vocal detection of a female during the additional follow-up visit on 23 July 2008. The 2008 activity center was located approximately 500 m down slope of the historic activity center location. Detections attributed to this activity center were from CANY01 on 25 June 2008, 9 July 2008, and 22 July 2008.

KL 1028: Pair Status. We determined Pair Status from the night detections at station SIXM14 of a female on 15 May 2007 and a male on 11 July 2007 (Map 6). The historic activity center was used for the centroid of this activity center since no daytime locations were made during the 16 May 2007, 12 July 2007 or the 24 July 2008 follow-up surveys. Other detections

attributed to this activity center were from SIXM12 and SIXM 16 on 23 July 2008 (Map 6).

KL1030: Pair Status. A non-reproductive pair was visually located during follow-up survey on 21 June 2007 upslope of the East Fork Whites Gulch. The new activity center location was established approximately 650 m southwest of the historic activity center location (Map 4). The single detection from station WHIT13 on 19 June 2007 was attributed to this pair.

KL1034: Pair Status. A non-reproductive pair was visually located within meters of the historic activity center location in the West Fork of Eddy Gulch during the follow-up survey on 30 May 2007 (Map 5). One nighttime detection from station KLAM02 on 16 May 2007 was attributed to this activity center.

KL 1041: Pair Status. Pair Status was determined by a nighttime detection of a female on 18 June 2007 and the visual detection of an after-hatch-year male during the 10 June 2008 follow-up survey. The centroid for the activity center was moved slightly (~250 m) from the 11 July 2007 location to that of the 10 June 2008 observation (Map 2). Detections attributed to this pair were from station MUSI10 on 18 June 2007 and 10 July 2007, and from station MUSI09 on 9 June 2008.

KL 1047: Pair Status. Pair Status was determined from the location of a male and female on 20 May 2008, as well as the presence of a male, female, and juvenile during the 11 July 2007 follow-up survey. This activity center location was moved slightly (~200 m north) from the 11 July 2007 detection location (Map 1). Night detections from station RUSS02 on 18 June 2007, 10 July 2007 and RUSS03 on 19 May 2008 were attributed to this activity center.

New NSO: Resident Single Status. A male owl was located during a follow-up survey in the West fork of Whites Gulch on 26 June 2008 (Map 3). This male was also incidentally located again on 13 August 2008 during the Northern Goshawk survey of the PR/SAR1 Goshawk Management Area (Map 11, incidental observation 009). No historic activity center locations are in this area and a new Klamath National Forest owl number will likely be assigned to this activity center. Night detections attributed to this owl were from stations WHIT9A on 21 June 2007, WHIT07 on 11 July 2007, and WHIT06 on 15 May 2007 and 25 June 2008. A Northern Goshawk was incidentally located during the follow-up survey on 26 June 2008 (see Northern Goshawk Surveys below). The presence of a Northern Goshawk near this activity center may have affected our ability to locate this individual during the unsuccessful follow-up surveys on 17 May 2007, 22 June 2007 and 12 July 2007.

Two Northern Spotted Owl locations (KL 0257 and KL 1041) were not given the activity center designation following the 1993 protocol definitions.

KL 0257: Status Unknown. A male owl was visually located during 11 June 2008 follow-up survey (498723N 4566438E NAD83), approximately 500 m southwest of the historic activity center location (Map 6). This male was also incidentally located again on 20 August 2008 during the Northern Goshawk survey of the SB/SAR11 Goshawk Management Area (Map 10, incidental survey observation 013). One nighttime detection on 10 June 2008 was attributed to this historic activity center.

KL 1014: Incidental Observation. A single Spotted Owl wing covert was found on 6 August 2008 during the Northern Goshawk survey of the MC/SAR8 Goshawk Management Area (Map 8, incidental survey observation 002). This feather was found approximately 550 m southeast of the historic activity center location.

Northern Goshawk Surveys

Protocol surveys of the four Goshawk Management Areas did not produce any detections of Northern Goshawks or goshawk sign. Incidental observations collected while on survey transects are summarized in Appendix A and were generally made of small piles of feathers.

However, Northern Goshawk observations were made from three locations during the completion of other survey work and were indicative of goshawk occupancy in the Eddy Gulch LSR. We confirmed an active goshawk nest in the lower Shadow Creek drainage on 23 May 2008 (Map 12). This nest site was first located on 16 May 2007 although no nest structure was located at that time. On 20 August 2008 we observed a single goshawk in juvenal plumage in proximity of the nest and assumed that this indicated a successful nest with at least one fledgling.

On 30 April 2008 Fred Schmalenberger detected an agitated female goshawk in the Butcher Gulch drainage (Map 7). Mr. Schmalenberger reported that the female may have been in incubation molt due to her ruffled appearance. This location is approximate 2 kilometers south of the MC/SAR8 Goshawk Management Area and may indicate that it is still used by this individual. However, we were unsuccessful in soliciting responses from the Butcher Gulch drainage while accessing and departing the MC/SAR8 area on 7 August 2008.

Also of note was a 26 June 2008 detection of an after-hatch-year female Northern Goshawk approximately 130 m north of the PR/SAR1 Goshawk Management Area (Map 11). This individual was detected visually and by a series of "Kak" calls just outside of the survey boundary while we conducted a Spotted Owl follow-up visit in the Whites Gulch drainage. We also attempted multiple times to solicit responses from Whites Gulch drainage while accessing the PR/SAR1 area.

Point Counts

As of this report date the 2008 point count data entry has not been completed and is only available in hard copy form. It is likely that Klamath National Forest Management Indicator Species and species with noteworthy conservation status were detected. Following data entry a summary table and comments will be submitted so that these data will be available for design and implementation of Eddy Gulch LSR project. In addition, we will provide a supplemental report of all point count observations from 1992, 1993, 2007, and 2008.

DISCUSSION

The fieldwork we concluded this year provides data on Northern Spotted Owls, and Northern Goshawks which are suitable for determining presence or absence for environmental documentation, such as preparation of Environmental Impact Statements. We did not attempt to determine reproductive success for any of the individuals located, although we were able to do so for KL 1047 and the Shadow Creek goshawk. With the addition of the 2008 point count data it would be possible to monitor before and after project treatments in order to evaluate the effectiveness of the Project on a wide array of avian species.

LITERATURE CITED

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APPENDICES

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|-------------|-----------------------------------------------------|------------|---------|----------|
| Observation | | | | |
| Number | Observation Comments | PointType | Easting | Northing |
| 002 | SPOW feather on ground, 70deg/40m from waypoint | Incidental | 483323 | 4559186 |
| 005 | AMRO feathers on ground at waypoint | Incidental | 482920 | 4558674 |
| 006 | AMRO feathers on ground 10deg/40m from waypoint | Incidental | 482716 | 4558918 |
| 007 | 3 SOGR feathers on ground 190deg/125m from waypoint | Incidental | 482527 | 4558913 |
| 009 | SPOW (New NSO KL #), male,125m@89Deg, 4-note | Incidental | 493051 | 4568058 |
| 010 | STJA feathers on ground 200deg/40m from waypoint | Incidental | 493568 | 4567701 |
| 011 | 20+ STJA feathers 88deg/35m from waypoint | Incidental | 493775 | 4568183 |
| 013 | Male SPOW, KL0257 observed 10:24, 20-Aug-08 | Incidental | 498616 | 4566597 |
| 014 | 3 STJA feathers, 64deg/30m from waypoint | Incidental | 498841 | 4566220 |
| 016 | NOGO: Fem observed 30-Apr-08, Fred Schmalenberger | NOGO Obs | 483166 | 4556341 |
| 017 | NOGO Nest by BPO,RCF on 23-May-08 | NOGO Obs | 494404 | 4562659 |
| 018 | NOGO: Fem observed 26-Jun-08 PAH | NOGO Obs | 493207 | 4568706 |
| 019 | NOGO: Hatch Year, 20-Aug-08, PAH, KGR, RLS | NOGO Obs | 494538 | 4562554 |

Appendix A. Northern Goshawk observations and incidental observations resulting from Northern Goshawk surveys (UTM coordinates are Zone 10, NAD 83 datum).

















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488,000

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4,562,000

494,000

