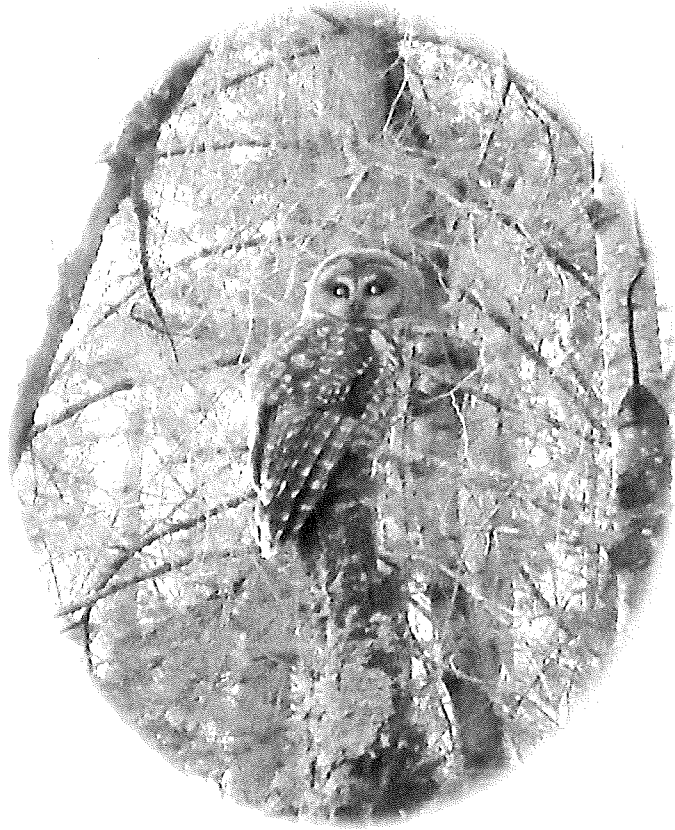


# Mexican Spotted Owl

Lincoln National Forest  
Sacramento Ranger District  
Inventories and Monitoring  
**2012**



Prepared By:  
Wildlife Crew

Reviewed By:  
Jack Williams, Staff Wildlife Biologist  
Reuben Gay, Wildlife Biologist  
John Montoya, Biological Technician

## **Introduction**

The Mexican spotted owl (MSO), *Strix occidentalis lucida*, is known to inhabit the Sacramento Ranger District of the Lincoln National Forest (from historic records). In 1987, a pair of MSOs with three young was verified on the Sacramento Ranger District. As of 2010, there are 117 established Protected Activity Centers (PACs) on the Sacramento Ranger District.

## **Training**

Training for the inventory surveys and formal monitoring consisted of a spotted owl certification session in April and a second session for late-coming workers in May. The training emphasized thorough knowledge of the owl inventory and monitoring protocol (Forest Service Manual 2676.2, Interim Directive No. 2), raptor identification by sight and sound, as well as map reading and orientation skills. The spring training also included a field session to a PAC. Any uncertified personnel were under the supervision of certified personnel during the inventory and formal monitoring. All personnel conducting inventory and monitoring were placed on a list for the United States Department of Interior - Fish and Wildlife Service's approval.

## **Personnel**

The 2012 Mexican Spotted Owl inventories and monitoring were supervised and conducted by Jack Williams (Staff Wildlife Biologist), Reuben Gay (Wildlife Biologist) and John Montoya (District Biological Technician). Field work for the Sacramento Ranger District was completed by:

Sarah Moon	STEP
Lori Huffman	STEP
Sylvia Rodriguez	STEP
Nathan Etzel	STEP
Ryan Jonnes	1039

## **Methods**

Inventory techniques outlined in Forest Service Manual 2676.2 (Interim Directive No. 2, Exhibit 1) were followed. Monitoring was done formally and informally for all project areas for MSO. Protocol for the informal monitoring was a modification of the formal protocol. Formal monitoring results were modified in 2001, after consulting with USFWS to confirm non-reproduction. If the same owl ate, cached, or held 5 mice in any combination, non-reproduction could be confirmed.

## **Legend**

### **Reproductive Abbreviations:**

PAC= protected activity center

O= pair occupancy inferred or confirmed

M= male inferred or confirmed

F= female inferred or confirmed

P= presence of a single owl inferred or confirmed; sex unknown

#HSU= number of hatchlings (nestlings), success unknown

#Y= number of young fledged

#YD= number of young found dead  
NU= nesting status unknown; no mousing attempted  
NY= nesting status undetermined; reproductive status inconclusive after mousing  
NSU= nest inferred or confirmed but success unknown  
NN= non-nesting/non-reproduction confirmed  
NF= nest failed; egg or nesting failure  
IM-NR= informally monitored, no response or location  
A= absence or not occupied; formal monitoring

### **Raptor Species Abbreviations:**

AEAC= Northern Saw-whet Owl (*Aegolius acadicus*)  
ACGE= Northern Goshawk (*Accipiter gentilis*)  
BUJA= Red-tailed Hawk (*Buteo jamaicensis*)  
ACCO= Cooper's Hawk (*Accipiter cooperii*)  
BUVI= Great Horned Owl (*Bubo virginianus*)  
GLGN= Northern Pygmy-Owl (*Glaucidium gnoma*)  
MSO= Mexican Spotted Owl (*Strix occidentalis*)  
OTFL= Flammulated Owl (*Otus flammeolus*)  
OTKE= Western Screech-Owl (*Otus kennicottii*)

### **Inventory and Monitoring Results**

All targets assigned by the Lincoln National Forest Supervisor's Office were met or exceeded for the Sacramento Ranger District.

### **Informal Monitoring**

#### **George PAC # 030802012**

**Survey 1 Daytime Follow-up Visit: 5/16/12** No MSO located  
**Survey 2 Daytime Follow-up Visit: 6/07/12** No MSO located  
**Survey 3 Daytime Follow-up Visit: 7/16/12** No MSO located  
**Survey 4 Daytime Follow-up Visit: 7/24/12** Male Presence detected, nesting unknown

#### **Results: M/NN**

Male heard in the PAC during the four informal surveys.

#### **Little Apache PAC # 030802091**

**Survey 1 Daytime Follow-up Visit: 4/09/12** Male and Female heard and female was seen.  
**Reproductive Visit 1: 5/16/12** No MSO located  
**Reproductive Visit 2: 6/12/12** Male and Female heard and moused. Lost both of them in the darkness unknown what they did with mice

**Reproductive Visit 3: 6/21/12** Male and Female MSO Located and moused. Male took mouse to young which 2 young were seen. Female cached mouse in nest tree lots of pellets and white wash observed under nest tree.

**Results: 02Y**

1 Survey and 3 reproductive visits were conducted, successful nesting pair with two fledgling young.

**Pierce PAC#030802068**

**Survey 1 Daytime Follow-up Visit: 6/04/12** Male and Female confirmed mouse#1 took from female and ate, mouse#2 was cached, mouse#3 was cached, and mouse#4 female left with mouse, fate unknown

**Reproductive Visit 1: 6/14/12** MSO detected sex unknown mouse#1 ate, mouse#2 cached, mouse#3 ate, mouse#4 cached, and mouse#5 the owl did not pay attention to mouse and fell asleep.

**Reproductive Visit 2: 7/02/12** No MSO located

**Reproductive Visit 3: 7/11/12** Male and Female confirmed; mouse#1-ate, mouse#2-cached, mouse#3-cached, mouse#4-cached, mouse#5-left with mouse, fate undetermined, mouse#6-left with mouse, fate undetermined.

**Results: O/NN**

**Zoo PAC#030802100**

**Survey 1 Daytime Follow-up Visit: 4/15/12** Pair confirmed.

**Reproductive Visit 1: 06/12/12** Male and Female found; mouse#1-male took to female and mouse was cached, mouse#2-female took mouse and cached.

**Results: O/NY**

**Kerr PAC#030802042**

**Survey 1 Daytime Follow-up Visit: 05/10/12** Pair confirmed

**Reproductive Visit 1: 05/24/12** Male and Female found; mouse#1-taken and ate by female, Mouse#2-4 all cached by female.

**Results: O/NN**

**York PAC#030802010**

**Survey 1 Daytime Follow-up Visit: 05/08/12** Pair Confirmed, Mouse#1,3,&4 taken to female, Mouse#2 Cashed by female.

**Reproductive Visit 1: 06/19/12** Male and Female found; Mouse#1 cashed by male and ate by female, Mouse#2 cashed by female.

**Results: O/NN**

**Masterson PAC#030802105**

**Survey 1 Daytime Follow-up Visit: 05/07/12** Pair Confirmed, Mouse#1,2 both ate by female, Mouse#3,4 cashed by female.

**Reproductive Visit 1: 06/19/12** Pair Confirmed, Mouse#1,2 ate by female, Mouse#3,4 cashed by female.

**Results: O/NN**

**Atkinson PAC#030802097**

**Survey 1 Daytime Follow-up Visit: 05/10/12** Pair confirmed, Mouse#1,2 ate by female.

**Reproductive Visit 1: 06/13/12** No presents, survey discontinued because of presents of a red-tailed hawk.

**Reproductive Visit 2:** No presents

**Reproductive Visit 3:** No presents

**Reproductive Visit 4:** Pair Confirmed, Mouse#1 ate by Female, Mouse#2 ignored by both male and female.

**Results: O/NN**

**Turkey PAC#030802087**

**Survey 1 Daytime Follow-up Visit: 06/28/12** No presents.

**Survey 2 Daytime Follow-up Visit: 07/13/12** No presents

**Survey 3 Daytime Follow-up Visit: 07/19/12** No presents

**Survey 4 Daytime Follow-up Visit: 07/24/12** No presents

**Results: IM-NR**

**Allen PAC#030802020**

**Survey 1 Daytime Follow-up Visit: 06/07/12** No Presence

**Survey 2 Daytime Follow-up Visit: 06/28/12** No Presence

**Survey 3 Daytime Follow-up Visit: 07/16/12** No Presence

**Survey 4 Daytime Follow-up Visit: 07/24/12** No Presence

**Results: IM-NR**

**Moore PAC#030802023**

**Survey 1 Daytime Follow-up Visit: 05/22/12** No Presence

**Survey 2 Daytime Follow-up Visit: 06/28/12** No Presence

**Survey 3 Daytime Follow-up Visit: 07/19/12** No Presence

**Survey 4 Daytime Follow-up Visit: 07/23/12** No Presence

**Results: IM-NR**

**Rice PAC#030802049**

**Survey 1 Daytime Follow-up Visit: 4/26/12** No Presence

**Survey 2 Daytime Follow-up Visit: 06/5/12** No Presence

**Survey 3 Daytime Follow-up Visit: 07/02/12** No Presence

**Survey 4 Daytime Follow-up Visit: 7/11/12 No Presence**

**Results: IM-NR**

**Water PAC#030802022**

**Survey 1 Daytime Follow-up Visit: 4/23/12 M**

**Survey 2 daytime Follow-up Visit: 5/14/12 No Presence**

**Survey 3 Daytime Follow-up Visit: 7/3/12 No Presence**

**Survey 4 daytime Follow-up Visit: 7/11/12 O/NN**

**Results: O/NN**

**Willie White PAC#030802025**

**Survey 1 Daytime Follow-up Visit: 5/15/12 O/UN**

**Survey 2 Daytime Follow-up Visit: 6/13/12 O/NN**

**Survey 3 Daytime Follow-up Visit: 7/23/12 O/UN**

**Results: O/NN**

**Wills Pac#030802078**

**Survey 1 Daytime Follow-up Visit: 5/14/12 O/NN Male cached 3 ate 1, female ate 1**

**Survey 2 Daytime Follow-up Visit: 7/3/12 No Presence**

**Survey 3 Daytime Follow-up Visit: 7/19/12 No Presence**

**Survey 4 Daytime Follow-up Visit: 7/23/12 No Presence**

**Results: O/NN Before the May 15 cut-off**

**Newman PAC#030802007**

**Survey 1 Daytime Follow-up Visit: 6/5/12 M. Male heard in territory, might be from adjacent territory.**

**Survey 2 daytime Follow-up Visit: 6/26/12 M. Male heard in same area as survey 1.**

**Survey 3 Daytime Follow-up Visit: 7/17/12 No Presence. Search area of former locations, no sign of birds.**

**Survey 4 Daytime Follow-up Visit: 7/24/12 No presence**

**Results: M/NU**

**Bear Lake PAC#030802034**

**Survey 1 Daytime Follow-up Visit: 6/6/12 No Presence**

**Survey 2 Daytime Follow-up Visit: 6/28/12 No Presence**

**Survey 3 Daytime Follow-up Visit: 7/13/12 No Presence**

**Survey 4 Daytime Follow-up Visit: 7/19/12 No Presence**

**Results: IM-NR**

**Wilmeth PAC#030802027**

**Survey 1 daytime Follow-up Visit: 4/30/12 F Mouse fates A I.**  
**Survey 2 Daytime Follow-up Visit: 6/26/12 M Mouse fates A I.**  
**Survey 3 Daytime Follow-up Visit: 7/3/12 M No mousing was used, male flew away from crew.**

**Results:**F/M-NU Pair was not seen or heard together during a single survey, can not determine pair status or nesting status.

**Lightning PAC#030802081**

**Survey 1 Daytime Follow-up Visit: 5/7/12 O NU Mousing Fates: Male AA; Female CA**  
**Survey 2 Daytime Follow-up Visit: 6/19/12 O/NN Mousing Fates: Male A; Female ACCC**

**Results: O-NN**

**Jim Lewis PAC#030802086**

**Survey 1 Daytime Follow-up Visit: 5/4/12 No Presence**  
**Survey 2 Daytime Follow-up Visit: 6/27/12 O-NU Heard pair**  
**Survey 3 Daytime Follow-up Visit: 6/26/12 No Presence**  
**Survey 4 Daytime Follow-up Visit: 7/3/12 O-NU**  
**Survey 5 Daytime Follow-up Visit: 7/11/12 O-NN**

**Results: O-NN**

**Jeffers PAC#030802038**

**Survey 1 Daytime Follow-up Visit: 6/5/12 No Presence**  
**Survey 2 Daytime Follow-up Visit: 6/11/12 No Presence**  
**Survey 3 Daytime Follow-up Visit: 6/26/12 No presence**  
**Survey 4 Daytime Follow-up Visit: 7/3/12 No Presence**

**Results: IM-NR**

**Trail PAC#030802059**

**Survey 1 Daytime Follow-up Visit: 6/6/12 No Presence**  
**Survey 2 Daytime Follow-up Visit: 6/29/12 No Presence**  
**Survey 3 Daytime Follow-up Visit: 7/11/12 No Presence**  
**Survey 4 Daytime Follow-up Visit: 7/26/12 No Presence**

**Results: IM-NR**

**Delaney PAC#030802076**

**Survey 1 Daytime Follow-up Visit: 6/5/12 No Presence**  
**Survey 2 Daytime Follow-up Visit: 6/27/12 No Presence**  
**Survey 3 Daytime Follow-up Visit: 7/3/12 Male Heard**  
**Survey 4 Daytime Follow-up Visit: 7/11/12 Male Heard**

**Results: M-NU**

**Crisp PAC 030802056**

**Survey 1 Daytime Follow-up Visit: 5/22/12 M. Mouse fates L**

**Survey 2 Daytime Follow-up Visit: 6/5/12 P**

**Survey 3 Daytime Follow-up Visit: 6/28/12 O: Mouse fate LF**

**Survey 4 Daytime Follow-up Visit: 7/3/12 O: Mouse fate AI**

**Results: O-NN**

**Carrisa Lookout PAC#030802036**

**Survey 1 Daytime Follow-up Visit: 5/4/12 No Presence**

**Survey 2 Daytime Follow-up Visit: 6/6/12 Male Mouse fates AA**

**Survey 3 Daytime Follow-up Visit: 6/27/12 No Presence**

**Survey 4 Daytime Follow-up Visit: 7/2/12 No Presence**

**Survey 5 Daytime Follow-up Visit: 7/11/12 O-NN**

**Results: O-NN. Non-nesting based off of behavior.**

**Chilcoote PAC#030802092**

**Survey 1 Daytime Follow-up Visit: 6/4/12 P-UN**

**Survey 2 Daytime Follow-up Visit: 6/26/12 No Presence**

**Survey 3 Daytime Follow-up Visit: 7/5/12 No Presence (Heard Carissa LO Pair)**

**Survey 4 Daytime Follow-up Visit: 7/19/12 No presence**

**Results: IM-NR (Carissa birds heard in territory)**

**Board PAC#030802093**

**Survey 1 Daytime Follow-up Visit: 6/26/12 No Presence**

**Survey 2 Daytime Follow-up Visit: 7/5/12 No Presence**

**Survey 3 Daytime follow-up Visit: 7/19/12 No Presence**

**Survey 4 Daytime Follow-up Visit: 7/26/12 No Presence**

**Results: IM-NR**

**Jim Jeffries PAC#030802037**

**Survey 1 Daytime Follow-up Visit: 6/26/12 No Presence**

**Survey 2 Daytime Follow-up Visit: 7/19/12 No Presence**

**Survey 3 Daytime Follow-up Visit: 7/26/12 No Presence**

**Survey 4 Daytime Follow-up Visit: 7/30/12 No Presence**

**Results: IM-NR**

**Carr PAC#030802018**

**Survey 1 Daytime Follow-up Visit: 6/4/12 No Presence**

**Survey 2 Daytime Follow-up Visit: 6/25/12 No Presence**

**Survey 3 Daytime Follow-up Visit: 7/09/12 No Presence**



**Survey 4 Daytime Follow-up Visit: 7/17/12 No Presence**

**Results: IM-NR**

**Fire PAC#030802073**

**Survey 1 Daytime Follow-up Visit: 5/4/12 No Presence**

**Survey 2 Daytime Follow-up Visit: 6/25/12 No Presence**

**Survey 3 Daytime Follow-up Visit: 7/09/12 No Presence**

**Survey 4 Daytime Follow-up Visit: 7/17/12 No Presence**

**Results: IM-NR**

**Wet Burnt PAC#030802071**

**Survey 1 Daytime Follow-up Visit: 5/4/12 No Presence**

**Survey 2 Daytime Follow-up Visit: 6/25/12 No Presence**

**Survey 3 Daytime Follow-up Visit: 7/9/12 No Presence**

**Survey 4 Daytime Follow-up Visit: 7/17/12 No Presence**

**Results: IM-NR**

**Walker Pac#030802017**

**Survey 1 Daytime Follow-up Visit: 5/30/12 No Presence**

**Survey 2 Daytime Follow-up Visit: 5/25/12 O-NN**

**Results: O-NN ( Had female off of nest for over 1 hr.)**

**West Walker Pac#030802077**

**Survey 1 Daytime Follow-up Visit: 5/30/12 No Presence**

**Survey 2 Daytime Follow-up Visit: 6/25/12 No Presence**

**Survey 3 Daytime Follow-up Visit: 7/9/12 No Presence**

**Survey 4 Daytime Follow-up Visit: 7/17/12 No Presence**

**Results: IM-NR**

**16 springs PAC#030802019**

**Survey 1 Daytime Follow-up Visit: 5/23/12 No Presence(Heard Walker Birds)**

**Survey 2 Daytime Follow-up Visit: 6/4/12 No Presence**

**Survey 3 Daytime follow-up Visit: 6/25/12 No Presence**

**Survey 4 daytime Follow-up Visit: 7/9/12 No Presence**

**Results: IM-NR**

**Rawlins PAC#030802005**

**Survey 1 Daytime Follow-up Visit: 5/2/12 No Presence**

**Survey 2 Daytime Follow-up Visit: 5/15/12 O-NSU**

**Survey 3 Daytime Follow-up Visit: 6/12/12 F-NSU**

**Survey 4 Daytime Follow-up Visit: 6/26/12 O-1Y**

**Results: O-1Y**

**Son PAC#030802116**

**Survey 1 Daytime Follow-up Visit: 5/25/12 O-NU**

**Survey 2 Daytime Follow-up Visit: 6/11/12 No Presence**

**Survey 3 daytime Follow-up Visit: 6/21/12 O-NN**

**Results: O-NN**

**A-Frame PAC#030802090**

**Survey 1 Daytime follow-up Visit: 5/17/12 O-NN**

**Results: O-NN**

**Thunder PAC#030802117**

**Survey 1 Daytime Follow-up Visit: 5/7/12 O-NU**

**Survey 2 Daytime Follow-up Visit: 6/19/12 O-NN**

**Results: O-NN**

**Hidden PAC#030802053**

**Survey 1 Daytime Follow-up Visit: 6/27/12 O-NN**

**Results: O-NN**