

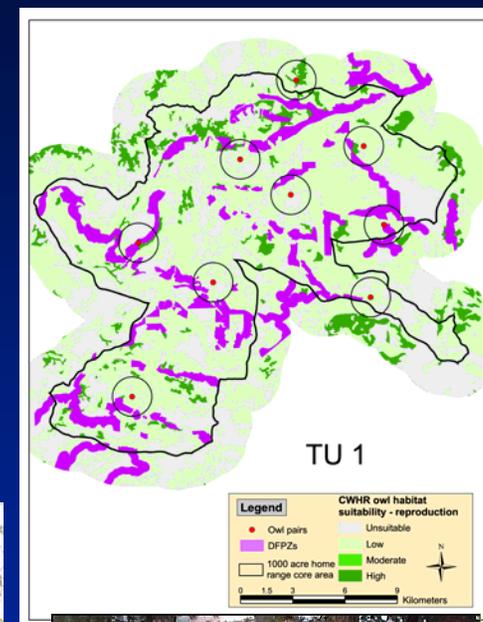
# California Spotted Owl Module: 2007 Overview

- **John Keane, Sierra Nevada Research Center, PSW.**



Field Project Leaders &: GIS Analysis:

- **Claire Gallagher, Paula Shaklee, Gretchen Jehle, Ross Gerrard - SNRC-PSW**



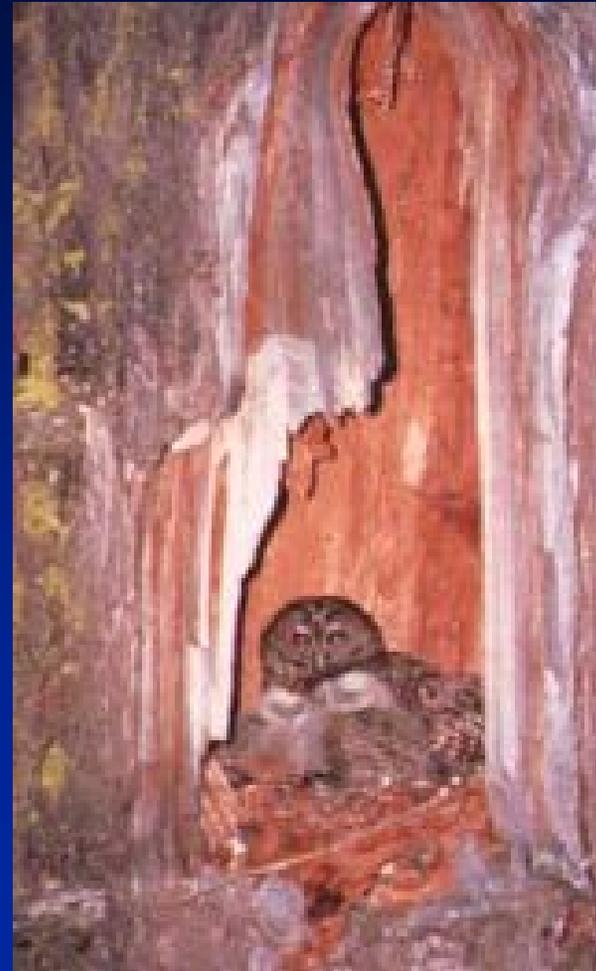
# Plumas-Lassen Study: Acknowledgments.

- National Forest Service Region 5.
- Plumas and Lassen National Forests.
- National Fire Plan.
- Peter Stine, Sierra Nevada Research Center, PSW.
- QLG Members.
- **Field Researchers: Brian Gill, Rachel Kussow, Dave Smith, Mason Werner**



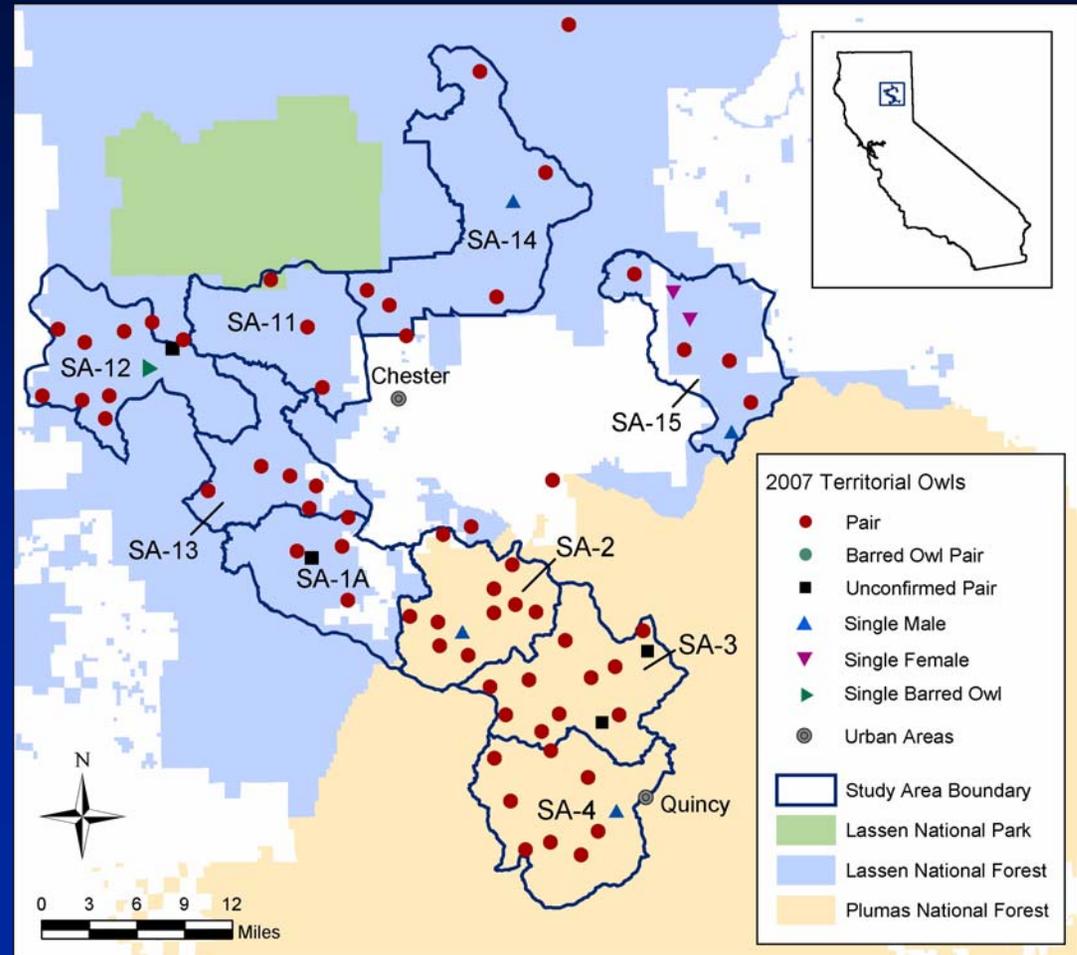
## 2007 PLS Annual Report

- **Monitor density, reproduction & demographics of CSOs.**
- **Address other potential stress factors (Barred Owls, WNV).**
- **Habitat association models.**
- **Radio-telemetry work.**
- **FY2008 Research Objectives.**



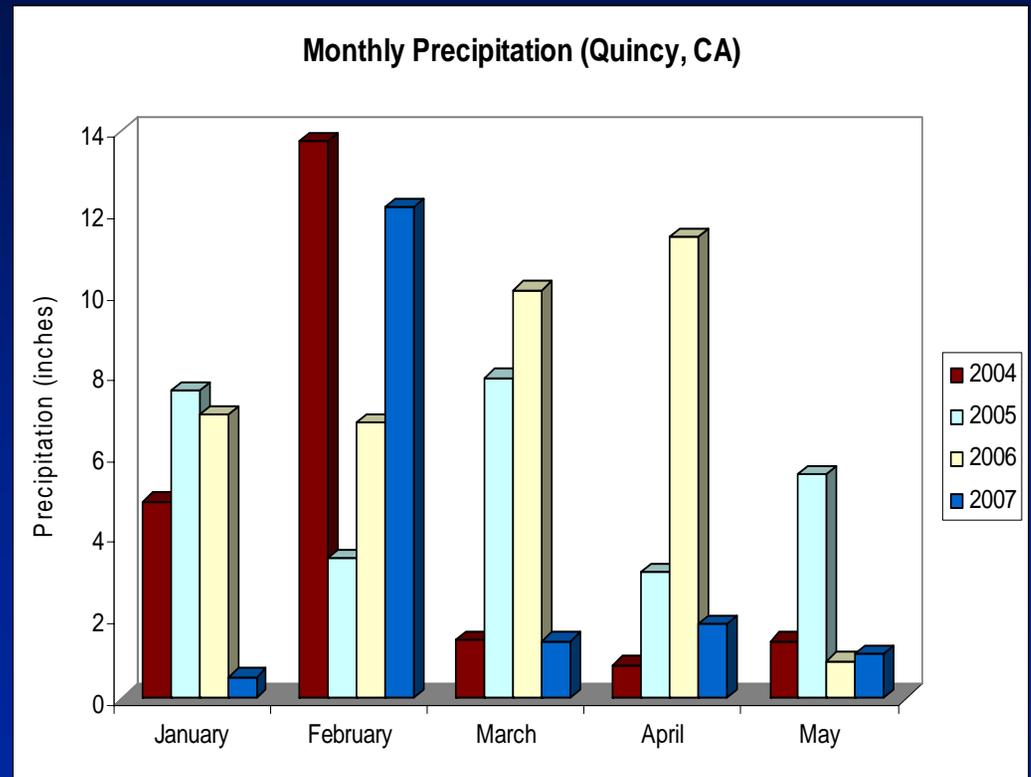
# CSO Density Across the PLS Area

- Surveyed 1,889 km<sup>2</sup> (468,500 acres)
- 71 territorial sites – 62 confirmed pairs, 3 unconfirmed pairs, 6 t-singles.
- 2005 = 64 pair/11 t-s  
2006 = 52 pair/9 t-s

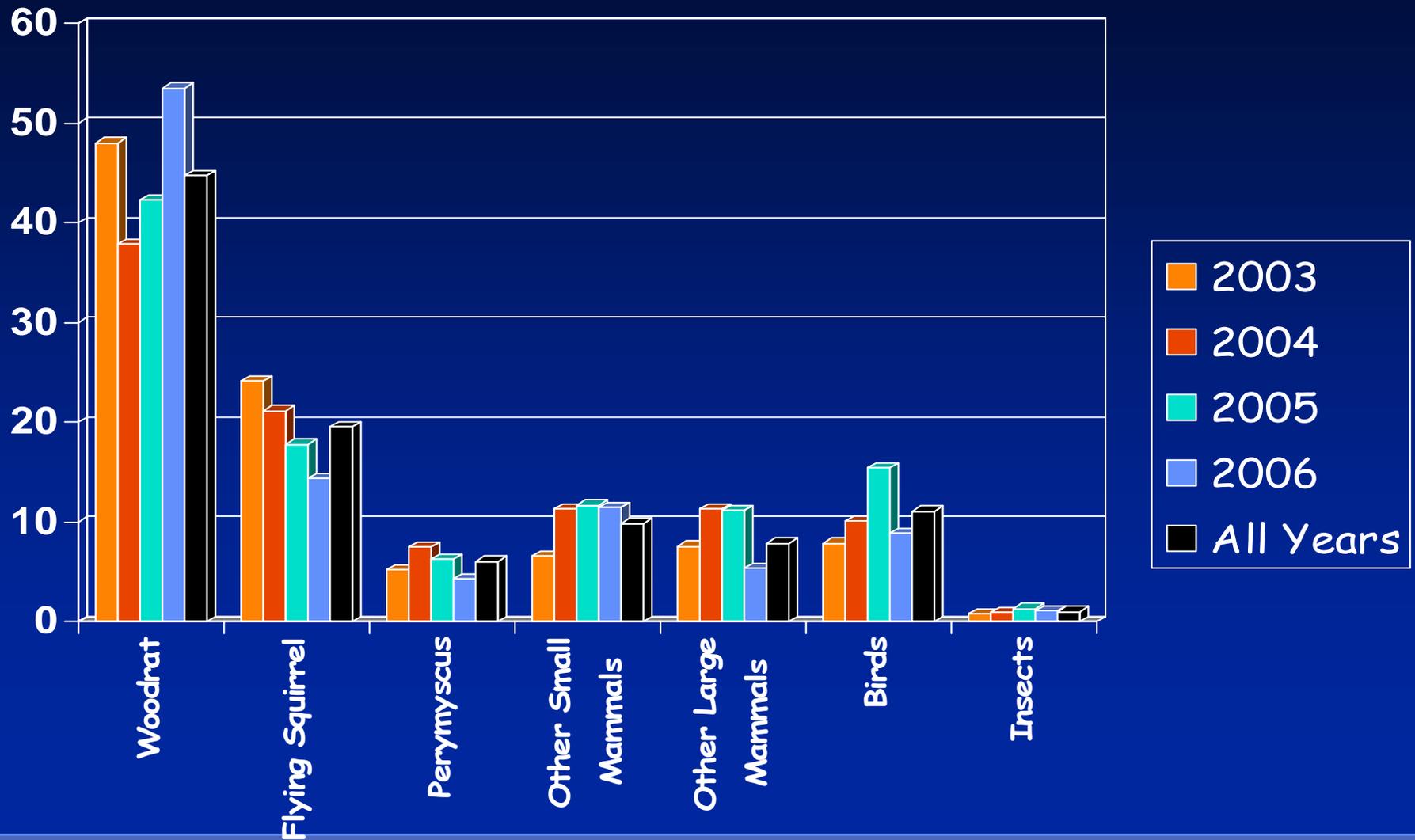


# Nesting Success 2004-2007

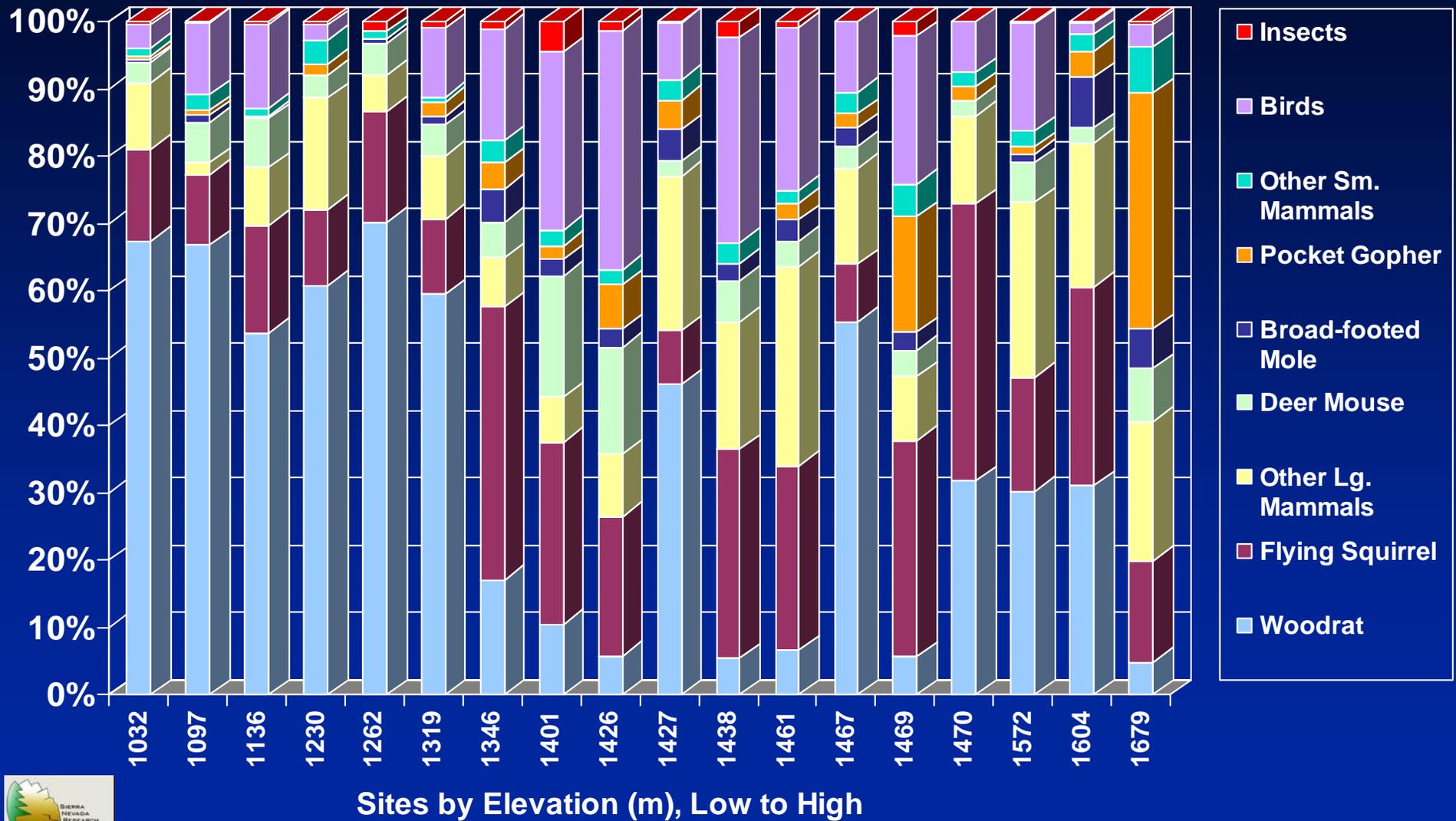
Year	% Successful Nests	Young Fledged / Nest
2004	49.4%	1.61
2005	18.3%	1.53
2006	13.8%	1.50
2007	55.4%	1.81



# Percent biomass of prey in CSO diet, 2003-2006.

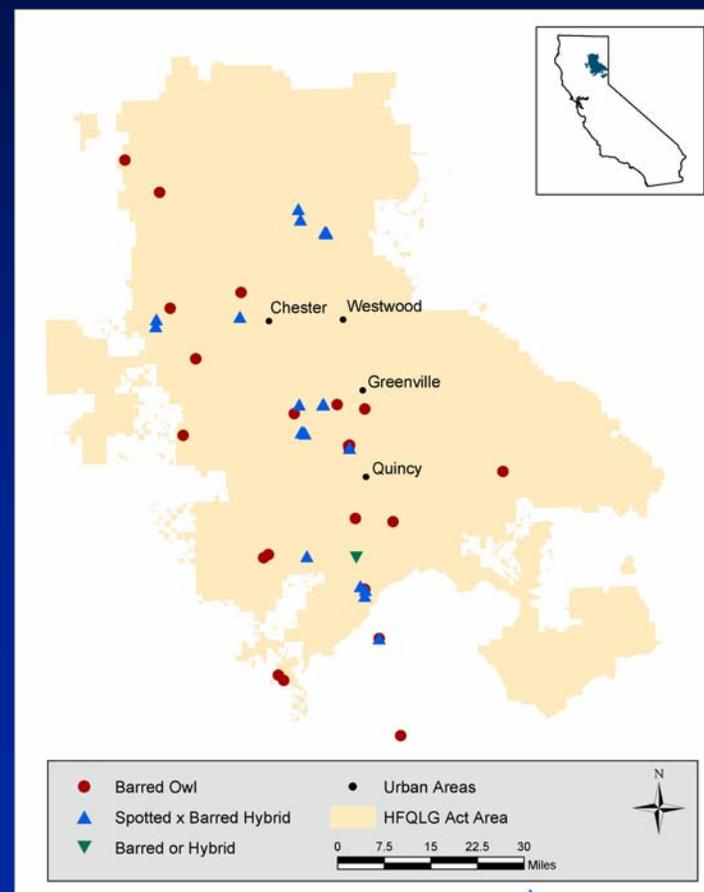


# Biomass By Site



# Barred/Sparred Owl Status in the PLS and Sierra Nevada

- Documented 4 Barreds and 4 Sparreds in PLS during 2007.
- First record in 1989, first repro in 1991.
- Minimum of ~45 records for Sierra Nevada 1989-2007.
- 17 records of pairing/repro among barred/sparred/spotteds.
- Data suggest Barred Owls increasing in the Sierra Nevada – population increase, reproduction, long-distance colonizers



# West Nile Virus in the HFQLG Area

- Plumas & Lassen Co.
- Collaboration with Dr. Josh Hull & Dr. Holly Ernest at UCD.
- 2004-2006: 120 samples from CSOs – all tested negative.
- 2007: 38 CSO samples – not screened to date.

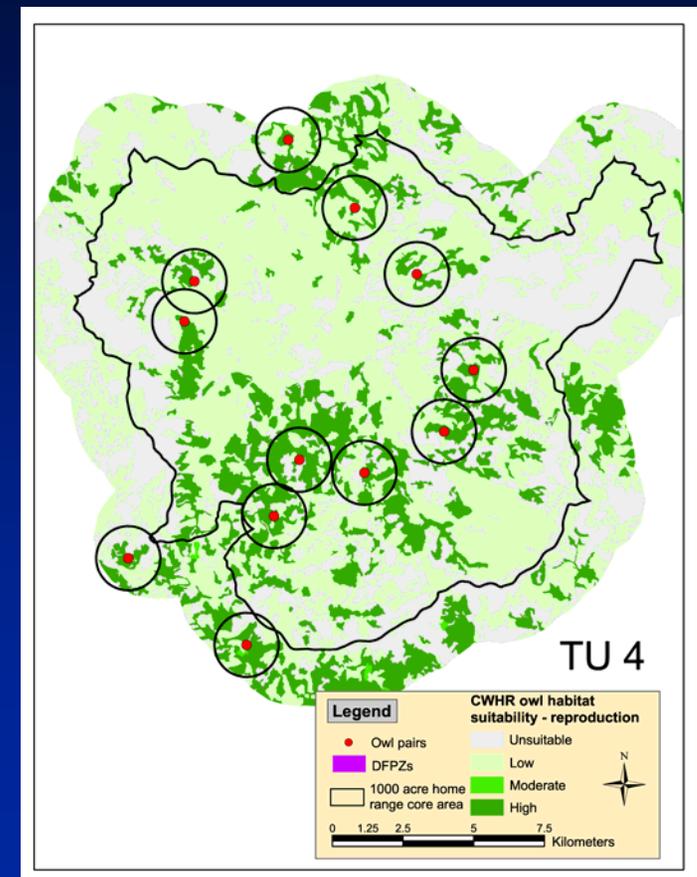


\* WNV detected in all counties in 2004.

Data: California Dept of Health Services, 2006

# CSO Habitat Associations

- **Home range scale:** relate occupancy and demographics to amounts and distribution of habitat within CSO home ranges.
- **Landscape-scale:** relate habitat to CSO density, distribution and spacing.
- **Within home range scale:**
  - nest polygon & plot scales
  - foraging area polygon & plot scales
- **Radio-telemetry work in 2007.**



# 2008 Plan of Work

- Continue density and demographic monitoring for estimating population trends.
- Continue monitoring of barred owls and WNV.
- Develop habitat models at landscape, home range, & nest-plot scales (occupancy, demographics) – adaptive management tools.
- Continue/expand radio-telemetry study of habitat use (use at stand-scale, plot-scale).
- Initiate inventory surveys in Moonlight and Antelope Complex fire areas.
- Integrate with fire-fuels, small mammal modules, etc.

