

Lidar Data Products

DCM:

- *FFEH* team → inputs to fire model: tree height; crown size; canopy cover; canopy base height; crown bulk density
- *Owl* team → characterize owl habitats: canopy roughness; vertical canopy structure

DEM:

- *Water* team → as input to the hydro model...
- *Fisher* team → characterize topographically-controlled habitats
- *FFEH* team → inputs to fire model

Digital Canopy Model

Digital Elevation Model

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SNAMP Science Team: Wildlife - Fisher

Principal Investigator: Reg Barrett

Fisher Project Leader: Rick Sweitzer

Staff Research Biologists:

- Geoff Cline, Lindsay Martin, Jeff Schneiderman

Staff Research Assistants:

- Wendy Sicard, Michelle Anderson

USFS Flight Support:

- John Litton, Jim Irving (Pilot)

- **Fisher Team Goals:**
 - Determine population parameters and limiting factors for Pacific fisher (*Martes pennanti*)
 - Evaluate effects of fuel reduction treatments (SPLATS) on resource use, survival, and population persistence of Pacific fisher
- **Fisher Team Activities:**
 - Camera surveys: determine occupancy rates
 - Live trapping: radio collar individual fisher
 - Daily monitoring: track dispersal/movements, identify key habitat features (den trees), determine sources of mortality
 - Modeling: investigate influence of SPLATS on resource use and population persistence

YEAR ONE

221 Camera Trap Months
106 Fisher Detections (48%)

Compare with CBI prediction?

67% Correct
33% Incorrect

If cutoff is 0.4

SNAMP Fisher Project Area
Invasive Tree Pack
CBI Predicted Occupancy
0.000 - 0.4
0.4001 - 0.6
0.6001 - 0.8
0.8001 - 1.0

Fisher Study Camera Data from 2007 to Sept 2008
Fishers detected in grid area
Fishers not detected in grid area

Approximate centers of fisher home ranges documented to date

27 fisher are currently “on the air”

Expect to have a total of at least 40 fisher tracked until death over the next seven years

ALL RADIO COLLARED OR SPOTTED FISHERS
• Home Range
• Home Range Boundary
• Home Range Occupancy
• Home Range Center
• Home Range Area
• Home Range Perimeter
• Home Range Shape
• Home Range Orientation
• Home Range Area
• Home Range Perimeter
• Home Range Shape
• Home Range Orientation

SNAMP Science Team: Wildlife – Spotted Owl

Owl Team Members

Principal Investigator:

- Rocky Gutiérrez

Project Leader:

- Douglas Tempel

Assistant Project Leader (SNAMP):

- Sheila Whitmore

Assistant Project Leader (Eldorado):

- Vince Berigan

Owl Team Goals

- The Owl Team will be monitoring the California Spotted Owl (*Strix occidentalis*) through the life of the SNAMP project in the northern site.
- Do forest fuel treatments have an effect on spotted owl territory occupancy and reproductive success?

Owl Team Activities

- Owl Surveys
- Pre-treatment vegetation sampling

University of Minnesota, Dept. of Fisheries, Wildlife & Conservation Biology

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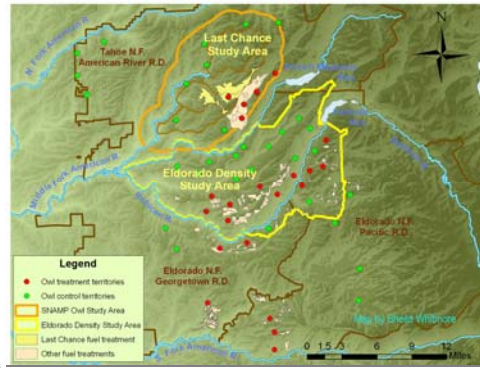
Summary of Completed Fieldwork

- Completed 2 seasons of owl surveys (2007, 2008) on Last Chance Owl Study Area. 24 color-marked owls.
- Continued owl surveys on Eldorado Owl Study Area (1986—present). 89 color-marked owls in 2007, 2008.
- Seven SPLATs planned on the two owl study areas for 2008-2010 (including Last Chance project).
- Completed pre-treatment vegetation sampling in summer 2008 within six SPLAT sites on both owl study areas.
- Tentative sample size of 22 treatment and 32 control owl territories.

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Planned SPLATs on Owl Study Areas



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Time for Questions...

For more information: <http://snamp.cnr.berkeley.edu>

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