



Pacific Northwest Research Station
USDA Forest Service



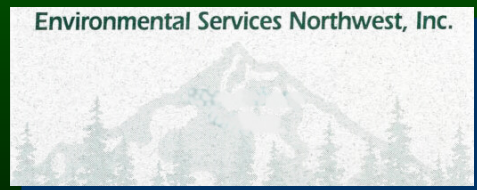
**Plum Creek Timber
Company**



Raedeke Associates
contractors



**US Timberlands /
AFR**



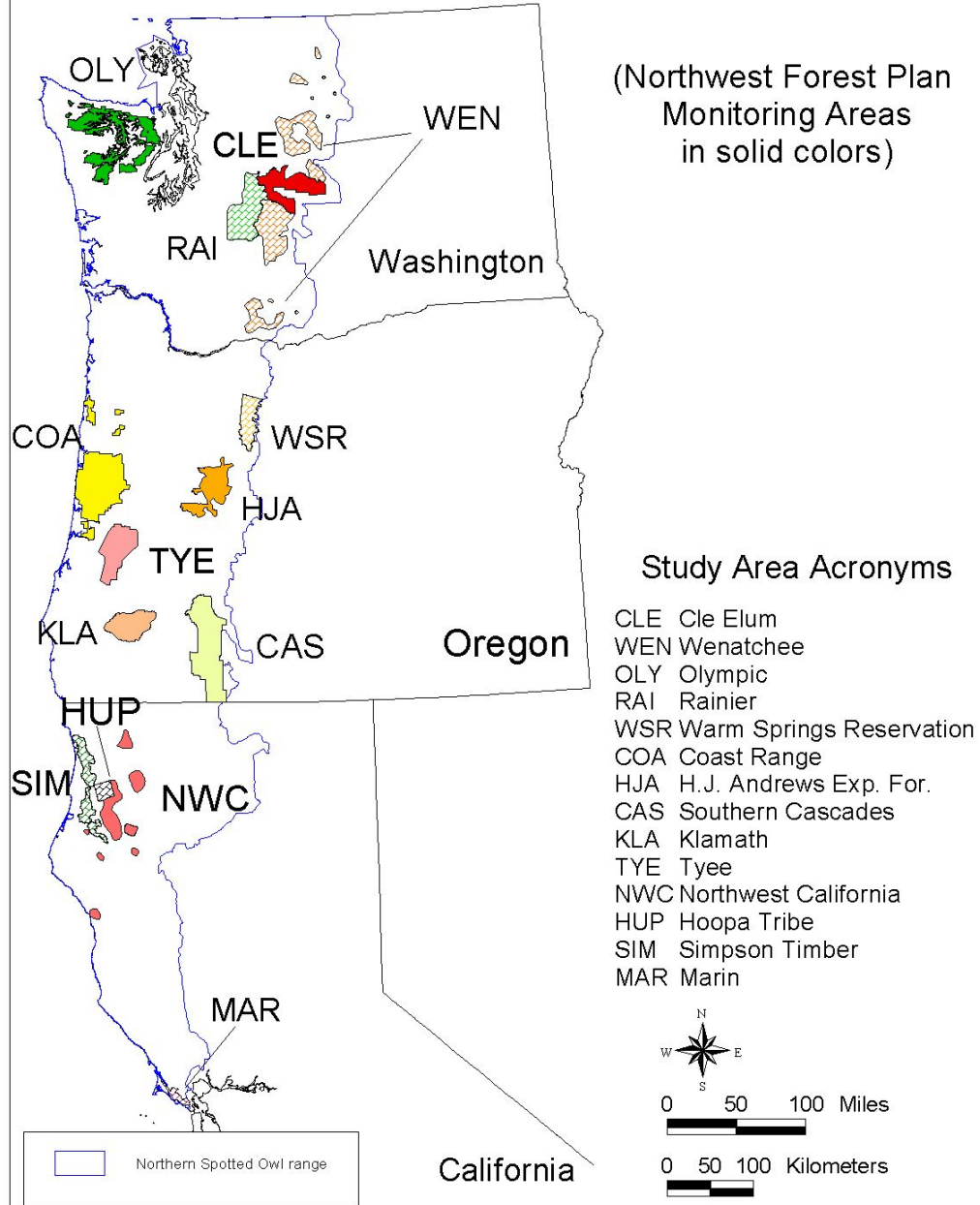
**Environmental
Services Northwest**
contractors

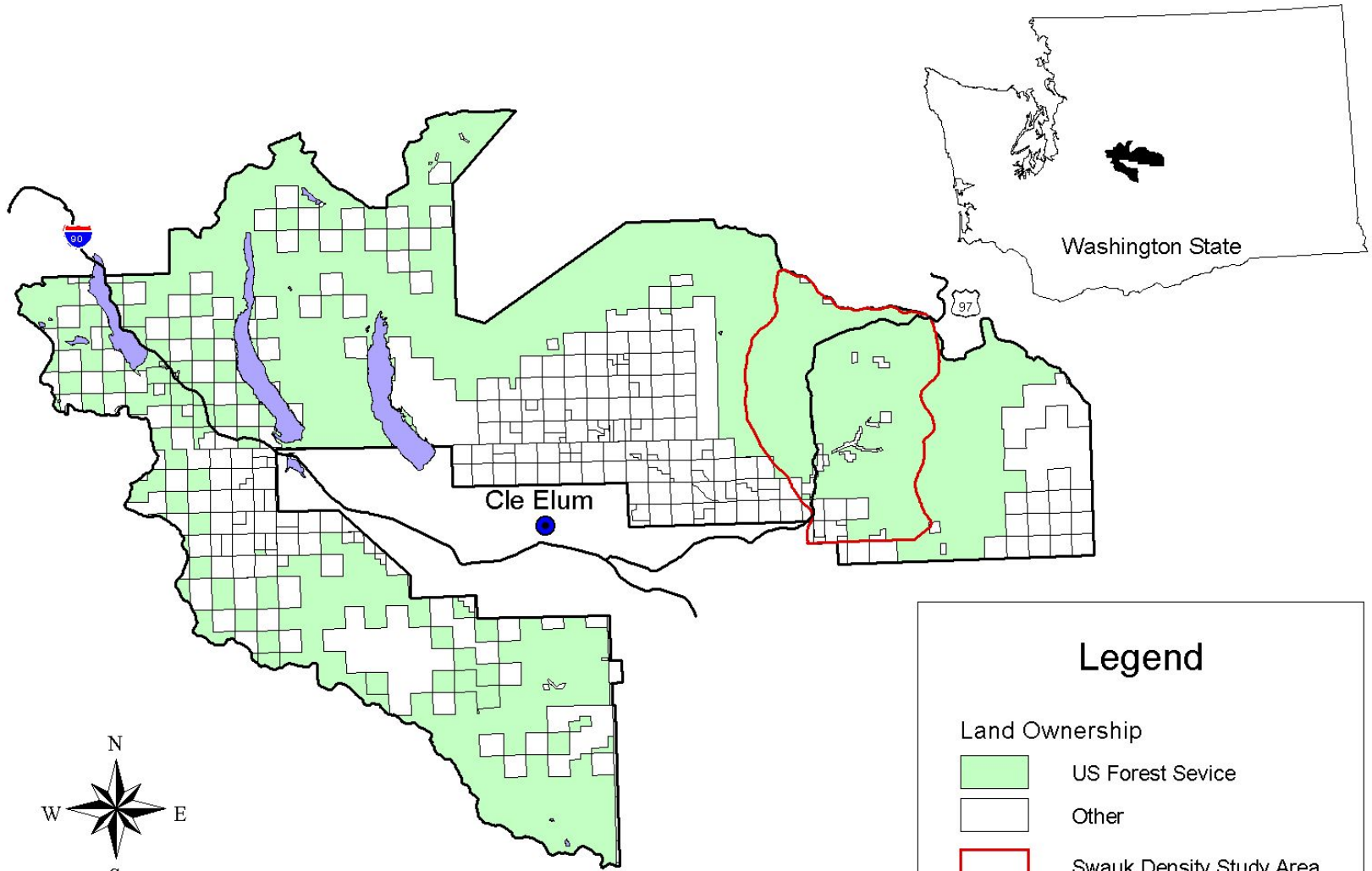


Washington State DNR



2004 Spotted Owl Demography Study Areas









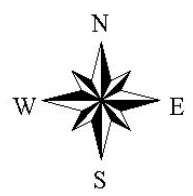
Washington State

Cle Elum

Legend

Land Ownership

-  US Forest Service
-  Other
-  Swauk Density Study Area
- Highways
-  Lakes



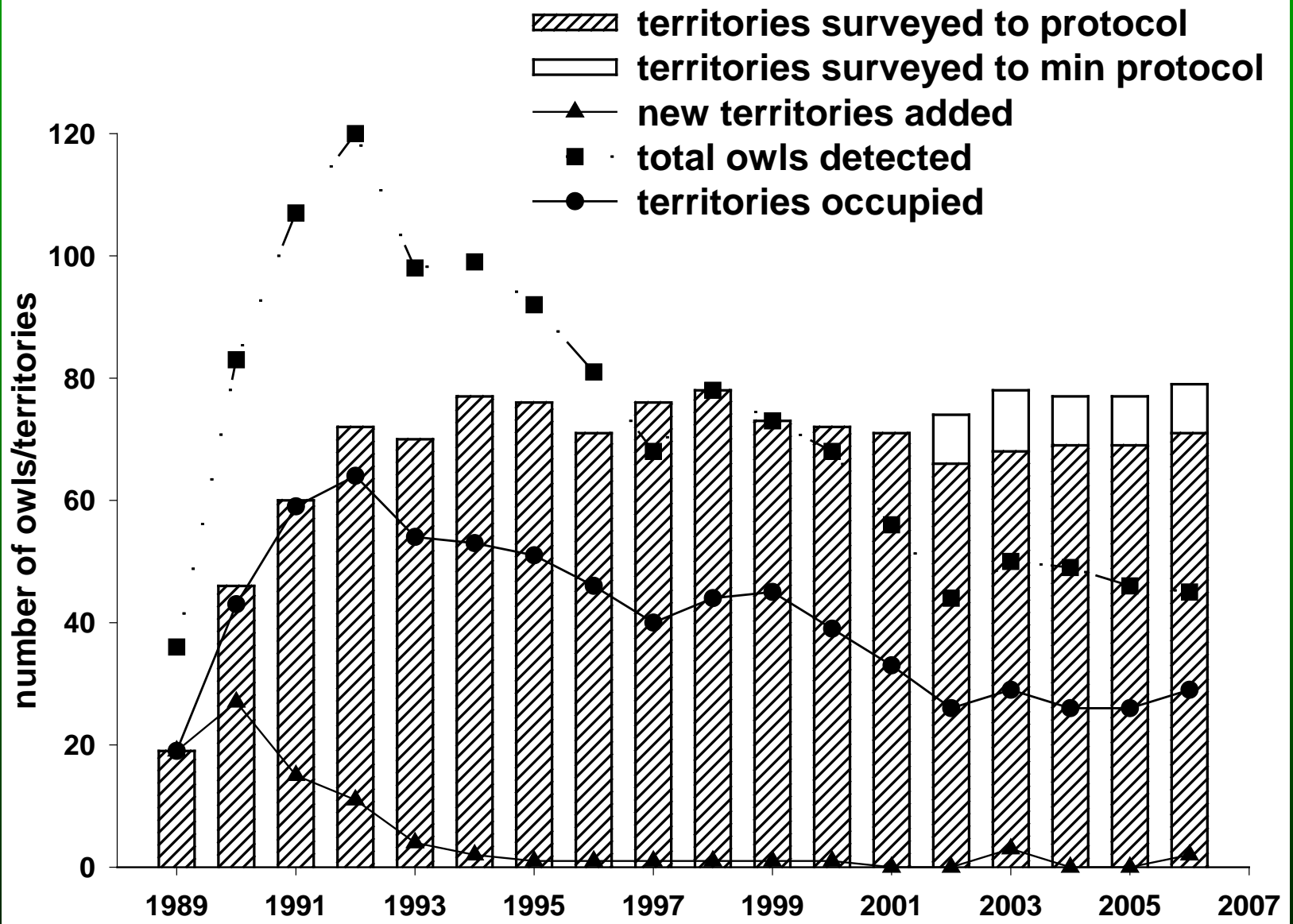
0 5 10 15 Miles

0 5 10 15 Kilometers

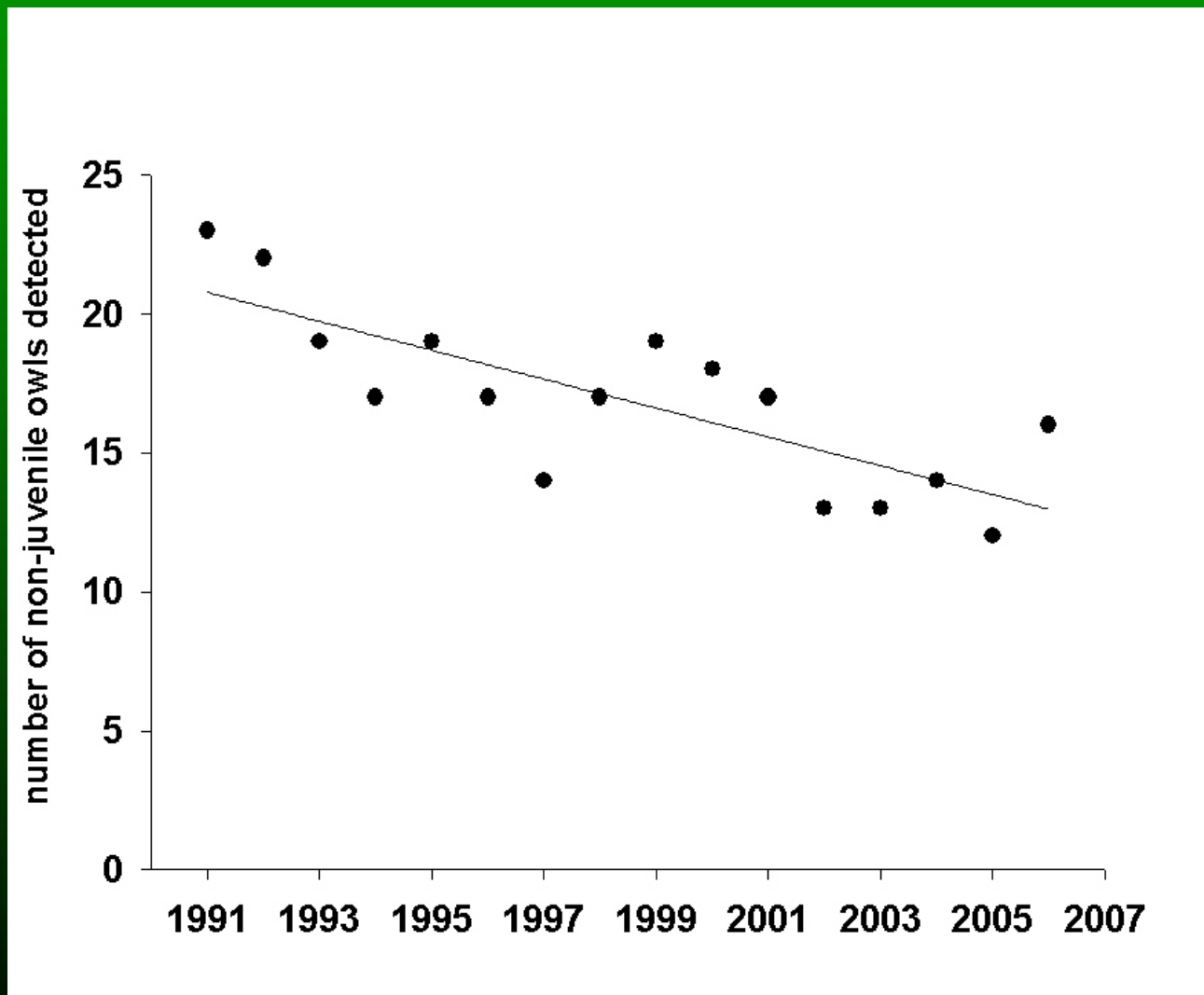
General Study Area: Return to historic territories,
band, determine reproduction

Density Study Area: Same as GSA only also
attempt to determine density

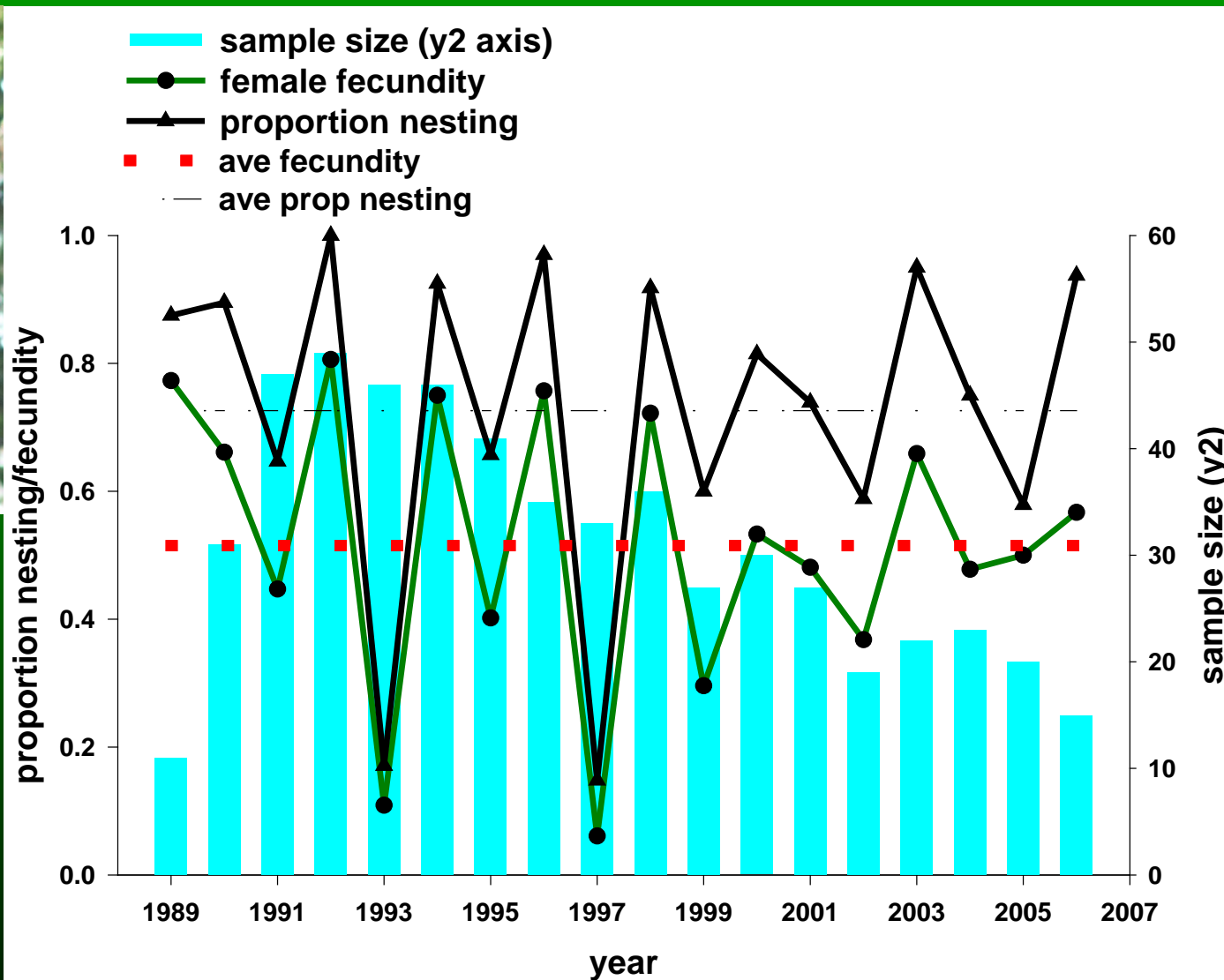


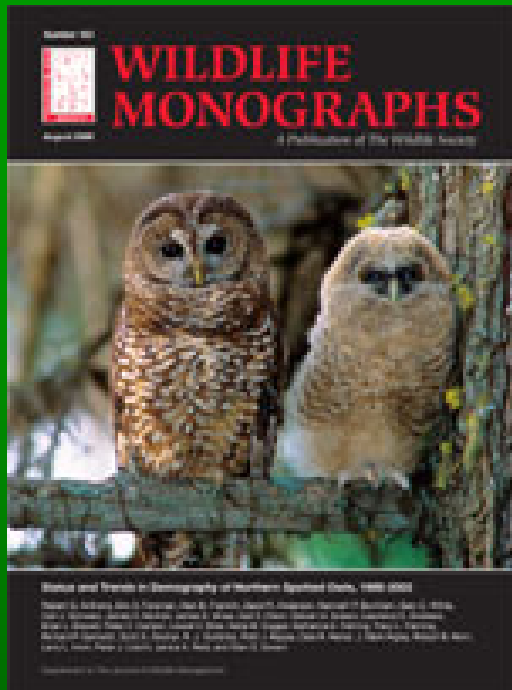


Number of non-juvenile Spotted Owls detected on the 204 km² Swauk Cr. Density Study Area, Wenatchee National Forest, Washington, 1991-2006



Reproductive indices, Cle Elum Study Area, 1989-2006



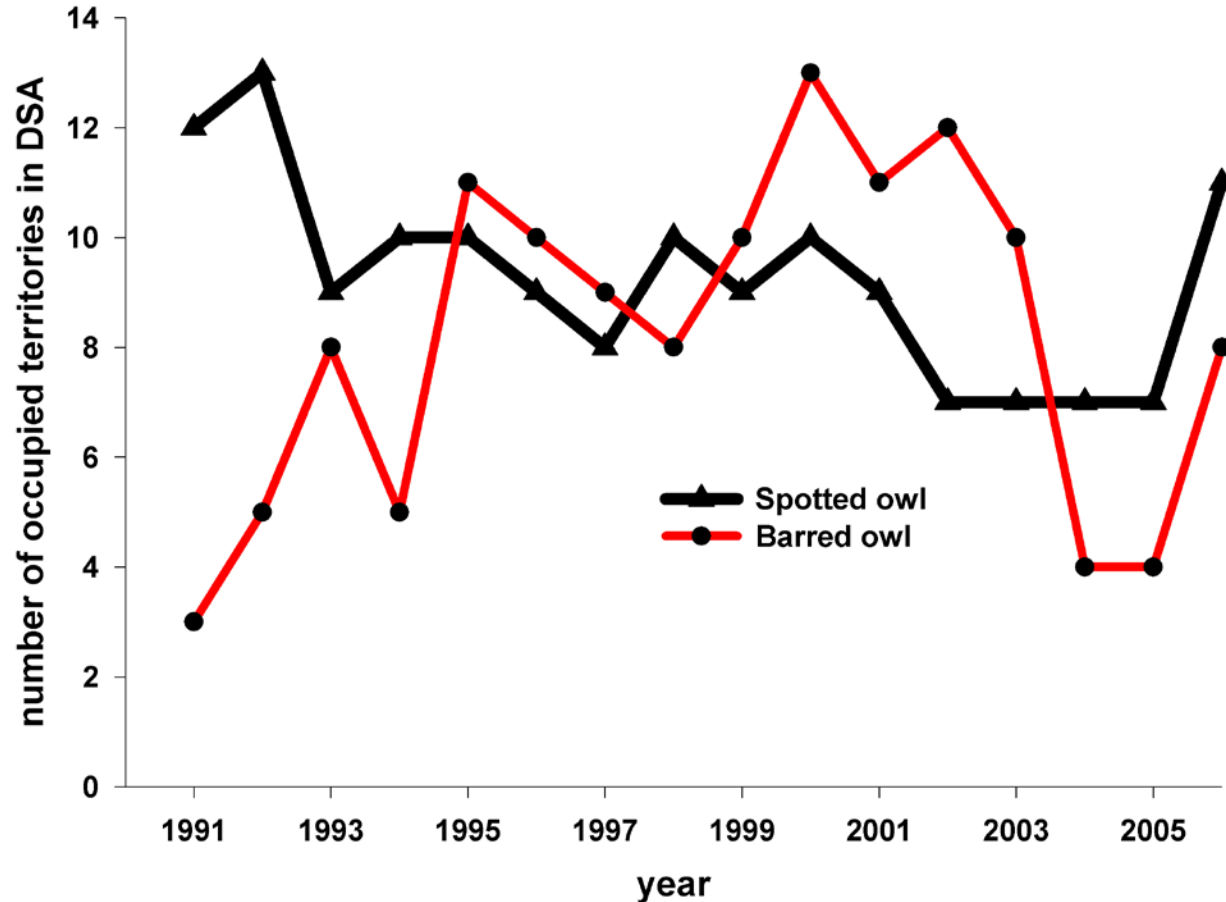
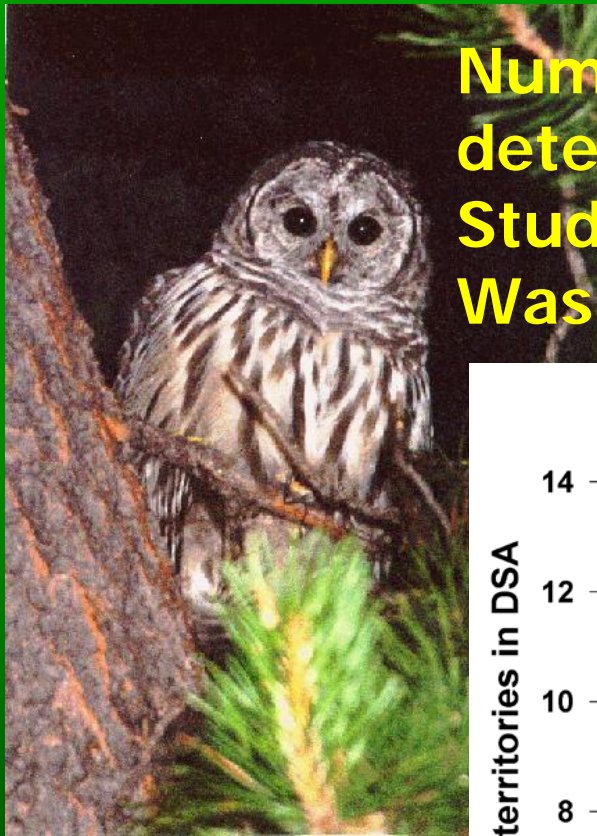


Anthony, R. G., E. D. Forsman, A. B. Franklin, d. R. Anderson, K. P. Burnham, G. C. White, C. J. Schwarz, J. D. Nichols, J. E. Hines, G. S. Olson, S. H. Ackers, L. S. Andrews, B. L. Biswell, P. C. Carlson, L. V. Diller, K. M. Dugger, K. E. Fehring, T. L. Fleming, R. P. Gerhardt, S. A. Gremel, R. J. Gutiérrez, P. J. Happe, D. R. Herter, J. M. Higley, R. B. Horn, L. L. Irwin, P. J. Loschl, J. A. Reid, and S. G. Sovern. 2006. **Status and trends in demography of northern spotted owls, 1985-2003.** *Wildlife Monographs* 163.

Estimated rate of population change (λ_{RJS}) and survival (Φ) 1992-2003 based on the best mark-recapture model from Anthony et al. 2006

Study area	λ_{RJS}	SE	Adult Φ	SE	Trend Φ
Cle Elum	0.938	0.019	0.860	0.017	T (?)
Wenatchee	0.917	0.018	0.750	0.026	TT

Number of barred owls and spotted owls detected on the 204 km² Swauk Density Study Area, Wenatchee National Forest, Washington, 1991-2006



Wen -
Cle +-
-

Proportion of spotted owl territories surveyed each year where at least 1 barred owl detection was recorded, Cle Elum Demography Study Area, Washington, 1989-2005. A spotted owl territory was counted as containing a barred owl response if a barred owl was detected in a given year within 2.0 km of any of the annual territory centers for that territory.

