

Status of the Spotted owl population on the Cle Elum Study Area, Washington, USA, 1989-2008

STAN SOVERN; *Pacific Northwest Research Station, United States Forest Service*

We marked 801 spotted owls in 1989-2008, and used yearly re-observations of the marked owls to estimate reproduction, survival, and population growth rate. Reproduction followed an odd-even year pattern with reproduction higher in even-numbered years in 1989-2000, after which time this pattern became less evident. Yearly empirical counts show a decline in number of owls of approximately 70% in 1992-2008. Annual apparent survival estimates from program MARK for 1989-2003 were generally high (0.86, SE = 0.017) for non-juvenile owls. The spotted owl population on the Cle Elum Study Area has declined by about 6.2%/year during (95% CI = 2.4 – 10%), based on the most recent population growth rate estimate calculated for 1992-2003. A meta-analysis of spotted owl mark-recapture data from 11 spotted owl demography study areas was completed in January, 2009. The results of this analysis will be made public in summer, 2009, and will include updated population growth rate estimates for all study areas.