

# **GROUND DWELLING BEETLES AND VEGETATION SUCCESSION OVER A 17-YEAR PERIOD**

William H. Heyborne

Department of Entomology, Oregon State University, Corvallis, OR 97331-2907, USA

This study was undertaken to assess the relationships between the dynamics of forest regeneration following clearcutting and composition of ground dwelling beetle communities. Regrowth and old-growth Douglas fir stands were sampled for ground dwelling beetles using pitfall traps in 1982, 1983, and 1999. Multivariate analyses showed: significantly different beetle communities in different forest seral stages, association of unique beetle communities with specifically defined plant communities, significant changes in beetle communities over the 17-year period, and a change in beetle communities which paralleled the transformation of young plant communities into mature forest stands.