MARK WATSON, Dept of Natural Sciences and Mathematics, University of Charleston, Charleston, WV 25304 and THOMAS PAULEY, Dept of Biological Sciences, Marshall University, Huntington, WV 25755. Investigation of environmental disturbances on habitat associated with *Plethodon nettingi*, Cheat Mountain Salamander.

Habitat fragmentation and disturbances due to anthropogenic activities are some of the most pressing problems in modern conservation biology. Fragmentation is often due to construction of barriers through habitats. Barriers include land development, roads, pipeline and powerline rights-of-way or through destructive energy resource collection such as timber harvest and mining. We investigated the effects of three fragmentation types on environmental conditions and abundance of plethodontid salamanders in temperate upland forest of West Virginia, USA. The study area targeted habitat supporting *Plethodon nettingi*, Cheat Mountain Salamander, to help determine potential impacts to this federally protected species. The study used five 50m transects of artificial coverboard arrays beginning at the edge of the disturbance and extending into the forest. Arrays were placed every 10m and salamanders and environmental data were collected at each coverboard array. The results of the study showed a positive linear relationship between distance from the habitat edge and abundance of salamander species. In addition, habitat disturbance influenced environmental conditions such as soil moisture and temperature and air temperature. This work was supported by the United States Fish and Wildlife Service.