# The Effects of the 2000 Wildfires on Bird Abundance and Species composition in the Bitterroot National Forest[tws]

Kristina M. Smucker
Wildlife Biology Program
University of Montana, Missoula, MT 59812

Disturbance events, such as windstorms, hurricanes, floods, and wildfires, maintain a range of successional stages with each offering habitat for a different suite of species. In the interior northwest, wildfire is the primary recurring disturbance that has maintained diversity in habitat types. During summer 2000 wildfires burned 13 transects that were part of the Landbird Monitoring Program's (LBMP) long-term monitoring effort in the Bitterroot National Forest. The Northern Region of the USDA Forest Service initiated the LBMP to assess bird habitat relationships and long-term population trends. As a result, one to five years of pre-fire data on bird abundance have been collected using 10-minute point counts. I conducted point counts on 13 burned and 13 unburned transects in the Bitterroot NF during summers 2001 and 2002. This represented the first opportunity to examine changes in bird abundance and species composition following stand-replacing wildfire. I compared relative bird abundance before and after wildfire for all species detected on at least 40 points. Post-fire changes in bird abundance were greatest at points that burned at high severity, where tree mortality was > 80 percent. Foliage-gleaning insectivores decreased following wildfire whereas aerial insectivores increased slightly.