

FLAMMULATED OWL DISTRIBUTION AND DETECTIONS IN MONTANA: RESULTS FROM A REGION-WIDE SURVEY

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The Flammulated Owl is a Montana Species of Concern and a Sensitive Species for the USDA Forest Service (USFS). Prior to summer 2005, this species of owl had not been systematically surveyed across the forested landscapes of Montana, and there have been questions about the extent of its distribution. This past summer, the Avian Science Center and the USFS used GIS modeling to locate survey areas in potential habitat on 12 Forests in Montana and North Idaho and then surveyed for owls using broadcast calls. We set up and ran 267 survey routes and detected almost 250 unique owls. Approximately 2/3 of the owls were detected only after playing the calls. We found Flammulated Owls on all but three forests (Gallatin, Lewis and Clark and Custer National Forests), and located them in a number of new areas. For example, we found 41 owls on the Helena Nation Forest where previously there were few records. For those Forests with owls, the probability of presence on a transect (adjusted for detection) varied from 12 percent to 75 percent. We also examined habitat characteristics surrounding the survey routes. All detections and non-detections are mapped and available for viewing on our new ArcIMS web site http://avianscience.dbs.umt.edu/arcims_info.htm. Through this past season's efforts we have developed a Flammulated Owl protocol for future survey work.