
MOVEMENTS AND HABITAT USE OF NORTHERN SAW-WHET OWLS DURING FALL MIGRATION

Katharine R. Stone*, Ecologist, MPG Ranch, Florence, MT

William Blake, Biologist, MPG Ranch, Florence, MT

We used radio telemetry to track the movements and habitat use of Northern Saw-whet Owls (*Aegolius acadicus*) as they traveled south through the Bitterroot Valley during fall migration. We deployed 38 units over the course of 3 weeks in late September and early October 2014. We hypothesized that owls would use the Bitterroot River floodplain as a travel route, because this landscape feature offers continuous vegetative cover the whole length of the Bitterroot Valley. Instead, many owls traveled along the periphery of the valley, through the forested foothills of both the Bitterroot and Sapphire Mountains. In many cases, their locations suggested that they crossed over landscapes offering little vegetative cover. Our greatest nightly distance moved was 26 miles. We tracked one owl a distance of approximately 60 miles from the banding station. Many owls exhibited stopover behavior, staying in the same general area for several days between movements. Some owls did not

migrate; we do not know if these individuals were year-round residents or overwintering owls arriving from other areas. Our ability to document roost-site characteristics of both migratory and resident owls was constrained by the common use of tall ponderosa pines for roosting, limiting our ability to precisely locate owls, even with telemetry equipment. This result suggests that methods relying on passive observation to detect owls and/or roost sites likely miss the majority of roost sites, at least during migration. We documented one communal roost containing at least three individuals.