

Grassland Ghosts Keeping an Eye on The Recovering Swift Fox 2018 International Census

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Swift Fox (*Vulpes velox*) were extirpated from Canada in 1938 and in Montana in 1969, largely due to federal eradication campaigns in the 1930's targeting coyote and wolves. Reintroduction efforts in Canada occurred from 1983 until 1997. By 2001, swift fox were thought to be established in Northern Montana. In Montana, survey efforts began in 2000/2001, then repeated in 2005/2006, 2014/2015, and most recently the summer of 2018. Surveys in the winter of 2014/2015 consisted of two methods, live trapping and camera trapping. The goal was to determine changes in demography and distribution, but also to assess the feasibility of switching exclusively to camera traps for future survey efforts. There was little difference in detection probability between the two methods suggesting camera trapping is an effective alternative to live trapping. This resulted in only camera trapping being used for the 2018 census. Analysis comparing occupancy between 14/15 and 2018 showed that swift fox populations in the sampling area remained stable and relatively unchanged despite the harsh winter of 2017/2018. Through a finer scope, the Montana populations seem to have experienced a slight increase. The swift fox population in Canada and northern Montana is interdependent and continued collaboration for monitoring across jurisdiction and boundaries is important. Management of swift fox in Montana will continue to follow the Swift Fox Conservation Strategy.