

Meeting Date: January 26, 2023

Agenda Item No. 10.

Agenda Item: 2022 Statewide Wolf Abundance Estimate

Bureau Chief Approval: JR

Prepared by: Shane Roberts, Wildlife Research Manager

Background:

The Department has used a statewide remote camera array to estimate wolf occupancy (distribution) and abundance (total number) since 2019. The camera-based abundance estimation method was first developed in Idaho through collaboration with the University of Montana for use on ungulates but has since been adapted for estimation of other species, including wolves. During spring 2022, regional staff deployed 747 cameras statewide for wolf monitoring. These cameras captured over 10 million pictures during the June-September deployment. We used specialized image recognition software to identify which pictures contained animals (as opposed to grass or twigs blowing in the wind), and then trained staff categorized the pictures that contained animals to species. The resulting data was used in a space-to-event model to estimate average wolf density within portions of the state categorized into three levels of wolf occupancy (low, medium, high). Those density estimates, combined with information on wolf habitat, were then used to estimate abundance of wolves across the entire state. These methods resulted in statewide estimates between 1,543 and 1,556 wolves during the summers of 2019, 2020, and 2021, suggesting a stable wolf population over those years.

Staff will present an overview of the methods used and the newly produced summer 2022 statewide wolf abundance estimate.

Statutory Authority and/or Policy issues:

The Idaho Fish and Game Commission administers state wildlife policy through the Department (Idaho Code 36-104). The Department is charged preserving, protecting, perpetuating, and managing the state's wildlife (IC 36-103). Abundance (number of animals) and population trend are important metrics monitored by the Department to assess population status and the effect of harvest seasons and other management actions.

Public Involvement Process:

The public is keenly interested in information on wolves, including population size and the effect wolves have on prey species and livestock. The Commission and Department receive input from the public on wolves and wolf management throughout the year via social media, email, phone calls, public meetings and hearings, and other events.

Staff Recommendation:

N/A. This agenda item is presented for Commission information.

Justification:

Information will aid Commissioners as they respond to requests, recommendations, or other input from the public.