

LITERATURE CITED

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APPENDIX A. POPULATION ESTIMATION TECHNIQUE USED TO DETERMINE WOLF POPULATION NUMBERS IN IDAHO

From 1996 until 2005, wolf populations were counted using a total count technique that was quite accurate when wolf numbers were low and most had radiocollars. We have, for the past two years, used an estimation technique that is more applicable to a larger population which is more difficult to monitor. In 2006 we began using an estimation technique that had been peer reviewed by the University of Idaho and northern Rocky Mountain wolf managers. This technique bypasses the need to count pups in every pack, and instead relies on our documented packs, estimated pack size, number of wolves documented in small groups not considered packs, and a percentage of the population believed to be lone wolves. Mathematically this technique is represented as:

$$\text{Minimum Wolf Population Estimate} = [(\text{Documented packs} * \text{mean pack size}) + (\text{Wolves in other documented wolf groups})] * (\text{lone wolf factor})$$

Using this technique, the 2008 wolf population estimate is 846 wolves and represents an increase of 16% over 2007's estimated wolf population:

$$\begin{aligned} & ((88 * 8.3) + (22)) * 1.125 \\ & (730 + 22) * 1.125 \\ & 752 * 1.125 = \\ & 846 \end{aligned}$$

The number of documented packs that were extant at the end of 2008 was 88.

Mean pack size (8.3) was calculated using only those packs ($n = 35$) for which biologists believed complete pack counts were obtained in 2008.

To account for wolves not classified as lone wolves and not associated with documented packs, we included a "total count" for those radiocollared wolves in groups of 2-3 wolves that were not considered packs under Idaho's definition. This resulted in the addition of 22 wolves from 8 groups.

A lone wolf factor (12.5%) was added to account for that component of the wolf population comprised of wolves not associated with packs or groups of 2-3 wolves. This was a mid value derived from 5 peer-reviewed studies and 4 non-reviewed papers from studies that occurred in North America and were summarized and reported in 2003 (Mech and Boitani 2003, page 170). For 2008, an estimated 92 lone wolves were in the Idaho population.

It is important to recognize this estimate is not corrected for survey effort and represents only the minimum number of wolves estimated to be present in Idaho. The actual number of wolves in Idaho is likely more than the 'estimated minimum number', as we did not include suspected packs (packs for which we did not have verified evidence) in the estimator. Also, changes in the estimate from year to year are not adjusted to differing amounts of effort put forth to document wolf activity. However, we are comfortable that this estimate is a good representation of packs that have been reported by the public and agency professionals and verified by wolf specialists, and thus a defensible estimate of the minimum population.

APPENDIX B. CONTACTS FOR IDAHO WOLF MANAGEMENT

Idaho Fish and Game Regional Offices at:

Headquarters Wildlife Bureau	(208) 334-2920
Panhandle Region	(208) 769-1414
Clearwater Region	(208) 799-5010
Southwest Region	(208) 465-8465
McCall Subregion	(208) 634-8137
Magic Valley Region	(208) 324-4350
Southeast Region	(208) 232-4703
Upper Snake Region	(208) 525-7290
Salmon Region	(208) 756-2271

For information about wolves in Idaho and IDFG management:

<http://fishandgame.idaho.gov/cms/wildlife/wolves/>

To contact IDFG via email:

<http://fishandgame.idaho.gov/inc/contact.cfm>

The Nez Perce Tribe's Idaho Wolf Recovery Program:

Telephone: (208) 634-1061
Fax: (208) 634-4097
Mail: P.O. Box 1922
McCall, ID 83638-1922
Email: cmack@nezperce.org
jholyan@nezperce.org

For information about the Nez Perce Tribe's Wildlife Program and to view Recovery Program Progress Reports, please visit the following website:

http://www.nezperce.org/programs/wildlife_program.htm

U.S. Fish and Wildlife Service Northern Rocky Mountain Wolf Recovery:

For information about wolf recovery in the Northern Rocky Mountains, please visit the USFWS website at the following:

<http://www.westerngraywolf.fws.gov/>

Appendix B. Continued.

To report wolf sightings within Idaho:

Report online: <http://fishandgame.idaho.gov/wildlife/wolves/report.cfm>

To report livestock depredations within Idaho:

USDA/APHIS/Wildlife Services

State Office, Boise, ID (208) 378-5077

District Supervisor, Boise, ID (208) 378-5077

District Supervisor, Gooding, ID (208) 934-4554

District Supervisor, Pocatello, ID (208) 236-6921

Wolf Specialist, Arco, ID (208) 681-3127

To report information regarding the illegal killing of a wolf or a dead wolf within Idaho:

U.S. Fish and Wildlife Service Senior Agent, Boise, ID (208) 378-5333

Citizens Against Poaching (24hr) 1-800-632-5999
or any IDFG Office