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RC 010

Comments on Proposals 113-115 – lengthening the wolverine trapping season in GMUs 11 and 13.

Appropriate ending dates for wolverine trapping and hunting seasons depend upon management goals and ethical considerations.

Over the last 30 years or more in Alaska wolverine trapping/hunting seasons have ended between January 31and April 15. Reasons for the wide range in ending dates include conservation concerns for unsustainably high harvests (January 31 closure in GMUs 11 and 13 during the 1990s), fur primeness (general closure date of February 28 in Interior Alaska), providing opportunities to hunt wolverines when temperatures are moderating (April 15 closures in Arctic GMUs), and avoiding harvest of females when wolverines have dependent young (closures on or before February 15).

To help the Board of Game in deliberations over appropriate ending dates for wolverine trapping and hunting seasons, we offer the following comments:

1) Home range size of reproductive females – in Alaska, territorial female wolverines have home ranges of 100-300 square miles (depending on density and food availability), which limits the number of females that will produce young in any particular GMU; a single female's home range might span more than one trapline.

2) Dispersal of females – most young female wolverines share their mother's home range in their first year or two and will either occupy the mother's home range if she dies or move into an adjacent area; dispersal of most females, therefore, is over relatively short distances compared to males; consequently, areas where females have been heavily trapped may require a number of years to be reoccupied by another reproductive female.

3) Female productivity – female wolverines usually do not have their first litter until they are 3 or 4 years old; litter size is generally 2 or 3 young; often females will skip a year between litters unless food is abundant; females will produce fewer kits as they age; maximum lifespan in the wild is about 12 years, although older females have been documented.

4) Timing of birth – although some wolverines are born in late January, most births occur in February and the first half of March; births can also occur in late March but rarely in early April. As the young develop, the female makes longer movements away from the den and becomes less wary in her attempts to secure

food. As the trapping season advances, the chances of trapping females with dependent young increases appreciably. Because the young are dependent on the mother's milk until at least early May and may continue to nurse into June, the young will not survive if the mother is removed during the lactation period. The young remain dependent on their mother to secure food until at least sometime in September. [Note: mating season is in the preceding spring and summer so all females that have been bred are pregnant the entire trapping season].

5) Movements of denning females – during the first 6-10 days after the birth of young, denning females will remain near the den, gradually increasing their movements until the den is abandoned sometime in May; denning females have been known to travel up to 15 miles to find food and return to the den.

6) Pelt primeness – although pelt primeness varies by region, we are not aware of any studies of wolverine pelt primeness in Alaska. We have observed fur primeness of approximately 20 live and trapped wolverines from GMU 26 during the first 2 weeks of April. About 50% of the animals were noticeably faded, singed, and/or rubbed on the hips. Pelt primeness also rapidly deteriorates during March in Interior Alaska.

Concluding Remarks

A relatively conservative closure date for the wolverine trapping season based on population dynamics and ethical considerations would be January 31. Proposed closure date of February 28 would result in reproductive females being trapped and may not be sustainable if large untrapped areas are not adjacent to existing traplines.

For strictly ethical considerations, a closure of January 15 would guarantee females with dependent young are rarely trapped, except for incidental captures made in sets for other species. There have been no studies in Alaska that have examined the proportion of trapped females in the harvest that likely have dependent young in dens. Such a study would help to determine if a later closure date was appropriate.

A hunting season for wolverines beginning in September probably would not affect dependent wolverines, however, hunting wolverines during spring bear hunts could result in the removal of females with dependent young.

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