### **Mountain Goat: Proposed Regulation to Reduce Harvest of Females**

The Fish and Wildlife Branch wishes to notify stakeholders of a proposal to reduce the harvest of female mountain goats, starting in 2010/11.

Minimizing female harvest of mountain goats has been identified as a conservation concern by the Ministry of Environment. High harvest rates of female mountain goats have and will continue to result in some areas being closed to hunting in B.C. unless regulations to reduce the female harvest can be developed. This regulation proposal will enhance hunting opportunities by minimizing female harvest and thus the necessity to restrict/close mountain goat hunting seasons. This regulation does not protect all female mountain goats as a solitary female mountain goat, or a female mountain goat within a group of goats that does not contain kids, would still be legal to harvest.

## **Proposed Regulation:**

There is no open season for a female mountain goat accompanying a kid, or a female mountain goat in a group that contains one or more kids.

# Proposed definition of "kid":

"kid" means a mountain goat with horns 10 cm or less;

#### Rationale

Mountain goat mortality associated with hunting is considered to be additive to population losses from natural events because of low propensity for dispersal, and limited ability of any density dependent response in reproductive and survival parameters (Toweill et al. 2004). This problem is magnified in small, relatively isolated populations.

Mountain goat populations are sensitive to adult female mortality because of comparatively late age at first reproduction (e.g., 4–5 yrs at Caw Ridge, Alberta) and low production and survival of kids (Côté and Festa-Bianchet 2008, Hamel et al. 2006). Mountain goat hunters often select the largest animal they observe within a group of goats. These individuals tend to be the dominate females in the nursery group, are often 7 years of age or older, and account for most of the kid production and recruitment of yearlings into the population (Festa-Bianchet and Côté 2008).

Under the proposed regulation, a kid would be defined as a mountain goat with horns 10 cm or less. This definition is adapted from Festa-Bianchet and Cote (2008) who found horn length of mountain goats at approximately 12 months of age (approximately June 1, the year following birth) in Alberta to be 11.4 cm for males and 10.2 cm for females. Because the longest mountain goat season in B.C. extends to Feb 28 (Region 6), mountain kids would be approximately 9 months old and in these northern areas would have horns less than 10 cm.

### References

- Festa-Bianchet, M., and S.D. Côté. 2008. Mountain goats: ecology, behaviour, and conservation of an alpine ungulate. Island Press, Washington, DC.
- Hamel, S., S.D. Côté, K.G. Smith, and M. Festa-Bianchet. 2006. Population dynamics and harvest potential of mountain goat herds in Alberta. Journal of Wildlife Management 70:1044–1053.
- Toweill, D.E., S. Gordon, E. Jenkins, T. Kreeger, and D. McWhirter. 2004. A working hypothesis for management of mountain goats. Biennial Symposium of the Northern Wild Sheep and Goat Council 14:5–45.