

**Title** Managing elk in a world with complex predator-prey (and social!) dynamics: A case study from the Kootenays

## Presenter's information

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## Abstract

I will present current challenges to managing elk in a multi-predator/multi-prey system in the Kootenay Region of southeast BC. Elk in this region are highly valued by licensed hunters, First Nations and the general public and are one of the most controversial and closely monitored wildlife populations in the province.

In 2010, BC Fish and Wildlife developed an elk management plan for the Kootenay Region following extensive stakeholder involvement. At that time there was relatively little regard for predation since elk populations were increasing and thought to be at or near carrying capacity in many areas. Concerns centered around the effects of large elk populations on grassland ecosystems, other wildlife species (such as bighorn sheep) and agricultural operations. Objectives for elk population targets were established by considering social and ecological criteria, and focused on reducing or maintaining populations using hunting as the primary management tool. Elk management from 2010 to 2014 followed guidance from the plan and objectives were largely achieved.

Since 2014, managing elk populations has been largely reactive to the effects of predation. Information on predation is gathered from elk population and composition surveys, radio-collared elk, and anecdotal observations (e.g., from First Nations, the general public, biologists, and Conservation Officers). This information is then applied to management, in consideration of social perspectives identified through public surveys and focus group meetings. For example, wildlife staff consider predation effects on population size and trend when setting cow/calf elk seasons and number of Limited Entry Hunt authorizations.

In the fall of 2015, wildlife staff began developing a provincial management plan for Rocky Mountain elk. A key part of this plan will be a management tool table, which will identify potential tools (e.g., predator management to increase elk populations), their likely biological effectiveness, as well as relevant policy, social, and economic considerations. I will provide an overview of these tools, focusing on those related to predator-prey dynamics.

## **Biographical notes**



Tara is a Senior Wildlife Biologist with Fish and Wildlife (Ministry of FLNRO) in Cranbrook, BC. She has worked on elk management in the Kootenay Region since 2005. Tara holds an MSc in Wildlife Ecology and Management and is a Registered Professional Biologist.