

Received  
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# Agenda Item 12

*Please replace the Green Sheet with the following materials.*

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**“GREEN SHEET”**

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**Meeting:** June 3-4, 2011

**Agenda Item 12:** Predator Population Trends and Predator-Prey Management – **Briefing**

**Prepared By:** Donny Martorello, Ph.D.

**Presented By:** Nate Pamplin, Assistant Director, Wildlife Program  
Donny Martorello, Ph.D., Carnivore, Furbearer & Special Species Manager,  
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**Background:**

Understanding predator-prey dynamics has become increasingly important for wildlife management agencies nationwide. In the last decade, an increasing number of state agencies have incorporated predator-prey management, specifically predator removal, into their management strategies. Similar issues involving species such as marine mammals, cormorants, and terns already occur in Washington State and the Department has addressed these issues on a case-by-case basis. Because predator management to attain prey population objectives is complex and tends to be controversial, there is a need for a more proactive approach for outlining our management principles, decision-making process, scientific standards, and public involvement process.

To that end, the Wildlife Program is currently working on two documents to advance and guide our management related to predator-prey. The need for the first document is identified in the 2009-2015 Game Management Plan and is a white-paper summarizing the current state of knowledge of black bear-cougar-coyote and deer-elk dynamics as it relates to predator-prey management. The second document is a draft of management guidelines that outlines principles that the Program would consider prior to implementing a predator-prey management action.

In response to a blue sheet request, the Department will brief the Commission on the population status and trends for black bear, coyote, and cougar. Staff will also brief the Commission on the draft predator-prey management guidelines and provide a general background on the science of predator-prey management. .

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**Policy Issue(s) you are bringing to the Commission for consideration:**

None, this is only a briefing.

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**Public involvement process used and what you learned:**

Management of large carnivore species and ungulates dynamics was discussed and incorporated into the Game Management Plan. As a part of that process, the Department is aware that the public has a strong interest in predator-prey dynamics and the potential implications to the status of prey species.

The presentation made to the Commission will be available on the WDFW website.

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**Action requested (identify the specific Commission decisions you are seeking):**

None; briefing only. This is a Commission request from the August 6-7, 2010 Commission meeting. It was postponed to occur at the June 3-4, 2011 Commission meeting.

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**Draft motion language:**

N/A

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**Justification for Commission action:**

N/A

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**Communications plan:**

News Release

WDFW Website

Other opportunities for public comment may be incorporated.

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# **Washington Department of Fish and Wildlife Predator-Prey Management Guidelines for Black Bear, Cougar, and Coyotes to Achieve Ungulate Population Management Objectives**

**Draft Version: *May 25, 2011***

## **Introduction:**

The Washington Department of Fish and Wildlife (WDFW; Department) serves Washington's citizens by protecting, restoring, and enhancing fish and wildlife and their habitats while providing sustainable fish and wildlife-related recreation and commercial fishing opportunities. To fulfill its responsibilities, WDFW must effectively manage wildlife to meet population objectives. The management goals for black bear, cougar, and coyotes (adapted from 2009-2015 Game Management Plan) are:

- Preserve, protect, perpetuate, and manage predators and their habitats to ensure healthy, sustainable, and viable populations.
- Minimize concerns regarding human safety and protection of livestock and pets from predators.
- Manage predators for a variety of recreational, educational and aesthetic purposes including hunting, scientific study, cultural and ceremonial uses by Native Americans, wildlife viewing, and photography.
- Improve our understanding of predator-prey relationships and the potential impacts of predators on ungulate populations.
- Increase public education and awareness of large carnivore conservation.

## **Purpose:**

In consultation with the Director, the Wildlife Program has developed these management guidelines to provide direction for when the Program would recommend black bear, cougar, or coyote management actions using the best appropriate science as a means to achieve ungulate population objectives. WDFW recognizes that predator management is a viable population management tool to achieve prey population objectives (hereafter referred to as predator-prey management). The Department also recognizes that socio-political concerns may drive wildlife management decisions and that societal values are often polarized regarding predator management for the purpose of achieving prey population objectives. This document would serve as a supplement to the 2009-2015 Game Management Plan.

## **Guiding Principles:**

WDFW will consider predator-prey management actions using the following guiding principles:

- 1) Predator and prey populations are managed to ensure the long-term perpetuation of each species while attaining individual species population objectives.
- 2) Management of predators to benefit prey populations will be considered when there is evidence that predation is a significant factor inhibiting the ability of a prey population to attain population management objectives. For example, when a prey population is below population objective and other actions to increase prey numbers such as hunting reductions, habitat enhancements, or other actions to achieve ungulate population objectives have already been implemented, and predation continues to be a limiting factor. In these cases, management actions would be directed at individuals or populations depending on scientific evidence and would include assessments of population levels, habitat factors, disease, etc.
- 3) Affected co-managers and stakeholders should be consulted prior to taking significant actions.
- 4) Conservation, economic, recreational, and societal values will be considered.
- 5) Any proposed management action must be consistent with federal and state law.
- 6) Decisions will be based on scientific principles and evaluated by WDFW. External review may be requested by WDFW for contentious or large-scale efforts using a scientific review panel of experts in predator-prey ecology.
- 7) Public education will be incorporated with any predator-prey management actions.

## **Action Consideration:**

Predator-prey management actions will be consistent with management objectives for predators, prey, habitat, and societal parameters. If the Department decides to take an action, management will be directed at either individual predators or populations and would be primarily managed through:

- 1) Recreational hunting seasons
- 2) Predator removal via:
  - a) specific actions to remove individuals or reduce populations of predators, using licensed hunters/trappers
  - b) professional contractors such as USDA Wildlife Services (monitored and supervised by WDFW)

## **Assumptions:**

Certain assumptions apply when considering predator-prey management:

- 1) The scientific information points to predators having a significant effect on prey population levels that ultimately impacts attainment of a population management objective.
- 2) The term “management objective” means a population or management objective identified in a planning document or commonly accepted and used by WDFW for management of that species. The basis for population objectives (outside of a listing status) are assumed to include viable and productive population levels and are often developed in consideration of: current population estimates; harvest history; current harvest levels; currently occupied summer and winter ranges; condition of available forage and other habitat; land use practices; volume and distribution of property damage complaints; landowner tolerance; and public satisfaction.
- 3) Implementation can apply across a continuum of predator management strategies, ranging from removal of individual or small numbers of animals to population level management across a broad spectrum of geographic scales (from site management to a larger landscape or region). Individual and local population management actions will be addressed as a priority, with ‘population level’ actions considered only when wide scale actions are deemed necessary to sustain prey populations.

## **Implementation of Predator-Prey Management Actions:**

When WDFW considers predator-prey management actions, the following information would be documented:

- 1) Describe the problem and rationale for a proposed action as determined by WDFW.
  - a) Articulate the information that the prey population is not at objective.
  - b) Articulate the biological status of the predator and prey populations.
  - c) Describe the evidence used to determine that predation is suspected to be limiting the prey population.
  - d) Determine the independence of other ecological affects other than predation (e.g. habitat, disease, etc.) on prey populations.
  - e) Determine whether population or individual level management actions are appropriate.
  - f) Articulate the socio-political aspects regarding the predator and prey populations in question.

- 2) Risk assessment – Assess the effect of proposed management actions on:
  - a) Predator populations;
  - b) Prey populations;
  - c) Other species (e.g., trophic cascades);
  - d) Habitat;
  - e) Recreational opportunity;
  - f) Landowners; and
  - g) Stakeholders who might be for or against actions.
  
- 3) Proposed Action:
  - a) Define geographical boundaries.
  - b) Identify which predator species are affected.
  - c) Identify which prey or other species that may be affected by the proposed action.
  - d) Describe the methods to be used (e.g. predator removal, hunting seasons, and habitat manipulations).
  - e) Project the expected outcome/objective
    - i. Include scientific information that addresses the expected effectiveness/success of predator control actions.
    - ii. Likelihood of success and how success is measured (including cost/benefit).
  - f) Develop a monitoring plan to evaluate effectiveness prior to and following the control actions.
  - g) Define a timeline for implementing an action.
  
- 4) Public Review:
  - a) Stakeholder discussions
  - b) SEPA/NEPA review when appropriate
  - c) Commission action when appropriate