



A Field Guide To

COMMON

WILDLIFE DISEASES

AND PARASITES

IN ALASKA



Alaska Department
of Fish and Game



STATE OF ALASKA
Tony Knowles, Governor
DEPARTMENT OF FISH AND GAME
Frank Rue, Commissioner
DIVISION OF WILDLIFE CONSERVATION
Wayne L. Regelin, Director

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Elkin, Brett and RL Zarnke. 2001. Common wildlife diseases and parasites in Alaska. Alaska Department of Fish and Game. Anchorage, Alaska USA.

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Pouch 1148, Nome, AK 99762
907-443-2271

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INTRODUCTION

Although most wild animals in Alaska are healthy, diseases and parasites can occur in any wildlife population. Some of these diseases can infect people or domestic animals. It is important to keep track of wildlife diseases, so changes can be seen and steps taken to reduce their impact.

The information in this field guide should help hunters:

- recognize sickness in an animal before they shoot,
- identify a disease or parasite in an animal they have killed,
- know how to protect themselves from infection,
- help wildlife managers monitor wildlife disease and parasites.

The diseases in this booklet are grouped according to where they are most often seen in the body of the animal: skin, head, internal organs, muscles, general.

General Precautions:

Hunters should look for signs of sickness in animals before they shoot, such as:

- poor condition (weak, sluggish, thin, or lame),
- swellings or lumps, hair loss, blood, or discharges from the nose or mouth,
- abnormal behaviour (loss of fear of people, aggressiveness).

CYSTIC HYDATID DISEASE



Two hydatid cysts in moose lungs.

What causes hydatid disease?

- Cystic hydatid disease is caused by the larvae of the tapeworm *Echinococcus granulosus*.
- Lifecycle: The tapeworm needs two hosts: a carnivore (e.g., wolf or dog) and a herbivore (e.g., caribou). The adult tapeworm grows and lays eggs in the intestines of the carnivore. The eggs come out in the carnivore's droppings and contaminate plants which are eaten by the herbivore. The eggs hatch into larvae that travel to the herbivore's lungs where they form cysts. Carnivores become infected when they eat lungs that contain cysts.

Where does hydatid disease occur?

- The adult tapeworm occurs in the intestines of wolves and dogs.
- The larval form or cyst occurs in moose, caribou, bison, elk and deer, and can occur in humans.
- In Alaska cystic hydatid disease occurs commonly in moose and caribou.

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What are the signs of hydatid disease?

- Carnivores (e.g., wolves) and herbivores (e.g., moose) usually appear healthy.
- In moose and caribou, the cysts have thick walls and are filled with a clear watery liquid.
- Cysts are usually found in the lungs but can also occur in the liver or other organs.
- Cysts can be 3/4 to 4 inches in diameter, but most are 3/4 to 2 1/2 inches.
- The surrounding tissue is usually normal.

How can I protect myself?



- You **can** be infected from tapeworm eggs found in the droppings of wolves and dogs.
- **Wear gloves when handling scats from wolves or foxes.**
- The lung cysts in moose and caribou **do not** infect people.
- Worm dogs regularly, keep dog lots clean and dispose of dog feces to minimize exposure to eggs of this parasite. Also, use care when handling dog harnesses and other gear that may be contaminated with *Echinococcus* eggs.
- When skinning wolves and foxes, keep in mind that the eggs of this parasite can cling to the fur around their tail and anus.

Can I eat the meat?



- Meat from infected animals is suitable for human consumption.
- **Do not eat any tissues or organs containing cysts.**
- Dogs and wolves can be infected from eating cysts in organs of moose or caribou and spread the disease to people in their droppings.
- **Do not feed infected parts to dogs.**

Samples to collect

- Portions of tissue containing cysts

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