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## Parasites of the Snowshoe Hare (1): Tapeworm Cysts

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## Wildlife Diseases FACTSHEET

# Parasites of the Snowshoe Hare (1): Tapeworm Cysts

### Introduction

All wild animals carry diseases. In some cases these might be of concern because they can spread to humans or domestic animals. In other cases they may be of interest simply because the signs of the disease have been seen and you want to know more. Though diseases are relatively common in these animals there is usually an increase in reporting when the hare populations are at a peak. High populations mean that there is an increased chance of one animal infecting another. In addition, when there are too many animals in one area, the amount of available food is reduced so that the animals become weaker and more vulnerable to disease.

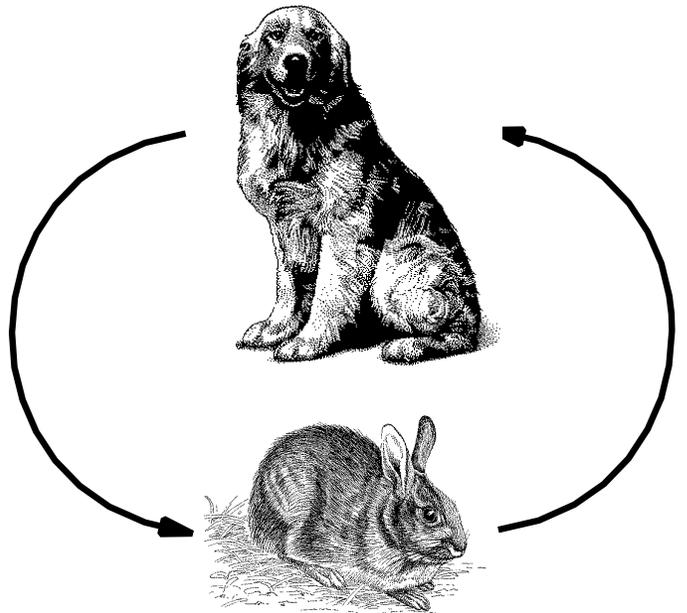
The two common tapeworm infections in the snowshoe hare of this province are described in this factsheet.

### Tapeworm Cysts

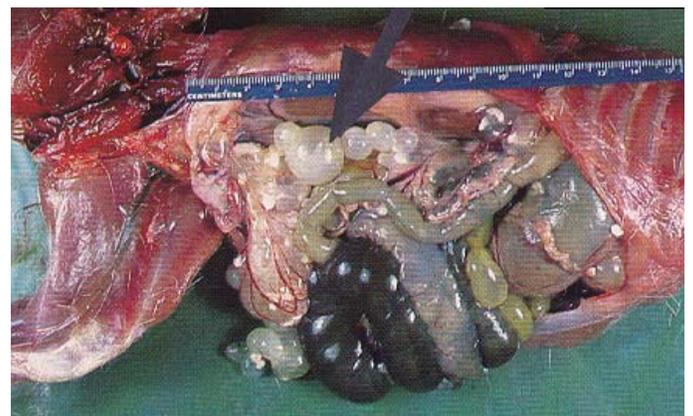
There are two common tapeworms found in the snowshoe hare of this province, *Taenia pisiformis* and *Taenia serialis*. These can be spread to dogs if they are fed uncooked meat or organs from an infected hare. They do not infect people.

These parasites go through different stages of development (life cycle, see Figure 1) from an egg to a larva (cyst form) through to the adult form (the tape). In order to complete the life cycle the parasite requires two animals or hosts. The final host is the animal that contains the adult form (egg laying part) of the parasite. The intermediate host is the animal that

contains the immature (larval) stage. For both of these diseases the snowshoe hare is the intermediate host.



**Figure 1:** Life cycle of common tapeworms



**Figure 2:** *Taenia pisiformis* cysts in body cavity

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The final host for *Taenia serialis* is the dog, coyote, fox and wolf; while for *Taenia pisiformis* the final host is the dog, cat, fox, wolf, coyote and lynx.

The hare gets infected by eating plants that have eggs on them that came from infected final hosts. The *Taenia pisiformis* larvae migrate through the liver before developing cysts in the body cavity (see Figure 2). These cysts are about the size and shape of a pea, contain clear fluid and can be seen on the body's organs (such as kidney and liver). *Taenia serialis* larval cysts (Figure 3) develop under the skin or between the muscles of the leg.



**Figure 3:** *Taenia serialis* cysts in leg muscles

For both of these tapeworms, the carcass is suitable for human consumption after the cysts have been trimmed away unless there are other signs of disease. Infected carcasses should not be fed raw to other animals (such as dogs) as this will only help to spread the parasite. Dogs don't often get sick from this infection unless they eat large quantities of cysts.

### More Information

For more information please contact the author, a Regional Veterinarian, or your local Conservation Officer. For information on diagnosing and treating infections in dogs or other pets please contact your local private veterinary clinic.

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### Photo credits:

**Figure 2:** Southeastern Cooperative Wildlife Disease Study, University of Georgia

**Figure 3:** Dr. Murray Lankester, Lakehead University