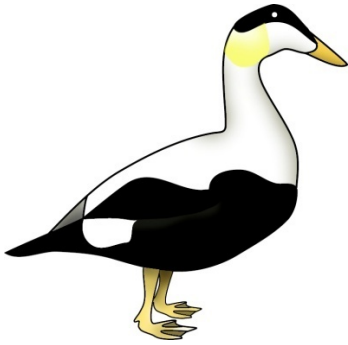
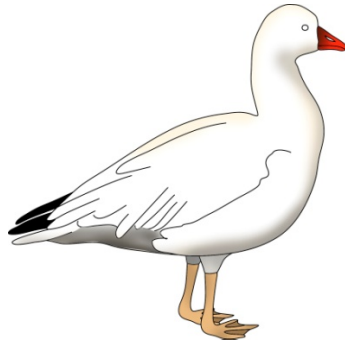


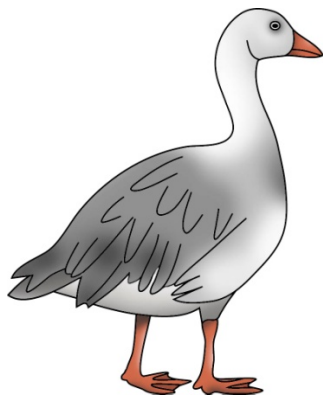
## Section B



Common Eider  
Section B-1



Ross's Goose  
Section B-2



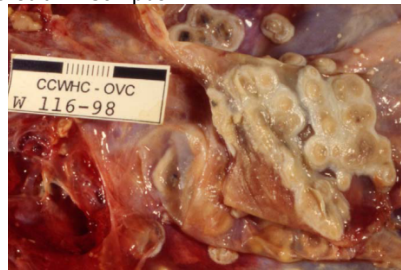
Lesser Snow Goose  
Section B-3

## Section B

### Diseases and Parasites of Birds

#### Aspergillosis

Photo Credit: D. Campbell



Common Eider

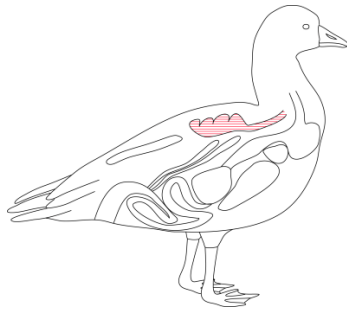
Section B-1.1

Ross's Goose

Section B-2.1

Lesser Snow Goose

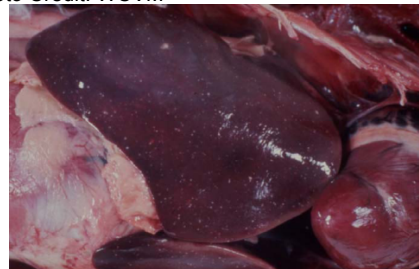
Section B-3.1



Lung

#### Avian Cholera

Photo Credit: WCVN



Common Eider

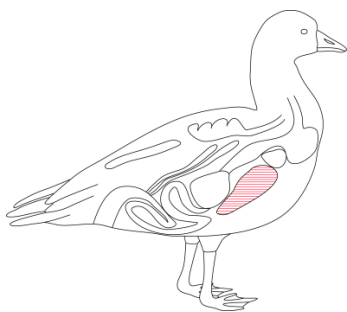
Section B-1.2

Ross's Goose

Section B-2.2

Lesser Snow Goose

Section B-3.2

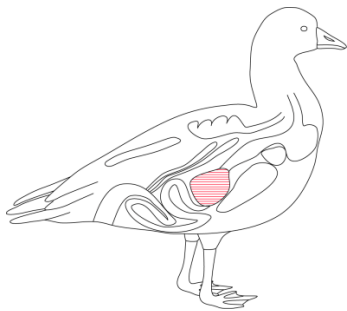


Liver

# Section B

## Diseases and Parasites of Birds

### Gizzard Worm



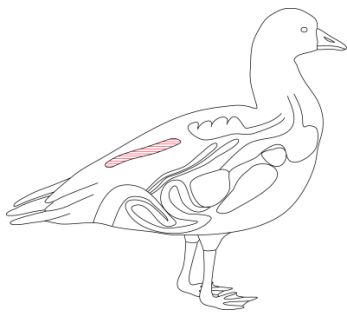
Gizzard



Photo Credits: James Runningen

Common Eider	Section B-1.3
Ross's Goose	Section B-2.3
Lesser Snow Goose	Section B-3.3

### Renal Coccidiosis



Kidney



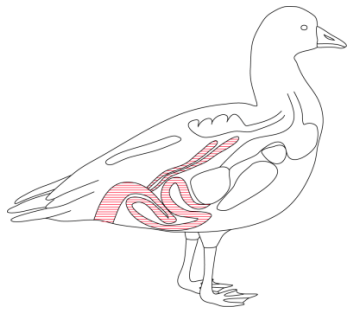
Photo credit: WCVM

Common Eider	Section B-1.4
Ross's Goose	Section B-2.4
Lesser Snow Goose	Section B-3.4

## Section B

### Diseases and Parasites of Birds

#### Thorny-headed Worm



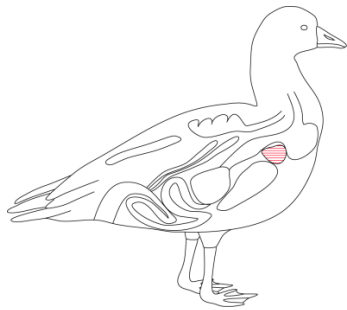
Intestine



Photo Credit: Gary Wobeser

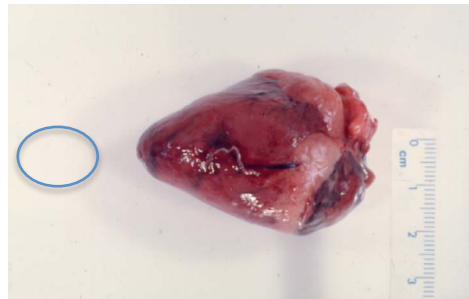
Common Eider	Section B-1.5
Ross's goose	Section B-2.5
Lesser Snow Goose	Section B-3.5

#### Heartworm



Heart

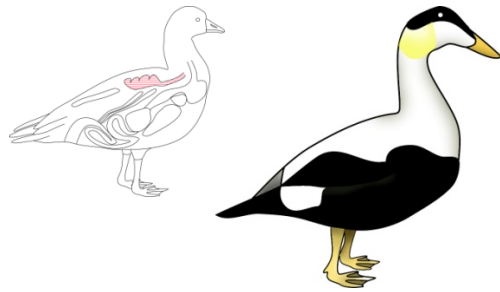
Photo Credit: G. Wobeser



Ross's Goose	Section B-2.6
Lesser Snow Goose	Section B-3.6

## B-1.1

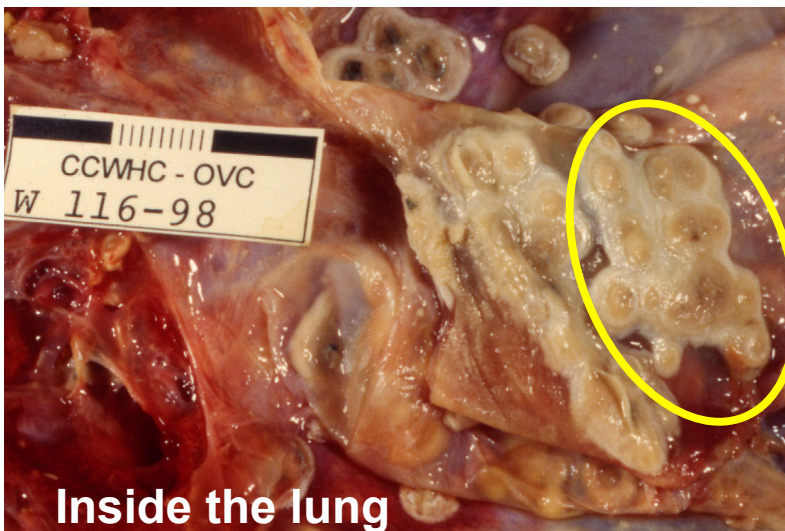
# Aspergillosis



Common Eider

Birds

## 1. Where is it found ?



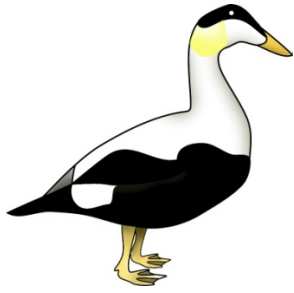
Inside the lung

Photo Credit: D. Campbell

- Thick fungal areas may be found in the lungs, covering the air sacs or on other surfaces in the body.

## 2. What is it ?

- Aspergillosis is a disease of the lung caused by the growth of a fungus. Fungus is similar to mould found on bread.
- The fungus grows in the air sacs, the lung or other surfaces in the body.
- This fungus is picked up by the birds from the ground or from mouldy grain.



## Aspergillosis

3. **Is it safe to handle the eider ?**

Throw away infected lungs and other infected body parts.



4. **Is it safe to eat the eider ?**

It is recommended to cook the bird well.



5. **Is it safe to feed to dogs ?**

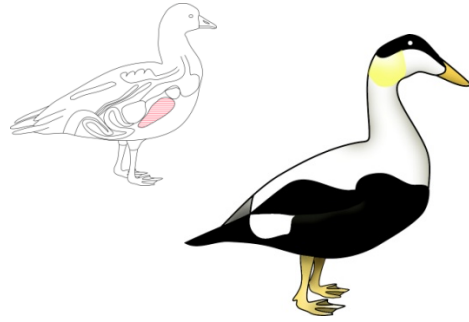
It is not recommended to feed dogs any infected parts.



For more information go to [H-B.1](#)

## B-1.2

# Avian Cholera

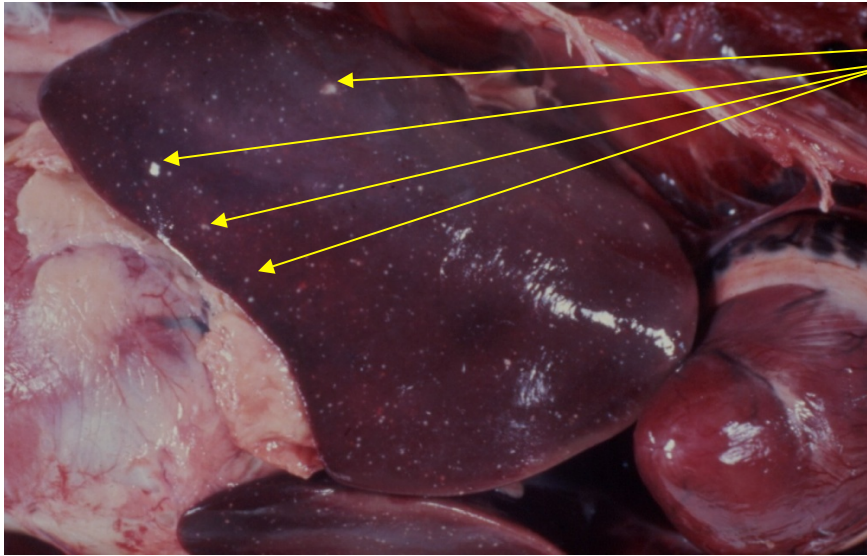


Common Eider

Birds

## 1. Where is it found ?

Photo Credit: WCVN

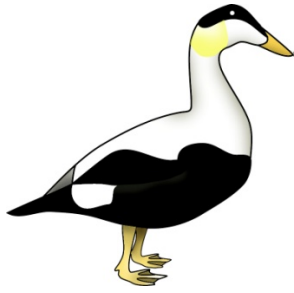


• Cholera is most clearly seen in the liver.

• Small white or yellowish spots scattered throughout the liver is the most common evidence of this disease.

## 2. What is it ?

- Avian cholera is a disease caused by a bacteria which is picked up from the water.
- Birds die a short time after being infected.
- Birds often appear tame prior to death.
- Massive die-offs will occur.



## Avian Cholera

3. **Is it safe to handle the eider ?**

Wear gloves (or plastic bags) over your hands when handling birds suspected to have avian cholera.

Wash tools, hands and outer clothing in hot soapy water.



4. **Is it safe to eat the eider ?**

It is not recommended to eat the bird if many small white spots are seen throughout the liver as in photo on the previous page.



5. **Is it safe to feed to dogs ?**

It is not recommended to feed dogs anything that is not safe for humans to eat.



For more information go to [H-B.2](#)



## B-1.3



Common Eider

# Gizzard Worms

## 1. Where are they found ?

- Gizzard worms are found in the gizzard of birds.



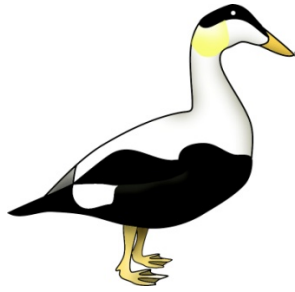
damage

worm

- Worms move through the gizzard causing damage.

## 2. What are they ?

- Gizzard worms are small, parasitic, thread-like roundworms (1-3 cm long) often found coiled.



## Gizzard Worms

3. Is it safe to handle the eider ?

SAFE

4. Is it safe to eat the eider ?



It is safe to eat the eider.  
If the gizzard looks unhealthy,  
throw it away. Otherwise, it is  
advised to cook the gizzard  
before eating it.

5. Is it safe to feed to dogs ?

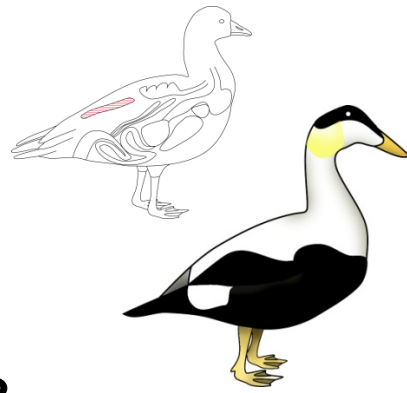


If the gizzard looks unhealthy,  
throw it away. Otherwise, it is  
advised to cook the gizzard  
before feeding it to dogs.  
The rest of the bird is OK to feed  
to dogs.

For more information go to [H-B.3](#)

## B-1.4

# Renal Coccidiosis



Common Eider

Birds

## 1. What does it look like ?

Photo credit: WCVN

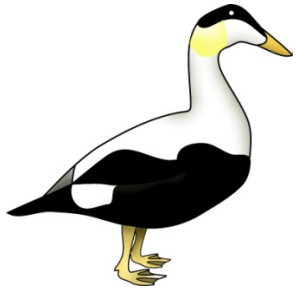


- Normal kidneys can become enlarged when infected.

- Kidneys often contain small white or yellowish spots scattered throughout.

## 2. What is it ?

- Renal coccidiosis is an infection of the kidneys with a tiny, invisible parasite.
- Parasite eggs leave the bird in the bird's droppings; another bird can pick up the infection while grazing.



## **Renal Coccidiosis**

3. Is it safe to handle the eider ?

SAFE

4. Is it safe to eat the eider ?

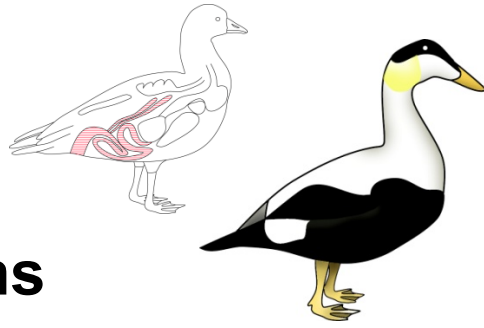
SAFE

5. Is it safe to feed to dogs ?



For more information go to [H-B.4](#)

## B-1.5



Common Eider

# Thorny-headed Worms

## 1. Where are they found ?

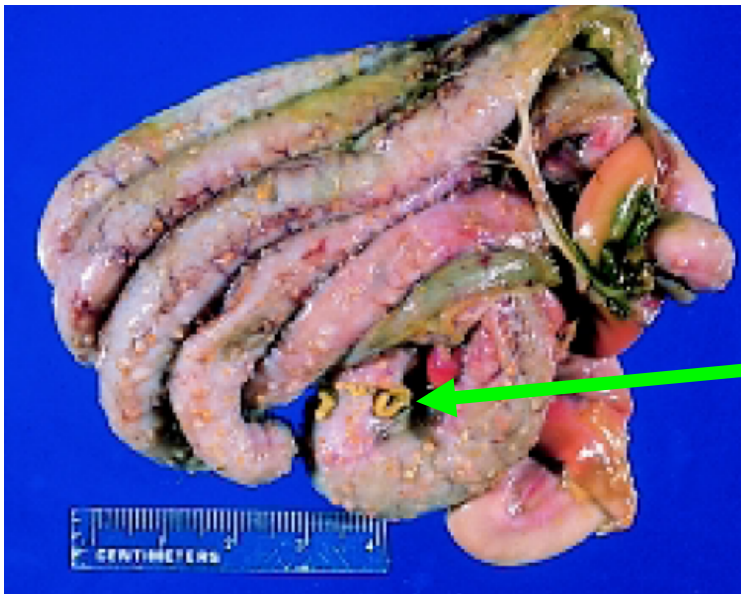


Photo Credit: J. Christian Franson

- Thorny-headed worms live in the intestine of birds.
- Sometimes they can be seen poking through the intestine.

## 2. What are they ?

- Thorny-headed worms are short and fat and attach themselves to the intestine of the eider using a set of hooks on their heads.

Thorny-headed worms attached to the inside of the intestine.

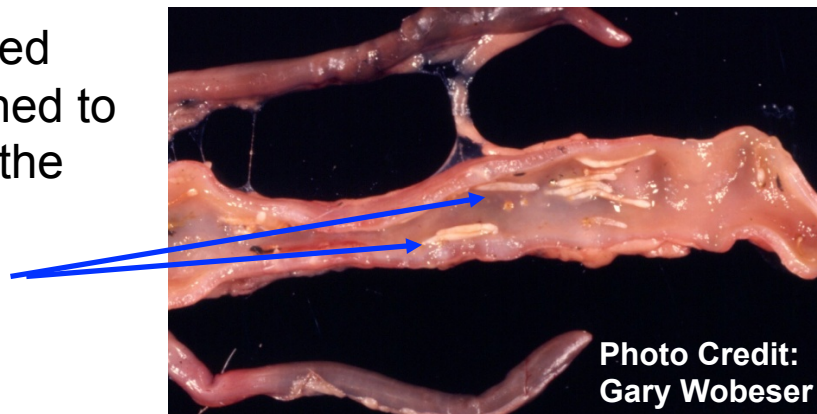
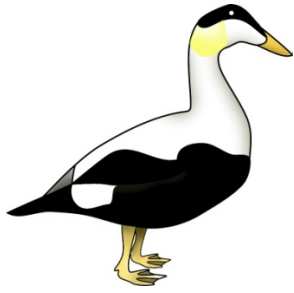


Photo Credit: Gary Wobeser



## Thorny-headed Worms

3. Is it safe to handle the eider ?

SAFE

4. Is it safe to eat the eider ?

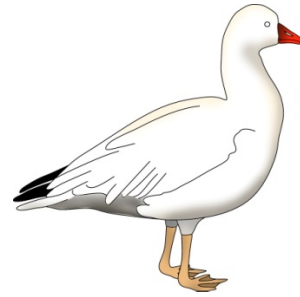
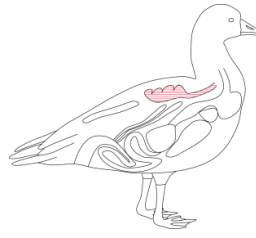
SAFE

5. Is it safe to feed to dogs ?



For more information go to [H-B.5](#)

## B-2.1

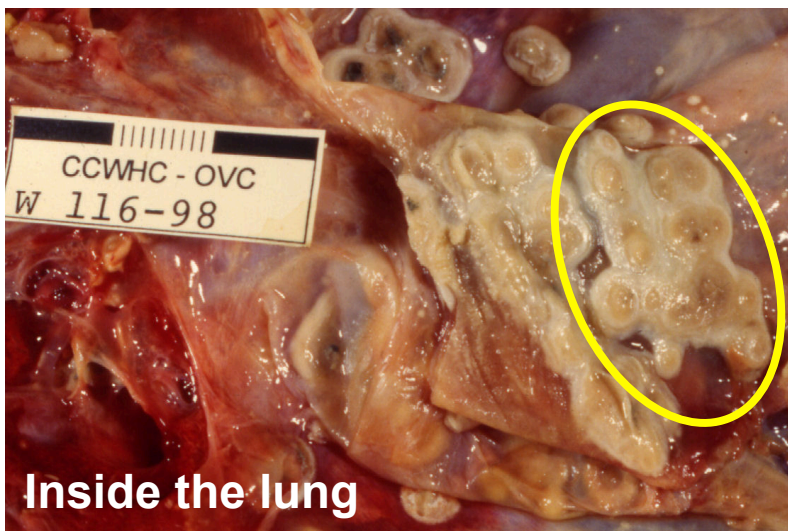


Ross's Goose

**Birds**

# Aspergillosis

## 1. Where is it found ?



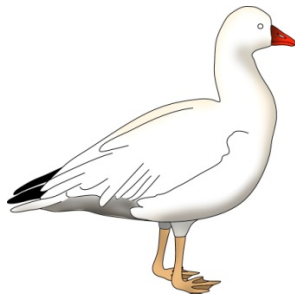
**Inside the lung**

Photo Credit: D. Campbell

- Thick fungal areas may be found in the lungs, covering the air sacs or on other surfaces in the body.

## 2. What is it ?

- Aspergillosis is a disease of the lung caused by the growth of a fungus. Fungus is similar to mould found on bread.
- The fungus grows in the air sacs, the lung and other surfaces in the body.
- This fungus is picked up by the birds from the ground or from mouldy grain.



## Aspergillosis

3. **Is it safe to handle the goose ?**

Throw away infected lungs and other infected body parts.



4. **Is it safe to eat the goose ?**

It is recommended to cook the bird well.



5. **Is it safe to feed to dogs ?**

It is not recommended to feed dogs any infected parts.

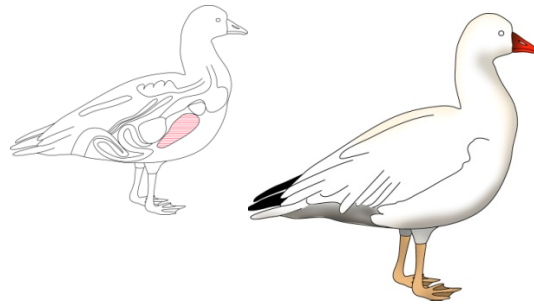


For more information go to [H-B.1](#)



## B-2.2

# Avian Cholera

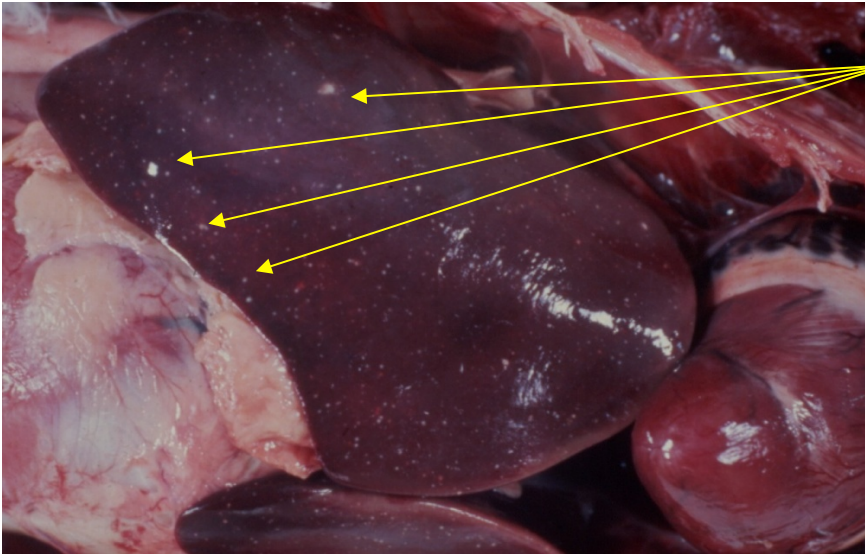


Ross's Goose

Birds

## 1. Where is it found ?

Photo Credit: WCVN

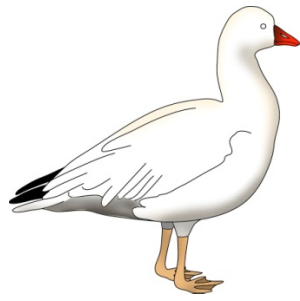


• Cholera is most clearly seen in the liver.

- Small white or yellowish spots scattered throughout the liver is the most common evidence of this disease.

## 2. What is it ?

- Avian cholera is a disease caused by a bacteria which is picked up from the water.
- Birds die a short time after being infected.
- Birds often appear tame prior to death.
- Massive die-offs will occur.



## Avian Cholera

3. **Is it safe to handle the goose ?**



Wear gloves (or plastic bags) over your hands when handling birds suspected to have avian cholera. Wash tools, hands and outer clothing in hot soapy water.

4. **Is it safe to eat the goose ?**



It is not recommended to eat the bird if many small white spots are seen throughout the liver as in photo on the previous page.

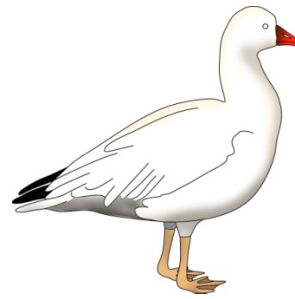
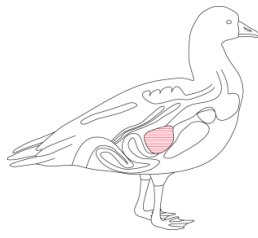
5. **Is it safe to feed to dogs ?**



It is not recommended to feed dogs anything that is not safe for humans to eat.

For more information go to [H-B.2](#)

## B-2.3



Ross's Goose

# Gizzard Worms

## 1. Where are they found ?

- Gizzard worms are found in the gizzard of birds.



Photo Credit: James Runnigen

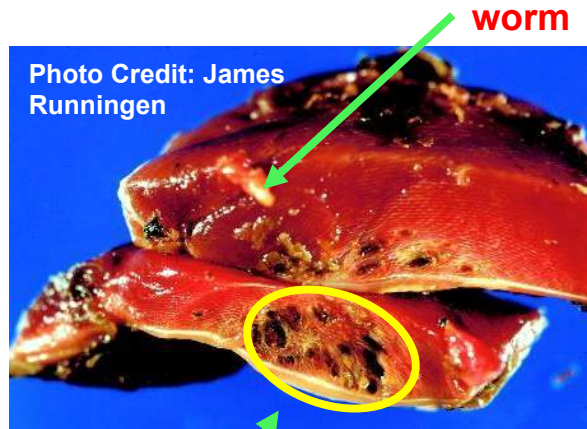


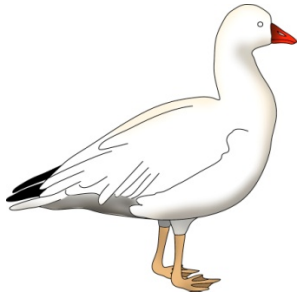
Photo Credit: James Runnigen

damage

- Worms move through the gizzard causing damage.

## 2. What are they ?

- Gizzard worms are small, parasitic, thread-like roundworms (1-3 cm long) often found coiled.



## Gizzard Worms

3. Is it safe to handle the goose ?

SAFE

4. Is it safe to eat the goose ?



It is safe to eat the goose.  
If the gizzard looks unhealthy,  
throw it away. Otherwise, it is  
advised to cook the gizzard  
before eating it.

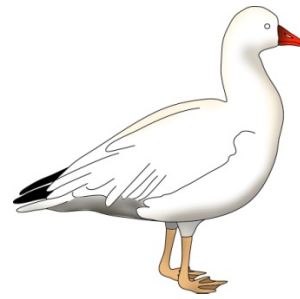
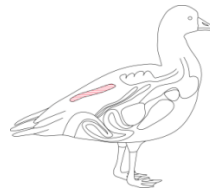
5. Is it safe to feed to dogs ?



If the gizzard looks unhealthy,  
throw it away. Otherwise, it is  
advised to cook the gizzard  
before feeding it to dogs.  
The rest of the bird is OK to feed  
to dogs.

For more information go to [H-B.3](#)

## B-2.4



Ross's Goose

**Birds**

# Renal Coccidiosis

## 1. What does it look like ?

Photo Credit: WCVN

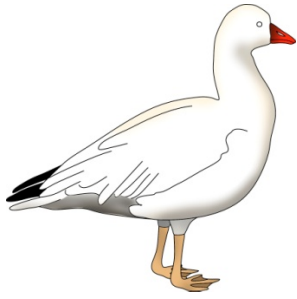


- Normal kidneys can become enlarged when infected.

- Kidneys often contain small white or yellowish spots scattered throughout.

## 2. What is it ?

- Renal coccidiosis is an infection of the kidneys with a tiny, invisible parasite.
- Parasite eggs leave the bird in the bird's droppings; another bird can pick up the infection while grazing.



## Renal Coccidiosis

3. Is it safe to handle the goose ?

SAFE

4. Is it safe to eat the goose ?

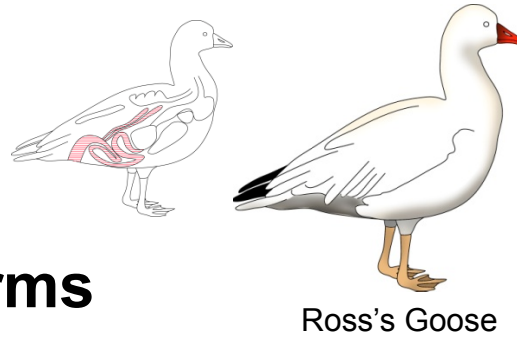
SAFE

5. Is it safe to feed to dogs ?



For more information go to [H-B.4](#)

## B-2.5

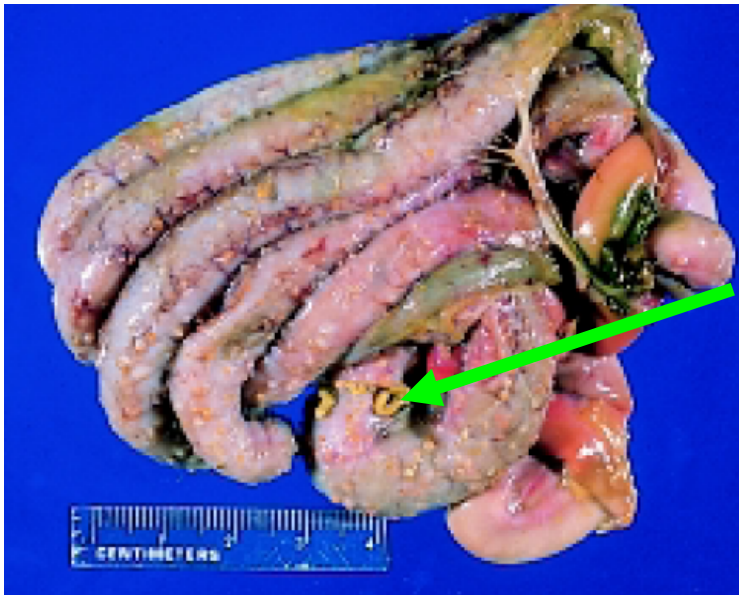


# Birds

## Thorny-headed Worms

### 1. Where are they found ?

Photo Credit: J. Christian Franson

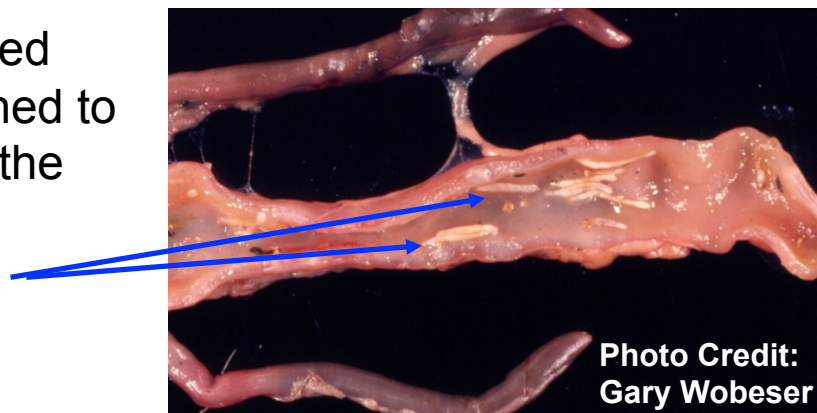


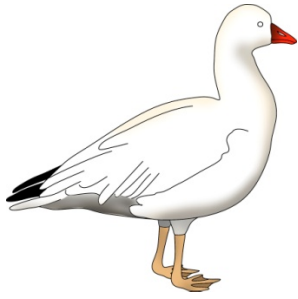
- Thorny-headed worms live in the intestine of birds.
- Sometimes they can be seen poking through the intestine.

### 2. What are they ?

- Thorny-headed worms are short and fat and attach themselves to the intestine of the goose using a set of hooks on their heads.

Thorny-headed worms attached to the inside of the intestine.





## Thorny-headed Worms

3. Is it safe to handle the goose ?

SAFE

4. Is it safe to eat the goose ?

SAFE

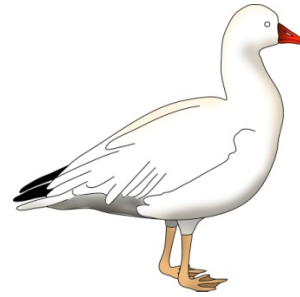
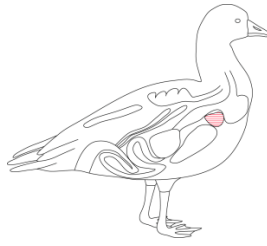
5. Is it safe to feed to dogs ?



For more information go to [H-B.5](#)



**B-2.6**



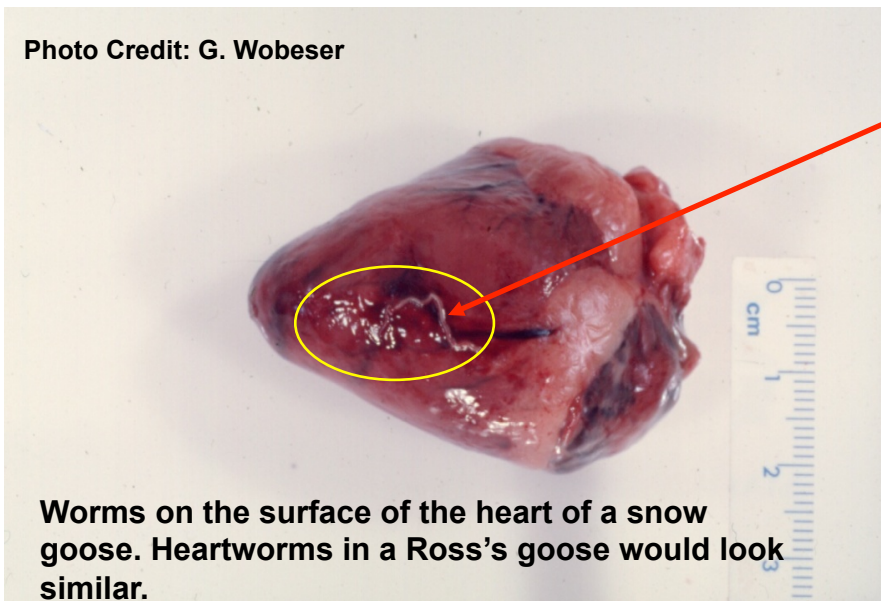
Ross's Goose

**Birds**

## Heartworm

### 1. Where are they found ?

Photo Credit: G. Wobeser

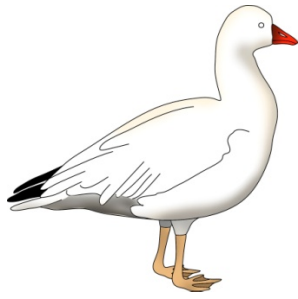


Worms on the surface of the heart of a snow goose. Heartworms in a Ross's goose would look similar.

- Worms are found in the heart and may cause damage as they move.

### 2. What are they ?

- Heartworms are small (1-3 cm), parasitic, thread-like roundworms, often found coiled.



## Heartworm

3. Is it safe to handle the goose ?

SAFE

4. Is it safe to eat the goose ?

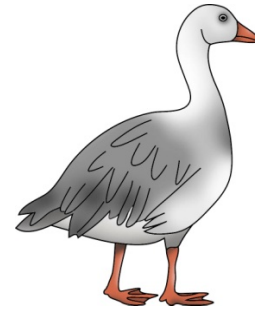
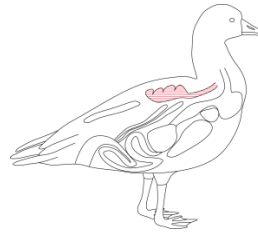
SAFE

5. Is it safe to feed to dogs ?



For more information go to [H-B.6](#)

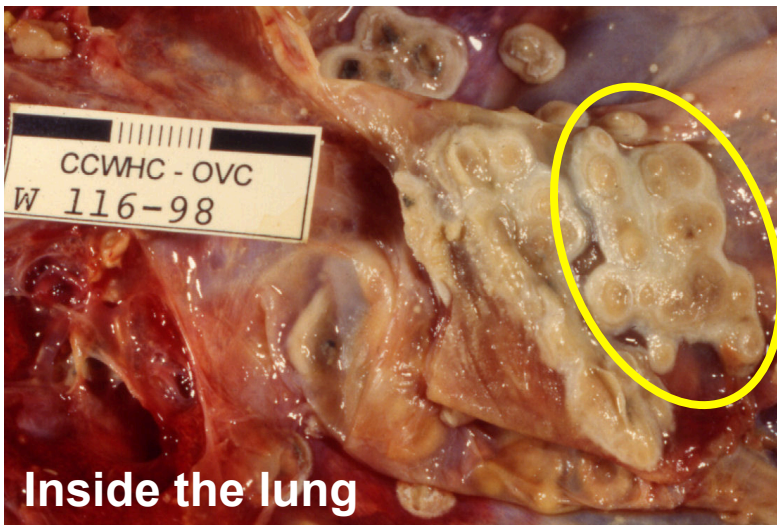
## B-3.1



Lesser Snow Goose

# Aspergillosis

## 1. Where is it found ?



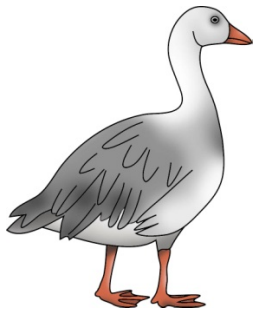
Inside the lung

Photo Credit: D. Campbell

- Thick fungal areas may be found in the lungs, covering the air sacs or on other surfaces in the body.

## 2. What is it ?

- Aspergillosis is a disease of the lung caused by the growth of a fungus. Fungus is similar to mould found on bread.
- The fungus grows in the air sacs, the lung and other surfaces in the body.
- This fungus is picked up by the birds from the ground or in mouldy grain.



## Aspergillosis

3. **Is it safe to handle the goose ?**



Throw away infected lungs and other infected body parts.

4. **Is it safe to eat the goose ?**



It is recommended to cook the bird well.

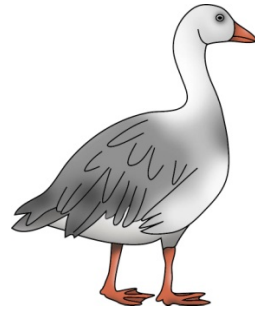
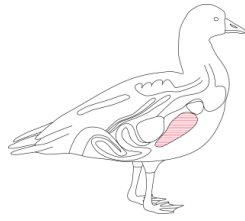
5. **Is it safe to feed to dogs ?**



It is not recommended to feed dogs any infected parts.

For more information go to [H-B.1](#)

## B-3.2

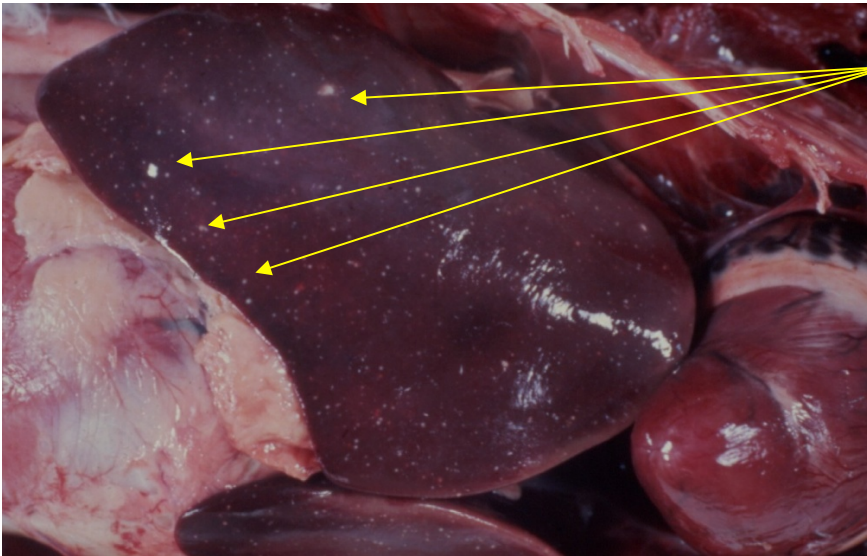


Lesser Snow Goose

# Avian Cholera

## 1. Where is it found ?

Photo Credit: WCVN

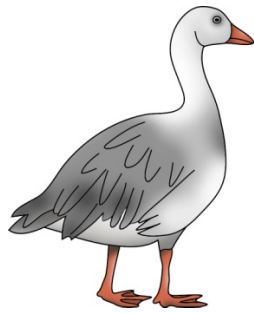


• Cholera is most clearly seen in the liver.

• Small white or yellowish spots scattered throughout the liver is the most common evidence of this disease.

## 2. What is it ?

- Avian cholera is a disease caused by a bacteria which is picked up from the water.
- Birds die a short time after being infected.
- Birds often appear tame prior to death.
- Massive die-offs will occur.



## Avian Cholera

3. **Is it safe to handle the goose ?**

Wear gloves or plastic bags over your hands when handling birds suspected to have avian cholera. Wash tools, hands and outer clothing in hot soapy water.



4. **Is it safe to eat the goose ?**

It is not recommended to eat the bird if many small white spots are seen throughout the liver as in photo on the previous page.



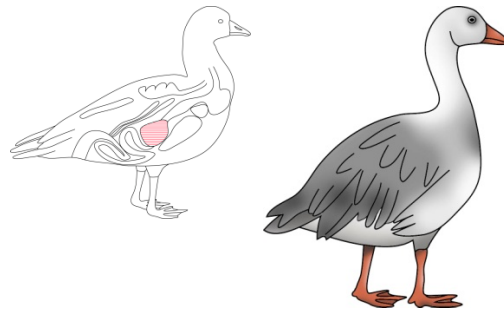
5. **Is it safe to feed to dogs ?**

It is not recommended to feed dogs anything that is not safe for humans to eat.



For more information go to [H-B.2](#)

## B-3.3



Lesser Snow Goose

# Gizzard Worms

## 1. Where are they found ?

- Gizzard worms are found in the gizzard of birds.

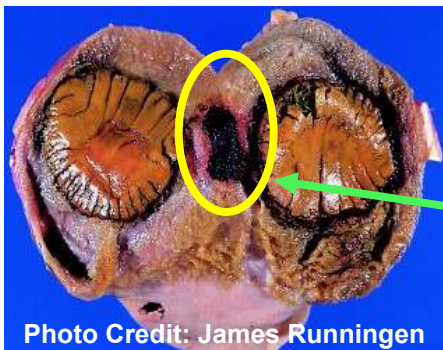


Photo Credit: James Runnigen

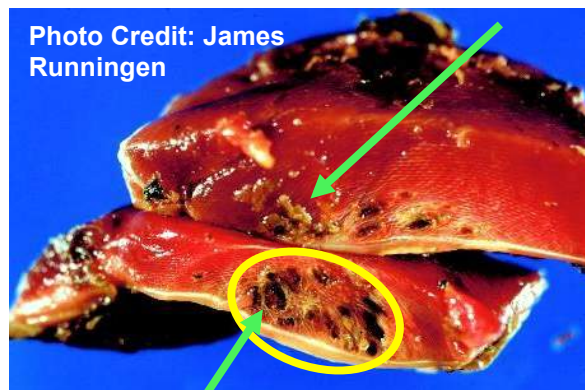


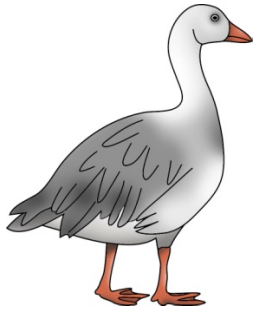
Photo Credit: James Runnigen

damage

- Worms move through the gizzard causing damage.

## 2. What are they ?

- Gizzard worms are small, parasitic, thread-like roundworms (1-3 cm long) often found coiled.



## Gizzard Worms

3. **Is it safe to handle the goose ?**

SAFE

4. **Is it safe to eat the goose ?**

It is safe to eat the goose.  
If the gizzard looks unhealthy,  
throw it away. Otherwise, it is  
advised to cook the gizzard  
before eating it.

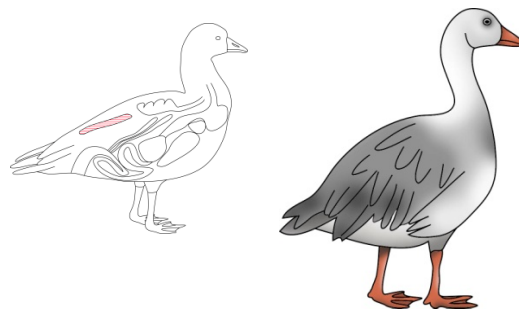
5. **Is it safe to feed to dogs ?**

If the gizzard looks unhealthy,  
throw it away. Otherwise, it is  
advised to cook the gizzard  
before feeding it to dogs.  
The rest of the bird is OK to feed  
to dogs.

For more information go to [H-B.3](#)



## B-3.4

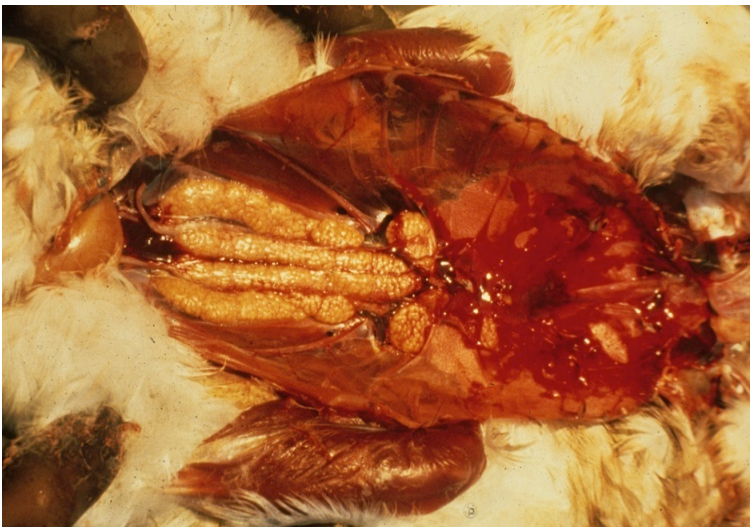


Lesser Snow Goose

# Renal Coccidiosis

## 1. Where is it found ?

Photo credit: WCVN

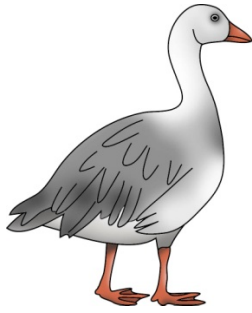


- Normal kidneys can become enlarged when infected.

- Kidneys often contain small white or yellowish spots scattered throughout.

## 2. What is it ?

- Renal coccidiosis is an infection of the kidneys with a tiny, invisible parasite.
- Parasite eggs leave birds in the bird's droppings; another bird can pick up the infection while grazing.



## **Renal Coccidiosis**

**3. Is it safe to handle the goose ?**

**SAFE**

**4. Is it safe to eat the goose ?**

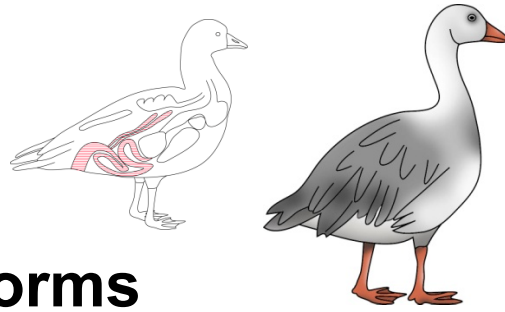
**SAFE**

**5. Is it safe to feed to dogs ?**



For more information go to **H-B.4**

## B-3.5

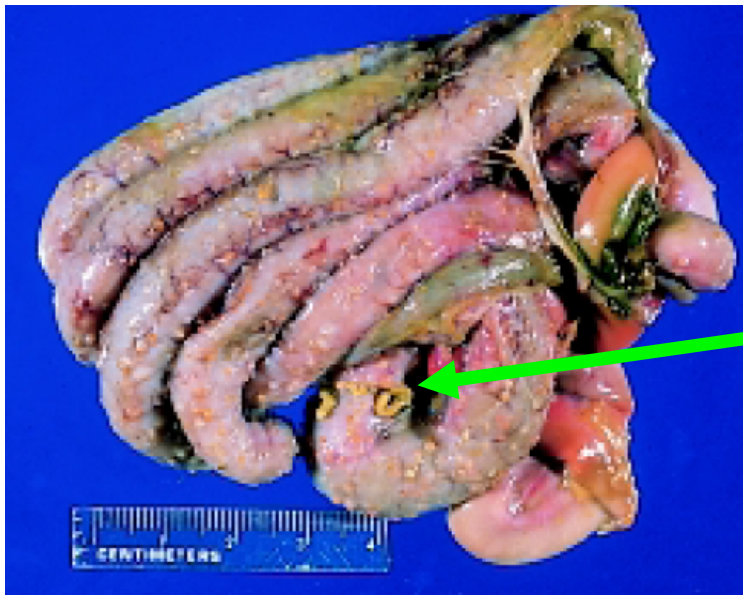


Lesser Snow Goose

# Thorny-headed Worms

## 1. Where are they found ?

Photo Credit: J. Christian Franson



- Thorny-headed worms live in the intestine of birds.
- Sometimes they can be seen poking through the intestine.

## 2. What are they ?

- Thorny-headed worms are short and fat and attach themselves to the intestine of the goose using a set of hooks on their heads.

Thorny-headed worms attached to the inside of the intestine.

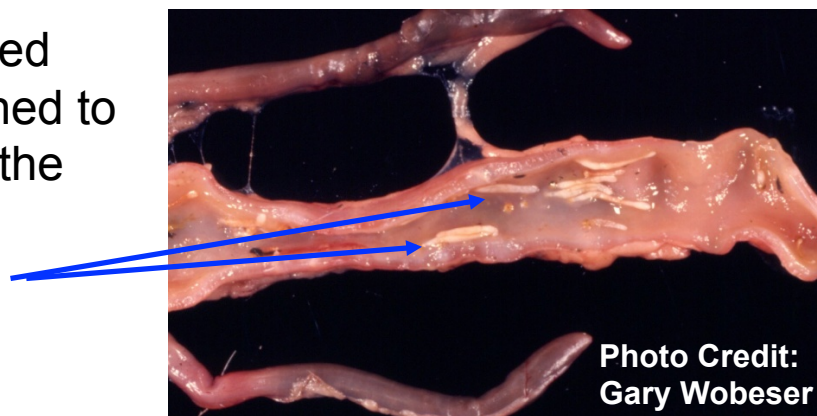
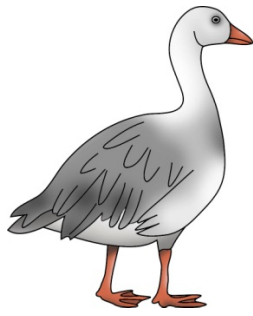


Photo Credit:  
Gary Wobeser



## Thorny-headed Worms

3. Is it safe to handle the bird ?

SAFE

4. Is it safe to eat the bird ?

SAFE

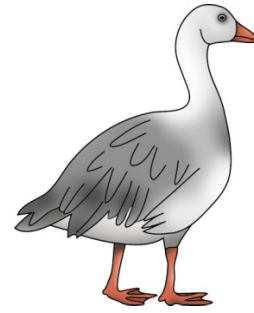
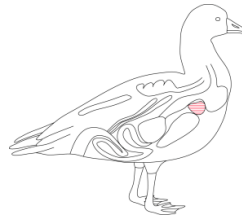
5. Is it safe to feed to dogs ?



For more information go to [H-B.5](#)

**B-3.6**

## Heartworm

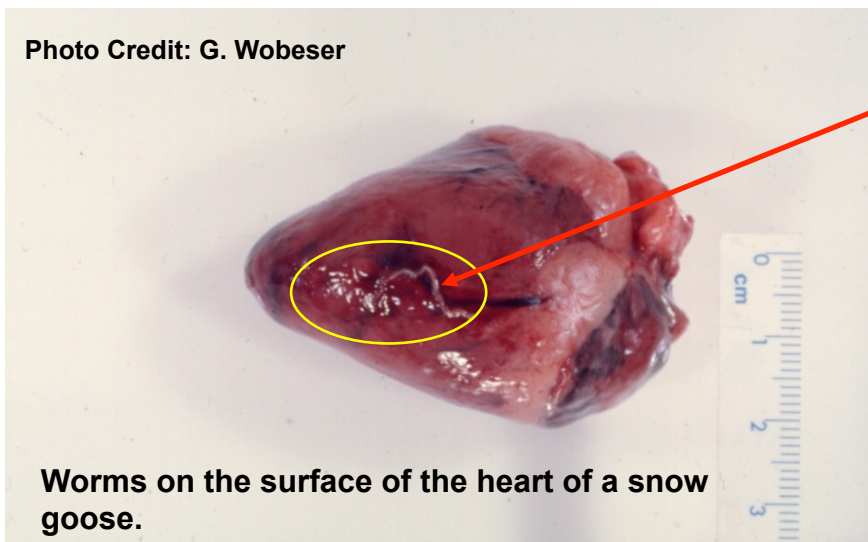


Lesser Snow Goose

**Birds**

### 1. Where are they found ?

Photo Credit: G. Wobeser

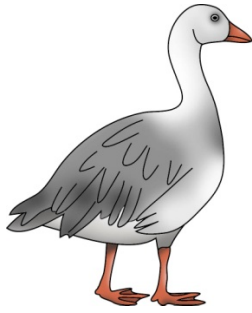


Worms on the surface of the heart of a snow goose.

- Worms are found in the heart and may cause damage as they move.

### 2. What are they ?

- Heartworms are small (1-3 cm), parasitic, thread-like roundworms, often found coiled .



## Heartworm

3. Is it safe to handle the goose ?

SAFE

4. Is it safe to eat the goose ?

SAFE

5. Is it safe to feed to dogs ?



For more information go to [H-B.6](#)