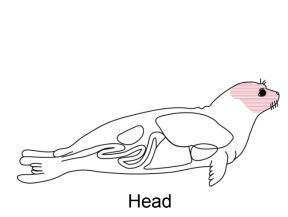


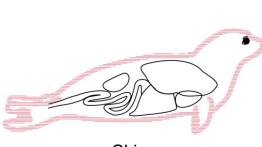
Seals, Walrus

Diseases and Parasites of Seals and Walrus



Conjunctivitis	
Photo Credit: <i>Dr. J. Geraci</i>	- Pois
	Photo Credit: Dr. P-Y. Daoust
Bearded seal	Section C-1.1
Ringed seal	Section C-2.1
Walrus	Section C-3.2

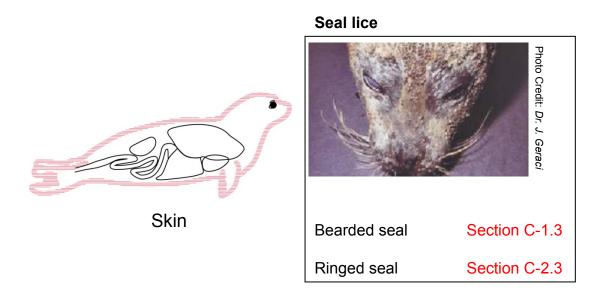
Hair loss



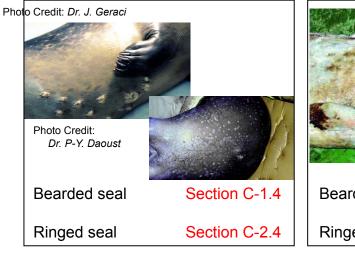
Skin



Diseases and Parasites of Seals and Walrus



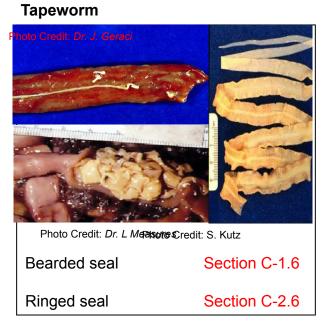
Seal Pox

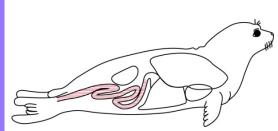


Pelt Discolouration



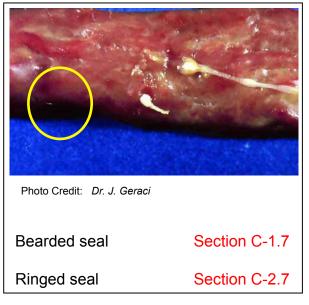
Diseases and Parasites of Seals and Walrus





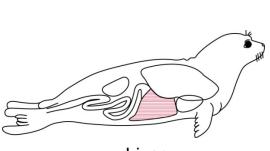
Intestine

Thorny-headed Worm



Diseases and Parasites of Seals and Walrus

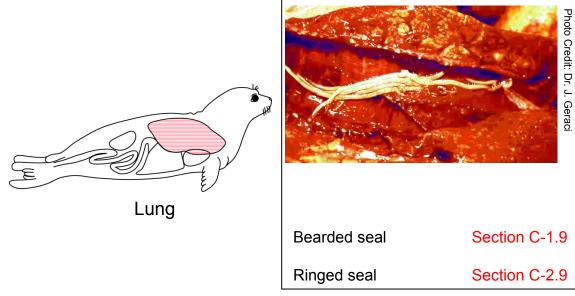
Liver Fluke



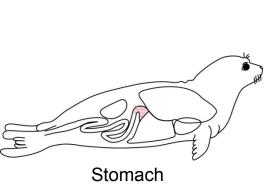
Liver



Lungworms

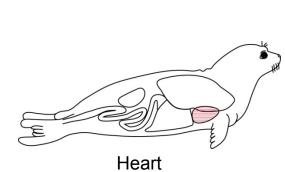


Diseases and Parasites of Seals and Walrus



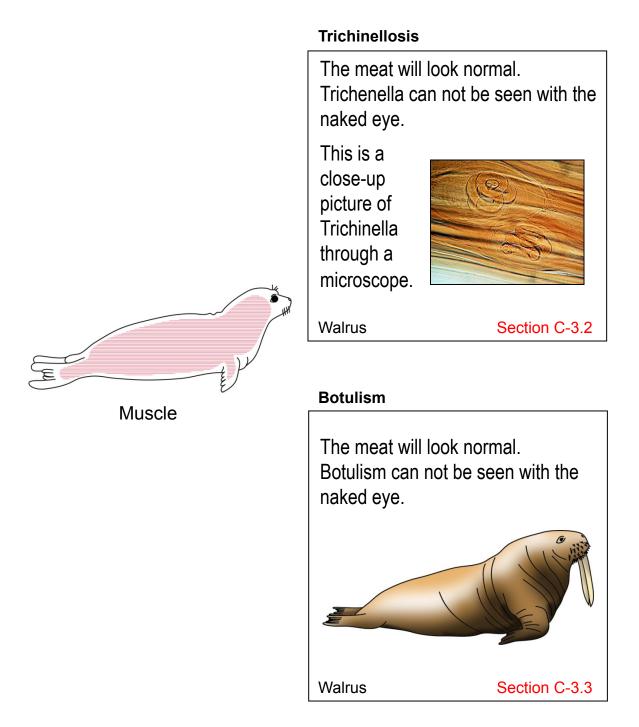


Heartworm

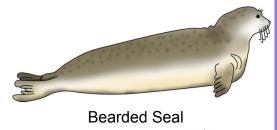




Diseases and Parasites of Seals and Walrus



Eye infections (conjunctivitis)



1. Where are they found ?

• Eye infections are often seen in eyes which appear to be slightly cloudy and partly shut.

• There may also be a discharge from the corners of the eyes.

• Eye infections may be associated with other sicknesses such as sick-looking lungs (see pneumonia in section G-1.7).

2. What are they ?

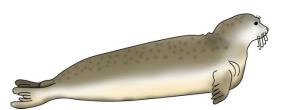
• Eye infections are seen as swelling and redness of the lining of the eyelids, similar to pinkeye in humans.

• They can be caused by viruses or by bacteria. We do not know a lot about the types of viruses that a seal can get, or if they can cause sickness in humans. Photo Credit: Dr. J. Geraci









Eye infections (conjunctivitis)

3. Is it safe to skin the seal ?

Wear gloves when handling animals that look sick. Wash tools, hands and outer clothing in hot soapy water.

4. Is it safe to eat the seal ?

Animals with only an eye infection are likely OK to eat. It is not recommended to eat seals that look sick overall.

5. Is it safe to feed to dogs ?



CAUTION

CAUTION

Animals with only an eye infection are likely OK to feed to dogs. It is not recommended to feed to dogs seals that look sick overall.

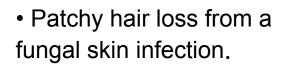
C-1.2 Hair Loss Bearded Seal

• Hair loss can occur anywhere on the body.

2. What is it ?

- Patchy hair loss in older animals may be caused by bacterial or fungal infections of the skin.
- Hair loss can occur in animals who fail to properly shed their old hair coat.
- Rarely, newborn pups will be born with no hair.
 This is most likely a genetic problem.

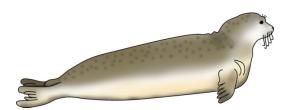
Photo Credit: Dr. P-Y Daoust







• Hairless seal pup born dead.



Hair Loss

3. Is it safe to skin the seal ?

Wear gloves or plastic bags over hands if the seal looks sick. Wash tools, hands and outer clothing in hot soapy water.





4. Is it safe to eat the seal ?

The seal is likely OK to eat, but it is advised to cook the meat first if you are concerned about safety. Avoid eating sick or weak animals.

5. Is it safe to feed to dogs ?

The seal is likely OK to feed to dogs but avoid feeding dogs seals looking sick or weak.



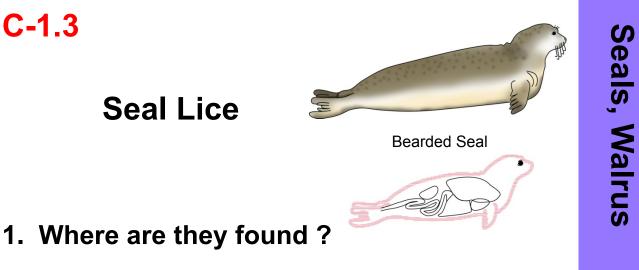


Photo Credit: J. Geraci

Lice can be

on the body.

found anywhere

Lice are most

often seen on

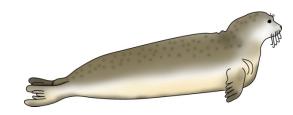
the head and

hind flippers.

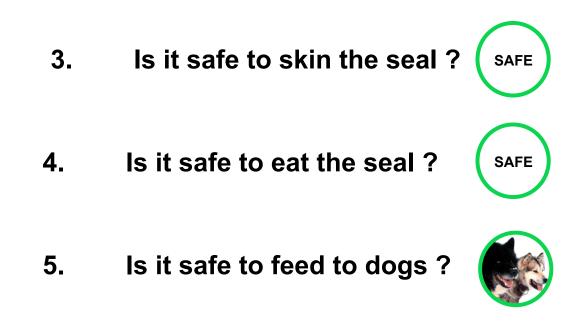
2. What are they ?

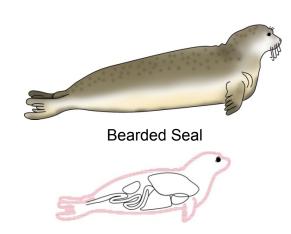
Seal lice are small marine insects.

• They suck the blood and from holes they make in the skin.



Seal Lice





1. Where is it found ?

Sealpox

- Sealpox lumps are more common on the head and neck, but can be found anywhere on the animal.
- These lumps may occur singly or in groups.

2. What is it ?

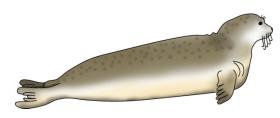
- Sealpox is caused by a virus.
- It is seen as firm lumps on the skin.
- The small lumps (2-3 cm) can break open, ooze and eventually heal often leaving a greyish, slightly raised scar without fur.

Photo Credit: Dr. P-Y. Daoust



Photo Credit: Dr. J. Geraci





Sealpox

3. Is it safe to skin the seal ?

Wear gloves or use plastic bags over hands.

Wash tools, hands and outer clothing in hot soapy water. The virus causing the sealpox may cause sores in people.





4. Is it safe to eat the seal ?

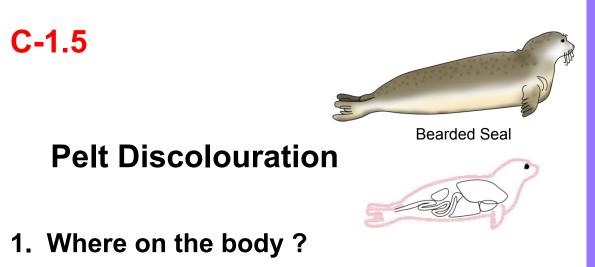
Human health concerns are uncertain. It is not recommended to eat these animals.





5. Is it safe to feed to dogs ?

It is not recommended to feed dogs anything you would not eat.



• Pelt discolouration can occur anywhere on the body.

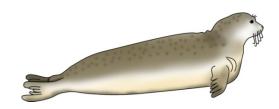


Photo Credit: D. White

2. What is it ?

• In affected areas the skin may be darker than usual, and there may be hair loss, reddening, thickening, and flaking of the skin.

• Pelt discolouration is often caused by a fungal infection.



Pelt Discolouration

3. Is it safe to skin the seal ?

Wear gloves, or use plastic bags to cover hands.



4. Is it safe to eat the seal ?

The meat should be OK to eat if cooked well. It is not recommended to eat the seal if it looks unusually sick or weak.

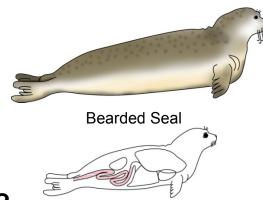


5. Is it safe to feed to dogs ?



It is not recommended to feed dogs any parts of the seal if it looks unusually sick or if you would not eat it.





1. Where are they found ?

Tapeworms

Photo Credit: Dr. J. Geraci



Photo Credit: Dr. L Measures



• Tapeworms are most often found in the intestines of the animal.

• Seals get tapeworms from eating fish infected with immature tapeworms (see Immature tapeworms of fish in sections A-1.6, A-2.6, A-3.6).

2. What are they ?

• Tapeworms are small flat, segmented worm-like parasites.

• Tapeworm size and length varies on the species and age of the worm.

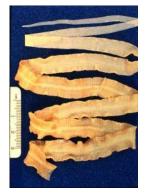
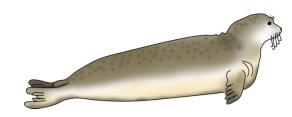


Photo Credit: S. Kutz

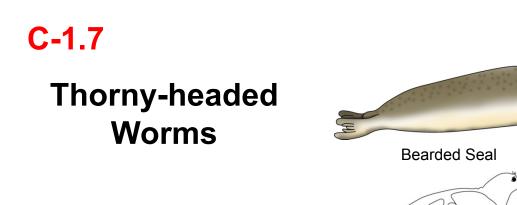


Tapeworms

3.	Is it safe to skin the seal ?	SAFE
4.	Is it safe to eat the seal ?	SAFE
5.	Is it safe to feed to dogs ?	

For more information go to H-C.6

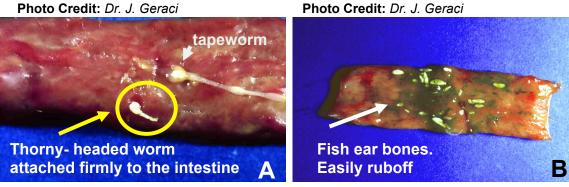
201



Seals, Walrus

1. Where are they found ?

Photo Credit: Dr. J. Geraci



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

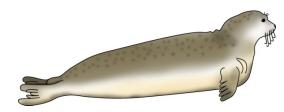
Small sores may be seen at the point of attachment.

 The ear bones from fish can sometimes be mistaken for worms. Ear bones (photo B) rub off easily, worms do not.

2. What are they ?

 Thorny-headed worms are short, small, flattened worms.

 The head of the worm has hooks which are used to attach onto tissues.



Thorny-headed Worms

- 3. Is it safe to skin the seal?
- 4. Is it safe to eat the seal ?
- 5. Is it safe to feed to dogs ?

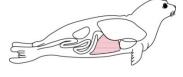


SAFE

C-1.8

Liver Flukes

Bearded Seal



1. Where are they found ?



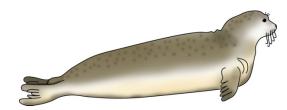
Photo Credit: Dr. L Measures

• Flukes are often found in the tubes of the liver and pancreas.

• They can often cause swelling, redness and scarring.

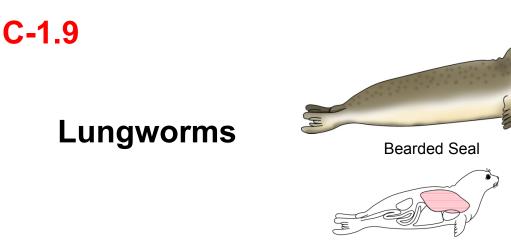
2. What are they ?

• Flukes are small, flat, worm-like parasites.



Liver Flukes

3. Is it safe to skin the seal? SAFE
4. Is it safe to eat the seal? SAFE
5. Is it safe to feed to dogs?



1. Where are they found ?

- Lungworms are found in the lungs of seals.
- Different species of lungworms are found in whales.

2. What are they ?

 Lungworms are parasitic roundworms.

• Worms (< 7 cm) and/or small round grey lumps (<2 cm) may be found when butchering.

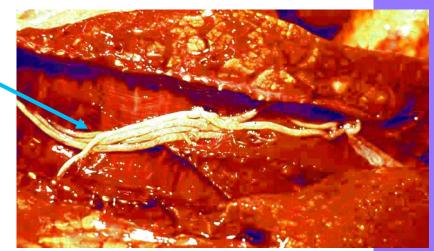
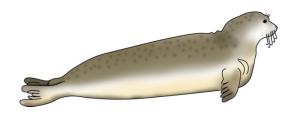
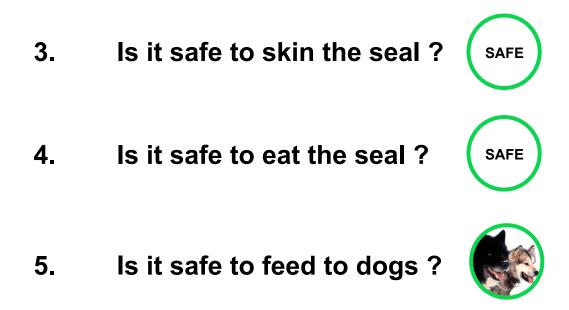


Photo Credit: Dr. J. Geraci



Lungworms



C-1.10

Stomach Worms

Bearded Seal



1. Where are they found ?





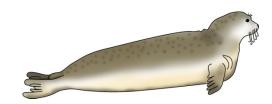
• Stomach worms are most often found only in the stomach, but can be found in the beginning part of the intestine.

• Worms can burrow into tissues causing sores.

2. What are they ?

• The stomach worms are roundworms.

• The seal becomes infected with the roundworm when it eats a fish that contains an immature stage of the worm (see roundworms of fish in sections A-1.4, A-2.4, A-3.4).



Stomach Worms



4. Is it safe to eat the seal ?

It is not recommended to eat infected stomach or intestines raw.

5. Is it safe to feed to dogs ?

It is not recommended to feed dogs infected stomach or intestines raw.



Eye infections (conjunctivitis)





1. Where are they found ?

 Eye infections are often seen in eyes which appear to be slightly cloudy and partly shut.

• There may also be a discharge from the corners of the eyes.

 Eye infections may be associated with other sicknesses such as sick-looking lungs (see pneumonia in section G-1.7).

2. What are they ?

• Eye infections are seen as swelling and redness of the lining of the eyelids, similar to pinkeye in humans.

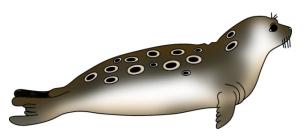
 They can be caused by viruses or by bacteria. We do not know a lot about the types of viruses that a seal can get, or if they can cause sickness in humans.

Photo Credit: Dr. P-Y. Daoust



Photo Credit: Dr. J. Geraci





Eye infections (Conjunctivitis)

3. Is it safe to skin the seal ?

Wear gloves when handling animals that look sick. Wash tools, hands and outer clothing in hot soapy water.



4. Is it safe to eat the seal ?

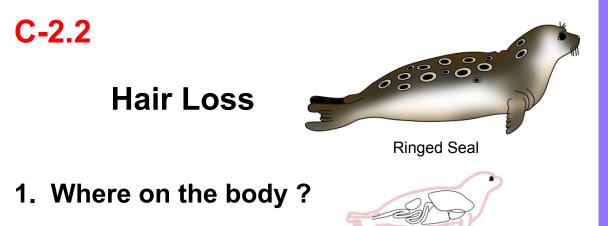
Animals with only an eye infection are likely OK to eat. It is not recommended to eat seals that look sick overall.



5. Is it safe to feed to dogs ?

sick overall.

Animals with only an eye infection are likely OK to feed to dogs. It is not recommended to feed to dogs seals that look

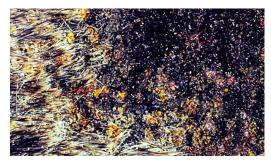


• Hair loss can occur anywhere on the body.

2. What is it ?

- Patchy hair loss in older animals may be caused by bacterial or fungal infections of the skin.
- Hair loss can occur in animals who fail to properly shed their old hair coat.
- Rarely, newborn pups will be born with no hair.
 This is most likely a genetic problem.

Photo Credit: Dr. P-Y Daoust



• Patchy hair loss from a fungal skin infection.

Photo Credit: Dr. J. Geraci



• Hairless seal pup born dead.



Hair Loss

3. Is it safe to skin the seal ?

Wear gloves or plastic bags over hands if seal looks unusually sick. Wash tools, hands and outer clothing in hot soapy water.





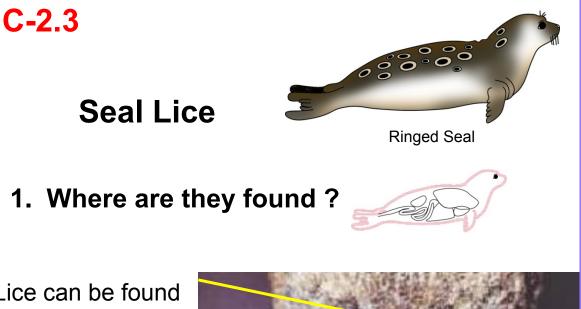
4. Is it safe to eat the seal ?

The seal is likely OK to eat, but it is advised to cook the meat first if you are concerned about safety. Avoid eating sick or weak animals.



5. Is it safe to feed to dogs ?

The seal is likely OK to feed to dogs but avoid feeding dogs seals looking sick or weak.



- Lice can be found anywhere on the body.
- Lice are most often seen on the head and hind flippers.



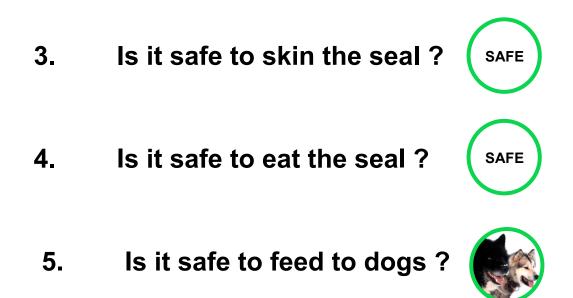
Photo Credit: J. Geraci

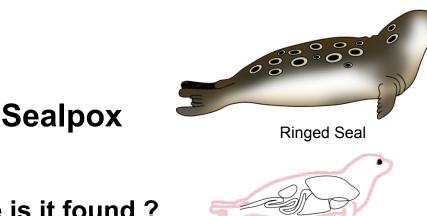
2. What are they ?

- Seal lice are small marine insects.
- They suck the blood from holes they make in the skin.
- They may transmit heartworm to the seal (see heartworm in section C-2.11).



Seal Lice





1. Where is it found ?

C-2.4

• Sealpox lumps are more common on the head and neck, but can be found anywhere on the animal.

• These lumps may occur singly or in groups.

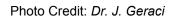
2. What is it ?

- Sealpox is caused by a virus.
- It is seen as firm lumps on the skin.

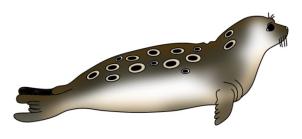
• The small lumps (2-3 cm) can break open, ooze and eventually heal often leaving a greyish, slightly raised scar without fur.

Photo Credit: Dr. P-Y. Daoust









Sealpox

3. Is it safe to skin the seal ?



Wear gloves or use plastic bags over hands. Wash tools, hands and outer clothing in hot soapy water. The virus causing the sealpox may cause sores in people.



4. Is it safe to eat the seal ?

Human health concerns are uncertain. It is not recommended to eat these animals.

5. Is it safe to feed to dogs ?

It is not recommended to feed dogs anything you would not eat.



WARNING

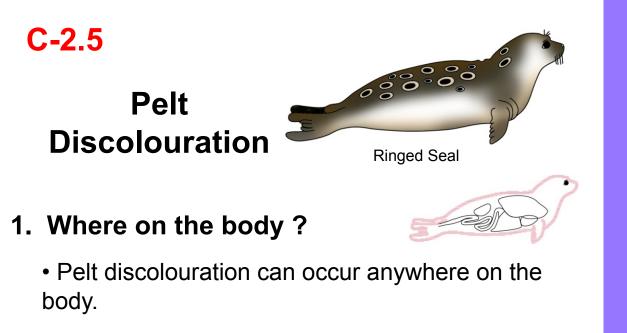


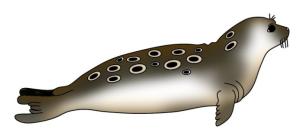


Photo Credit: D. White

2. What is it ?

• In affected areas the skin may be darker than usual, and there may be hair loss, reddening, thickening, and flaking of the skin.

• Pelt discolouration is often caused by a fungal infection.



Pelt Discolouration

3. Is it safe to skin the seal ?

Wear gloves, or use plastic bags to cover hands.

4. Is it safe to eat the seal ?

The meat should be OK to eat if cooked well. It is not recommended to eat the seal if it looks unusually sick or weak.

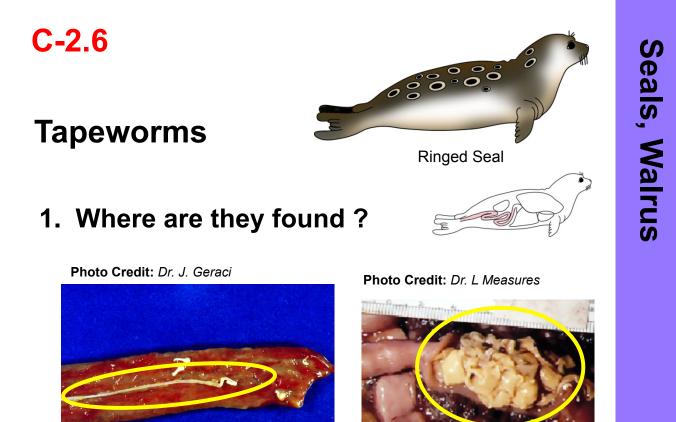




5. Is it safe to feed to dogs ?

It is not recommended to feed dogs any parts of the seal if you would not eat it.





• Tapeworms are most often found in the intestines of the animal.

• Seals get tapeworms from eating fish infected with immature tapeworms (see Immature tapeworms of fish in sections A-1.6, A-2.6, A-3.6).

2. What are they ?

- Tapeworms are small, flat, segmented worm-like parasites.
- Tapeworm size, and length varies depending on species and age of the worm.

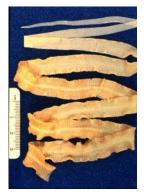
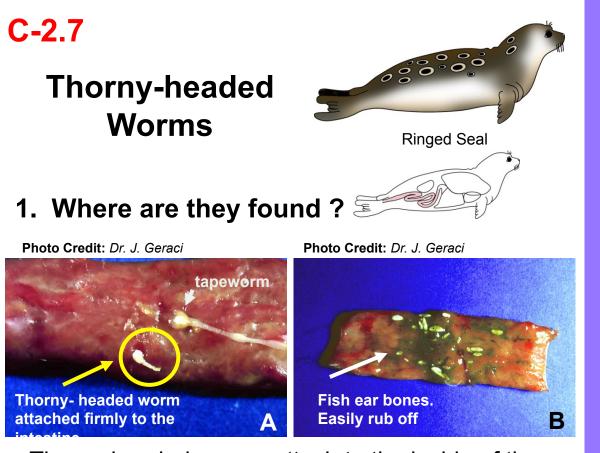


Photo Credit: S. Kutz



Tapeworms

3.	Is it safe to skin the seal ?	SAFE
4.	Is it safe to eat the seal ?	SAFE
5.	Is it safe to feed to dogs ?	



Seals, Walrus

• Thorny-headed worms attach to the inside of the intestine.

• Small sores may be seen at the point of attachment.

• The ear bones from fish can sometimes be mistaken for worms. Ear bones (photo B) rub off easily, worms do not.

2. What are they ?

• Thorny-headed worms are short, small, flattened worms.

• The head of the worm has hooks which are used to attach onto tissues.



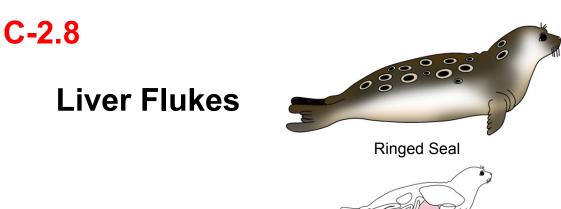
Thorny-headed Worms

- 3. Is it safe to skin the seal ?
- 4. Is it safe to eat the seal ?
- 5. Is it safe to feed to dogs ?



SAFE

SAFE



1. Where are they found ? Ξ



Photo Credit: Dr. L Measures

 Flukes are often found in the tubes of the liver and pancreas.

• They can often cause swelling, redness and scarring.

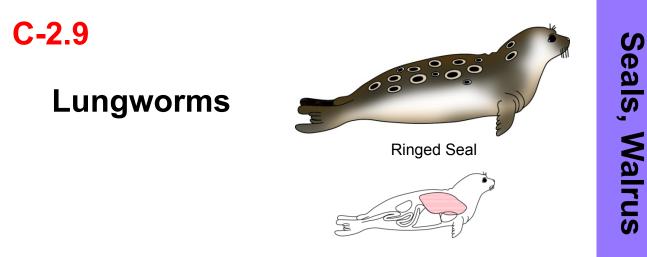
2. What are they ?

• Flukes are small, flat, worm-like parasites.



Liver Flukes

3. Is it safe to skin the seal? SAFE
4. Is it safe to eat the seal? SAFE
5. Is it safe to feed to dogs?



1. Where are they found ?

- Lungworms are found in the lungs of seals.
- Different species of lungworms are found in whales.

2. What are they ?

• Lungworms are parasitic roundworms.

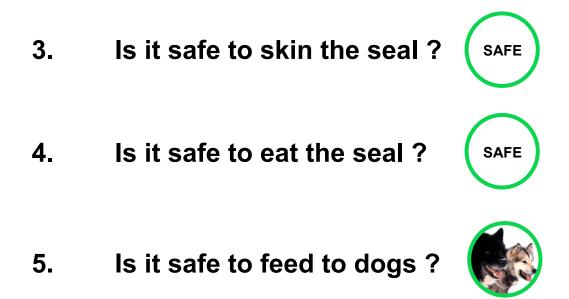
• Worms (< 7 cm) and/or small round grey lumps (<2 cm) may be found when butchering.



Photo Credit: Dr. J. Geraci

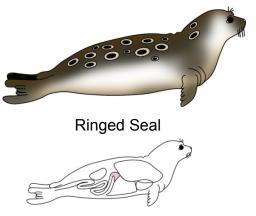


Lungworms

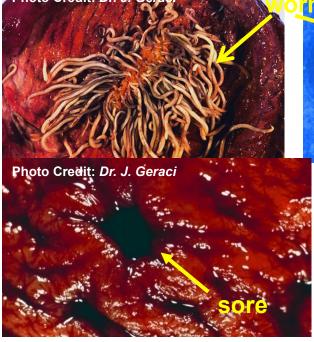


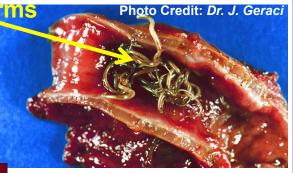


Stomach Worms



1. Where are they found ?





• Stomach worms are most often found only in the stomach, but can be found in the beginning parts of the intestine.

• Worms can burrow into tissues causing sores.

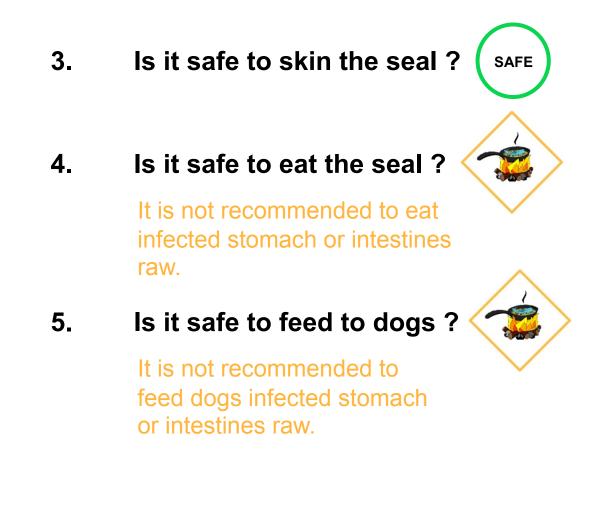
2. What are they ?

• The stomach worms are roundworms.

• The seal becomes infected with the roundworm when it eats a fish that contains an immature stage of the worm (see roundworms of fish in sections A-1.4, A-2.4, A-3.4).



Stomach Worms



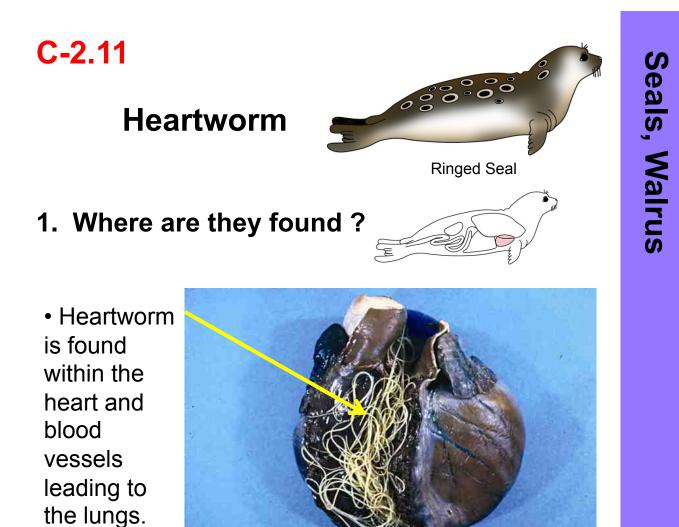


Photo Credit: Dr. J. Geraci
Seals get heartworm when they are bitten by seal lice (see seal lice in section C-2.3) carrying immature

2. What are they ?

heartworms.

• Heartworms, also known as roundworms.



Heartworm

3.	Is it safe to skin the seal ?	SAFE
4.	Is it safe to eat the seal ?	SAFE
5.	Is it safe to feed to dogs ?	

C-3.1

Eye infections (conjunctivitis)





1. Where are they found ?

- · Eye infections are often seen in eyes which appear to be slightly cloudy and partly shut.
- There may also be a discharge from the corners of the eyes.
- Eye infections may be associated with other sicknesses such as sick-looking lungs (see pneumonia in section G-1.7).

2. What are they ?

- Eye infections are seen as swelling and redness of the lining of the eyelids, similar to pinkeye in humans.
- They can be caused by viruses or by bacteria. We do not know a lot about the types of viruses that a walrus can get, or if they can cause

sickness in humans.



Photo Credit: Dr. J. Geraci



Seals showing eye infections. Walrus eyes would look similar.



Eye infections (conjunctivitis)

3. Is it safe to skin the walrus ?

Wear gloves when handling animals that look sick. Wash tools and outer clothing in hot soapy water.



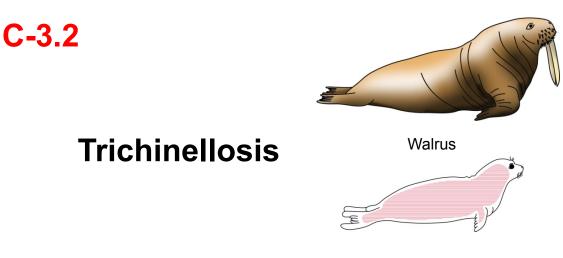
4. Is it safe to eat the walrus ?

Animals with only an eye infection are likely OK to eat. It is not recommended to eat walruses that look sick overall.



5. Is it safe to feed to dogs ?

Animals with only an eye infection are likely OK to feed to dogs. It is not recommended to feed to dogs walruses that look sick overall.



1. Where is it found ?

• Trichinella can be in many different parts of the meat.

• You can not see trichinella with the naked eye. They can only be detected using a microscope.

• Samples of walrus meat can be tested at a laboratory.

2. What is it ?

• Trichinellosis is an infection with a roundworm parasite.

• It is passed from one animal to another by eating raw meat containing the parasite.

• The tiny, invisible, immature stage of the parasite lives in the meat.



Trichinellosis

3. Is it safe to skin the walrus ?

SAFE

4. Is it safe to eat the walrus ?

The trichinella should be killed if the meat is cooked well. If the meat is to be eaten raw, frozen or aged, then it is recommended that the animal be tested before eating.



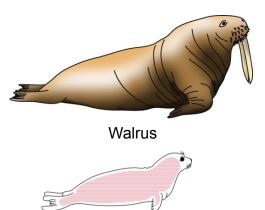
5. Is it safe to feed to dogs ?

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



C-3.3

Botulism



1. What is it ?

 Botulism is caused by a strong poison produced by bacteria which can grow on **improperly** prepared igunaq (aged meat) and sometimes also misiraq (aged oil).

• The bacteria occur naturally in animals and the environment.

• Botulism can be life threatening to those who eat contaminated food.

 It causes progressive body weakness and paralysis.

2. Signs and Symptoms

• First signs usually appear 12 to 36 hours after eating contaminated food.

• First signs usually are nausea, vomiting, diarrhea or stomach pain.

• Shortly afterwards, there can be dry mouth, blurry vision, double vision, difficulty or pain in swallowing or speaking, faintness and difficulty in breathing.



Botulism

3. What should you do?

Go directly to the nursing station if you think you ate bad food.

4. Is it safe to eat aged meat you think has been improperly aged ?

It is advised to only eat aged meat (igunaq) which you know has been prepared properly by experienced and trusted producers.

5. Is it safe to feed aged meat to dogs you think has been improperly aged ?

It is not recommended to feed dogs anything you would not eat.







