

VISUAL SIGN

CAUSE/RECOMMENDATION

11. Undulating worms attached to body, fins, gills, and mouth.



Leeches. Conspicuous, blood-feeding, external parasites, leeches produce a small circular wound that remains even though the leech moves or drops off. **Edible. Clean and prepare as usual.**

12. Red, thread-like worms extending from the anus.



Round Worms (*Camallanus* sp.). Various roundworms are found throughout the intestine. The species that lives in the lower large intestine will occasionally extend from the anus. **Edible. Clean and prepare as usual.**

13. White to pink thread-like swelling on head or fins.



Round Worms (*Philometra* sp.). Normally found on carp, buffalo, and suckers, this adult roundworm lives just under the skin. **Edible. Clean and prepare as usual.**

Found in the Flesh

14. White or yellow cysts imbedded in the muscle.



Yellow Grub (*Clinostomum* sp.). Cream-colored cysts found in many parts of the body contain larval flukes that become adults in birds. Numerous at times, the Yellow Grub will emerge if cyst is broken in water. **If practical, remove cysts from flesh; clean and prepare as usual. Otherwise, discard entire fish.**

White Grub (*Hysteromorpha* sp.). Smaller and lighter colored than the Yellow Grub. These larval flukes are most often found in catfish. **Use same as above.**

15. Sandy flesh in walleye.

Found Internally

16. Large white flat worm in the body cavity.



Unknown. An unusual problem apparently found only in walleye. Fish show no external symptoms or abnormal behavior. The rough, sandy flesh is found in varying intensity when fish is filleted but the flesh is always somewhat discolored. **DO NOT EAT. Wrap fish in plastic or foil (do not freeze) and notify nearest Game and Parks Commission office.**

Tapeworm (*Ligula* sp.). This larval tapeworm is found free in the body cavity of minnows, carp, suckers, and some other fish. It is uncommonly large and may create an abdominal bulge. **Edible. Clean and prepare as usual.**

17. Coiled (like a watch spring) worm encysted on the internal organs.



(*Contracaecum* sp.). Found on the internal organs or the wall of the body cavity, these larval roundworms are immobile. They become adult in fish-eating birds. **Edible. Clean and prepare as usual.**

18. Round transparent cysts on the internal organs.



Heart

White Grub (*Neascus* sp.). These larval flukes occasionally occur in quite large numbers. **Edible. Clean and prepare.**

19. Irregular white cysts in or on the internal organs.

Larval Spiny-Headed Worm or Larval Tapeworm. These cysts are larger, whiter, and not as round as those described in No. 18. **Edible. Clean and prepare as usual.**

20. White, thread-like worms lying on or moving through the internal organs.



Liver

Larval Tapeworm. Some tapeworms are not found in cysts. Numerous worms may infect the ovaries of bass. **Edible. Clean and prepare as usual. Roe can be cleaned by removing worms with tweezers before preparing.**

21. Tiny gold-brown cysts on the internal organs.

Larval Roundworm. Often found in great numbers, these cysts will give a sandy appearance to a fish's innards. **Edible. Clean and prepare as usual.**

22. White or orange worm in body cavity, attached to the intestine.



Spiny-Headed Worm (*Pomphorhynchus* sp.). Since most adult acanthocephalans live inside the intestine, they are not seen by fishermen. However, this species can be found lying in the body cavity with its head buried in the intestine. **Edible. Clean and prepare as usual.**

23. White, undulating worms emerging from ruptured intestine.

Intestinal Worms (Adult Helminths). Adult flukes, tapeworms, roundworms, and spiny-headed worms will not normally be seen by fishermen unless the intestine is accidentally cut in cleaning. **Edible. Clean and prepare.**