

Common Freshwater Fish Parasites Pictorial Guide: Crustaceans¹

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Introduction

This publication is one in a [series of pictorial guides](#) that is designed to assist in the identification of common freshwater fish parasites.

The information provided in this guide is not intended to be a complete, detailed description of each parasite or parasite group and its characteristics but rather is intended to assist in the visual identification of some of the most common species or groups of parasites seen in freshwater fish. For further information on each parasite, refer to publications in the "Recommended Reading" and "Reference" sections below.

Guide Information

- **Target Tissue:** provides the location on/in the fish where the parasite is most commonly found.
- **Characteristic:** provides a brief description about the appearance of the parasite.
- **Size:** provides the size or size range of the parasite. (1 μm = 0.001 mm = 0.0001 cm) (μm = micron or micrometer; mm = millimeter; cm = centimeter)
- **Movement:** provides the type of movement, if any, of the parasite.
- **Note:** provides a brief comment of interest about the parasite.

Crustaceans

Argulus ("Fish Louse")

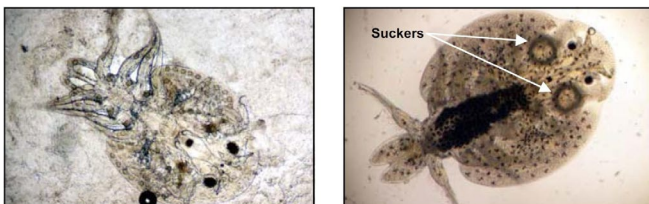


Figure 1. *Argulus*

Target Tissues: Skin, fin

Appearance: Flattened, saucer shape; two suckers; two eyespots

Size: Juveniles approx. 1–3 mm in length; adults approx. 5–20 mm in length

Movement: Free-moving; may glide over fish when feeding

Note: Can be seen with unaided eye; common in koi and goldfish; sucks body fluids from host; egg-layer (requires multiple treatments)

Ergasilus

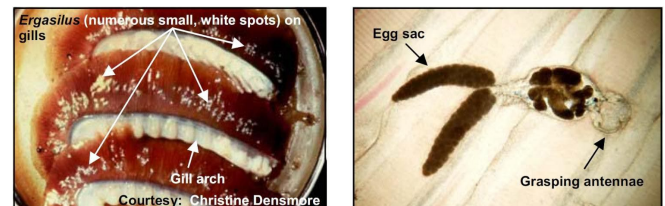


Figure 2. *Ergasilus* on gills (left); egg sac and grasping antennae (right)

Credit: Courtesy of Christin Densmore (left)

Target Tissues: Primarily gills

Appearance: Conical, segmented body with grasping antennae

Size: Usually greater than 2 mm in length

Movement: Generally seen fixed (attached with grasping antennae) on fish

Note: Direct life cycle; often incidental on fish but modified antennae used to grasp fish can cause severe, localized damage and infection

Lernaea ("Anchor Worm")

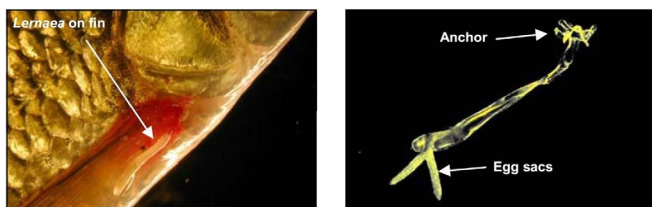


Figure 3. Samples under microscope, Lernaea on fin (left); arrows indicating anchor and egg sacs (right)

Target Tissues: Skin, fin

Appearance: Long, narrow; "anchor" at one end imbeds into fish; pair of egg sacs often seen at end opposite of anchor

Size: Approx. 5–25 mm in length

Movement: Generally seen fixed (attached with anchor) on fish

Note: Only females are parasitic; can cause secondary bacterial infections due to wound from anchor; common in koi, goldfish, and golden shiners

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Recommended Reading

- UF/IFAS Circular 91 Nematode (Roundworm) Infections in Fish. <https://edis.ifas.ufl.edu/FA091>
- UF/IFAS Circular 120 Fish Health Management Considerations in Recirculating Aquaculture Systems - Part 1: Introduction and General Principles. <https://edis.ifas.ufl.edu/FA099>
- UF/IFAS Circular 121 Fish Health Management Considerations in Recirculating Aquaculture Systems - Part 2: Pathogens. <https://edis.ifas.ufl.edu/FA100>
- UF/IFAS Circular 122 Fish Health Management Considerations in Recirculating Aquaculture Systems - Part 3: General Recommendations and Problem Solving Approaches. <https://edis.ifas.ufl.edu/FA101>
- UF/IFAS Circular 920 *Ichthyophthirius multifiliis* (White Spot) Infections in Fish. <https://edis.ifas.ufl.edu/FA006>
- UF/IFAS Circular 921 Introduction to Fish Health Management. <https://edis.ifas.ufl.edu/FA004>

- UF/IFAS Fact Sheet FA-13 Use of Copper in Freshwater Aquaculture and Farm Ponds. <https://edis.ifas.ufl.edu/FA008>
- UF/IFAS Fact Sheet FA-90 Pentastomid Infections in Fish. <https://edis.ifas.ufl.edu/FA090>
- UF/IFAS Fact Sheet FA-107 Common Freshwater Fish Parasites Pictorial Guide: Sessile Ciliates. <https://edis.ifas.ufl.edu/FA107>
- UF/IFAS Fact Sheet FA-108 Common Freshwater Fish Parasites Pictorial Guide: Motile Ciliates. <https://edis.ifas.ufl.edu/FA108>
- UF/IFAS Fact Sheet FA-109 Common Freshwater Fish Parasites Pictorial Guide: Flagellates. <https://edis.ifas.ufl.edu/FA109>
- UF/IFAS Fact Sheet FA-110 Common Freshwater Fish Parasites Pictorial Guide: Dinoflagellates, Coccidia, Microsporidians, and Myxozoans. <https://edis.ifas.ufl.edu/FA110>
- UF/IFAS Fact Sheet FA-111 Common Freshwater Fish Parasites Pictorial Guide: Monogeneans. <https://edis.ifas.ufl.edu/FA111>
- UF/IFAS Fact Sheet FA-112 Common Freshwater Fish Parasites Pictorial Guide: Digenean Trematodes. <https://edis.ifas.ufl.edu/FA112>
- UF/IFAS Fact Sheet FA-113 Common Freshwater Fish Parasites Pictorial Guide: Nematodes. <https://edis.ifas.ufl.edu/FA113>
- UF/IFAS Fact Sheet FA-114 Common Freshwater Fish Parasites Pictorial Guide: Acanthocephalans, Cestodes, Leeches, and Pentastomes. <https://edis.ifas.ufl.edu/FA114>
- UF/IFAS Fact Sheet VM-104 *Cryptobia iubilans* in Cichlids. <https://edis.ifas.ufl.edu/VM077>

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