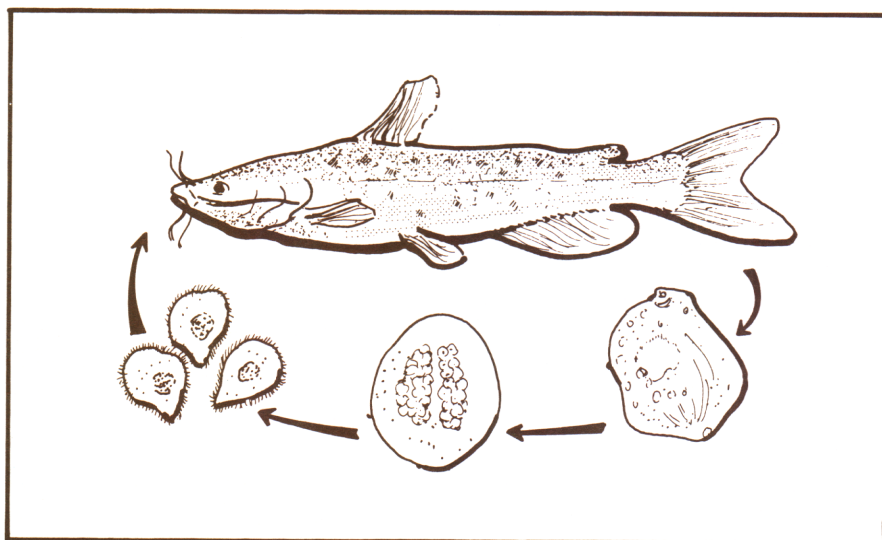


Life cycle of the yellow grub.



Life cycle of the "ich" skin parasite.

broad tapeworm of man, infrequently found in fish from a few waters in Michigan's Western Upper Peninsula, is the only real threat to humans—but again, only in cases of inadequate cooking.

Aside from effects of parasites on the appearance of fish flesh, some parasites and diseases can severely hamper fish growth and survival. This is most likely to be a problem where fish are crowded, as in trout ponds where the number of fish is kept unnaturally high by heavy stocking and supplemental feeding. Disease is also more likely to occur when the fish are stressed by unfavorable temperature, low oxygen supply, or other water quality problems.

Common diseases of Michigan fishes are listed in Table 12-1. If the symptoms described there are noted, or if abnormal numbers of dead fish occur, contact a private fisheries consultant for positive identification and proper treatment. See the Appendix for information on private consultants. Disease or parasite identification and treatment recommendations can also be obtained for a fee by sending specimens of the fish to the Michigan State University Animal Diagnostic Laboratory (East Lansing 48824).

Pond owners should carefully examine fish they intend to stock. If the fish show signs of distress, parasites or disease, don't stock them. They may be a poor investment and may infest other fish in the pond. A fish breeder or dealer who delivers diseased fish for stocking should be instructed to keep and treat all fish or destroy them. Under no circumstances should diseased fish be stocked into public waters. In fact, for this very reason, no fish should be stocked in public waters without a state permit.