

Other professional activities
Teaching and educational material



The preliminary identification key for Finnish fish larvae and juveniles I wrote years ago still exists as a MS version from the year 1995, still lacking final checking and illustrations. Therefore and because of limiting accessible time it is not published and not available, yet.

Instead, guidance to larval identification is available mainly on the courses given at universities or under supervision.

Irregular lectures, field and laboratory courses at the Universities of Helsinki, Joensuu and Jyväskylä (1984-2007).

- Courses held on identification of fish larvae and juveniles also at the University, Åbo Akademi and at the National Board of Fisheries in Sweden.
- Last two days session of larval identification course took place in May 2007 at the University of Jyväskylä.
- There are some plans to keep the next identification course at the University of Helsinki in 2008 or 2009.
- Supervision of master's thesis limited
- Supervision of doctoral thesis limited

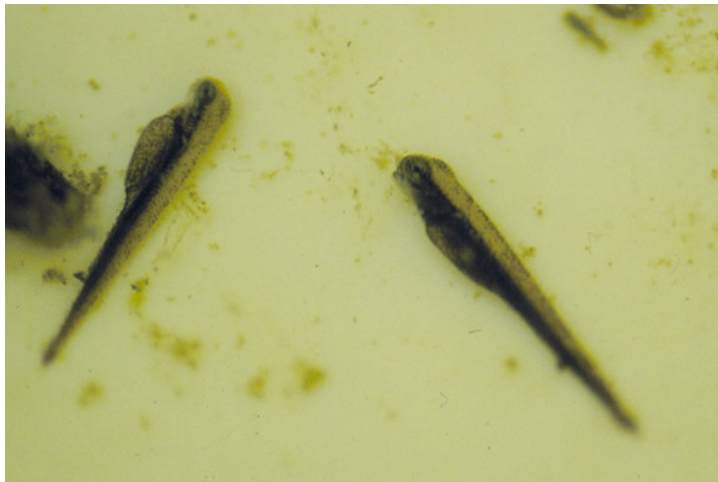
Some separate publications offer help for larval identification, e.g.:

1. "Urho, L. 1992: *Morphological and ecological differences in the development of smelt and herring larvae in the northern Baltic Sea.* - *Sarsia* 77:1-10."

2. "Urho, L. 1996: Identification of perch (*Perca fluviatilis*), pikeperch (*Stizostedion lucioperca*) and ruffe (*Gymnocephalus cernuus*) larvae. - *Ann. Zool. Fennici* 33:659-667."

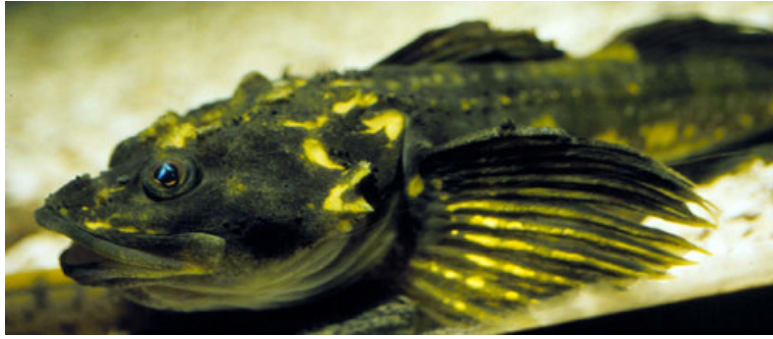


3. Newly hatched pike (*Esox lucius*) larvae do not resemble an adult.



More on pike development published in "Urho, L., Laurila, S. & Hildén, M. 1989: Hauen ensimmäinen kesä. (The first summer in pike's life.) - *Luonnon Tutkija* 93:130-135." (In Finnish with English abstract, table and figure texts).

4. A guide for fish monitoring was written in 1999 containing my instructions for spawning and larval areas surveys and larval studies: "Böhling, P., Rahikainen, M. (toim.) Kalataloustarkkailu: Periaatteet ja menetelmät. Helsinki: Riista- ja kalatalouden tutkimuslaitos. s. 58-76. (In Finnish)."
5. General articles on "Fish reproduction" and "Larvae and juveniles" are published in a book "Kalavesillä" (WSOY 2006). (In Finnish).
6. An article with several photos on fish larvae with hard life was published in Tiede-magazine. "Urho, L. & Böhling, P. 2003. Kalanpoikasilla rankka lapsuus. - *Tiede* 4/2003:36-40." (In Finnish)
7. Pictorial photo portraits on fish development of five common species are on display in Maretarium, Kotka, Finland. Numerous other photos e.g. on fish larvae have been published in several magazines and other publications
8. Identification of adult commercially exploited species in Finland and other information on them is available on our homepage under name "fish atlas". http://www.rktl.fi/kala/tietoa_kalalajeista/.



Editor, editorial board and referee activities

- *Editor in Monistettuja Julkaisuja in 1989*
- *Editor in Kalatutkimuksia in 1990-1991.*
- *Editor in charge in Kalatutkimuksia 1992-1997.*
- *Member of editorial board in Boreal Environmental Research*
- *Referee for some papers on fish reproduction*



Working groups

- Suomen luontotyyppien uhanalaisuuden arviointi, sisävedet työryhmä.
(National working group assessing the vulnerability of aquatic nature types)
- WGITMO, ICES ("Introductions and Transfers of Marine Organisms")
- WGRP, ICES ("Recruitment Processes")
- WGBOSV, ICES ("Ballast and Other Ship Vectors")

