

## 2 Anatomy

### Finfish

The external and internal anatomy of finfish varies considerably across species. Specific adaptations to predator-prey interactions, aquatic habitat variability and dietary preferences can explain these differences. Examples include the short intestinal length of carnivorous fish compared with the relatively long intestine of herbivorous fish, and the ventrally directed mouth of bottom-feeding species such as European carp (*Cyprinus carpio*) compared with the upward oriented mouth of the surface-feeding saratoga (*Scleropages leichardti*).

---

Gravid female Atlantic salmon (*Salmo salar*); note distended abdomen and protruding spawning vent

---



Source: M Porter

---

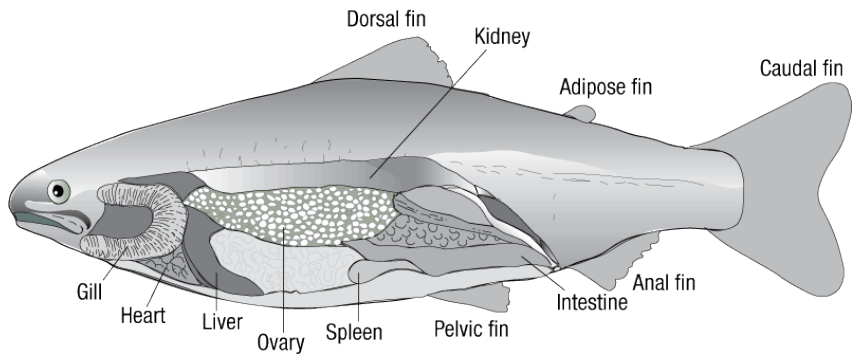
Male Atlantic salmon (*Salmo salar*) showing typical hooked mouth when mature



Source: M Porter

---

Anatomy of a juvenile salmon



Source: Aquatic Animal Health Program, Animal Health Policy, Australian Government Department of Agriculture, Fisheries and Forestry

Gravid female Atlantic salmon (*Salmo salar*). Note the stomach cavity dominated by the ovary. Compare the relative size of the ovary with the rest of the internal organs



Source: K Nelson

Gravid female Atlantic salmon (*Salmo salar*), showing location of the ovary (orange) in relation to the liver and intestines



Source: M Porter

---

Degenerative eggs in an old female Atlantic salmon (*Salmo salar*)

---



Source: M Porter

---

Golden perch (*Macquaria ambigua*)

---



Source: Illustration © State of New South Wales Department of Primary Industries 2006

Silver perch (*Bidyanus bidyanus*)

---

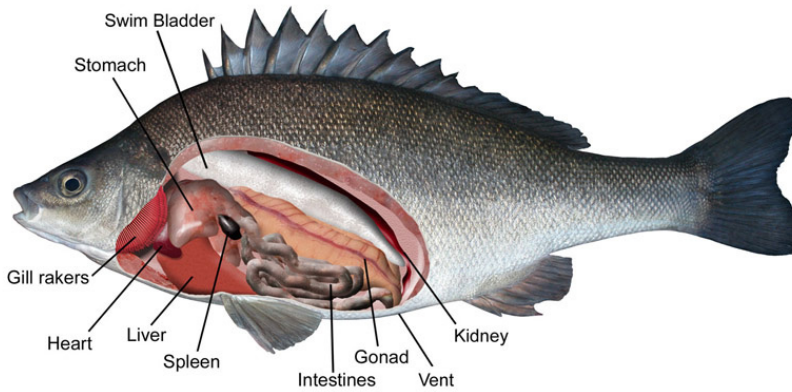


Source: Illustration © State of New South Wales Department of Primary Industries 2006

---

Anatomy of a silver perch

---



Source: Illustration © State of New South Wales Department of Primary Industries 2006

---