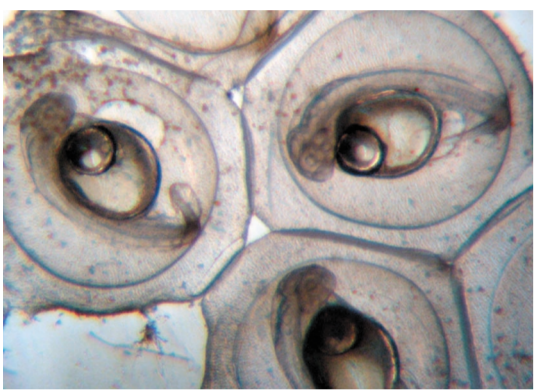


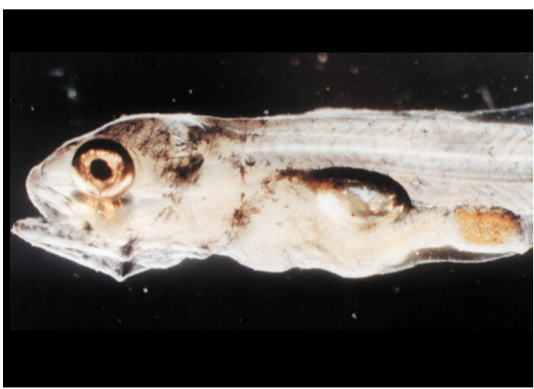
# Farming European Perch



**Spawning Troughs**  
Perch farmers often allow spawning and hatching to occur naturally, however a far higher hatch rate is achieved by hatching in controlled conditions such as spawning troughs.



**Perch Eggs**  
A characteristic polygonal cluster of Perch eggs. The larvae eyes turn a distinctive gold colour prior to hatching, and vigorous shaking of ribbons can help achieve greater than a 90% hatch.



**A Perch Larvae**  
Feeding of perch can be extremely difficult and labour intensive. The mouthparts of newly hatched perch are unable to handle large zooplankton and therefore a food supply of rotifers or small grade artemia must be initially provided.



**Larvae in Tanks**  
Two methods of feeding juvenile perch are available, natural pond production or intensive feeding in a recirculation system. Perch are trained onto formulated feeds either in tanks or in situ weaning using micro ponds. Feed training of fry in ponds can be more difficult giving the abundant supply of natural zooplankton available.



**Perch Pond**  
Farming of perch can take place in intensive reared systems (recirculation units) or in more extensive earthen pond based systems, the latter being the standard. Pond size can vary from 400m<sup>2</sup> to 1,200m<sup>2</sup>. A 10 ton unit has a typical pond volume of 9,000m<sup>3</sup> taking up about 7.5 hectares.



**Market Size Perch**  
Growth in ponds is variable and can take approximately two years to reach 100g weight. However efforts with domestication and strain selection may reduce this. A natural phenomenon is that female perch tend to grow faster than their male counterparts and thus efforts are being made to have all female stocks available.

The European Perch *Perca fluviatilis* is a common native freshwater species found in Ireland, Great Britain and the Baltic countries, including brackish water habitats in the Baltic Sea. Perch is an adaptable species that has been successfully bred in many varying habitats far from its original range. It has been introduced into southern European countries and in Asia it can be found across Russia as far east as Siberia. It can also be found in Australia, New Zealand and South Africa. The species is closely related to the American yellow perch *Perca flavescens* and together they have an almost complete circumpolar range. Perch generally live in lakes and slow moving rivers. They can tolerate mild to moderate pollution but as with most fish, prefer clearer waters. Their temperate range lies between 4-24°C with an optimum of 21°C.

Perch aquaculture has been typically confined to the Czech Republic, Hungary, Poland and France but recently there has been interest in Belgium, Ireland and Switzerland. In Eastern Europe production has tended to be extensive with perch grown in large pond systems alongside other fish including carp, catfish and pike and the products are usually sold in local markets. This extensive method of cultivation means that production can vary from year to year and the perch are not fed formulated diets but rather their normal feeding is supplemented with grain. New perch cultivation initiatives in Belgium, France and Switzerland tend to focus more on the use of recirculation systems.

Perch farming has been identified as a potential form of diversification for the aquaculture sector. Perch farming utilises local natural resources, is in harmony with the environment and has the potential to be a low cost, high value sector offering an opportunity for employment in rural communities. The farming of the species has significant potential in traditionally agricultural rural areas, in line with EU policy for social and economic development.

## LARVAE 5.9 mm

Perch go through several stages of larval development. Stocking density and feeding conditions are critical at these early stages to avoid cannibalism.

## LARVAE 5.5 mm

Newly hatched larvae contain yolk sacs which they use as their initial food source. Within days the yolk sac is absorbed and the larvae begin to feed on rotifers and other small zooplankton present in the water column.

## EGG 1.0 mm

Eggs are produced in a cylinder of fabric, commonly known as a ribbon, wherein each egg is attached to six others in a polygonal pattern. In the wild these ribbons can be seen in April-May draped on submerged branches and leaves. The average female produces up to 120,000 eggs per year. The period of incubation before hatching is dependent on temperature with eggs taking 10 days at 16°C.

## ADULT

Perch are carnivorous and in the wild eat other fish such as roach, sticklebacks and minnows. It is a white fish with a small flake, delicate texture and mild flavour. It is a relatively small fish and can reach sizes of 35-50cm length and up to 4.75kg weight. Perch are normally sold as filets from 10 grams upwards.

## FRY

17 - 20 mm

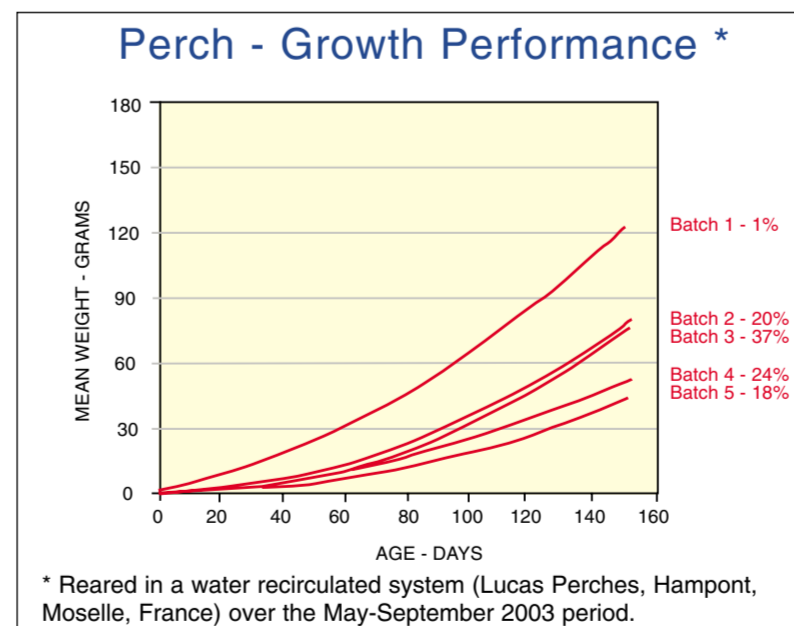
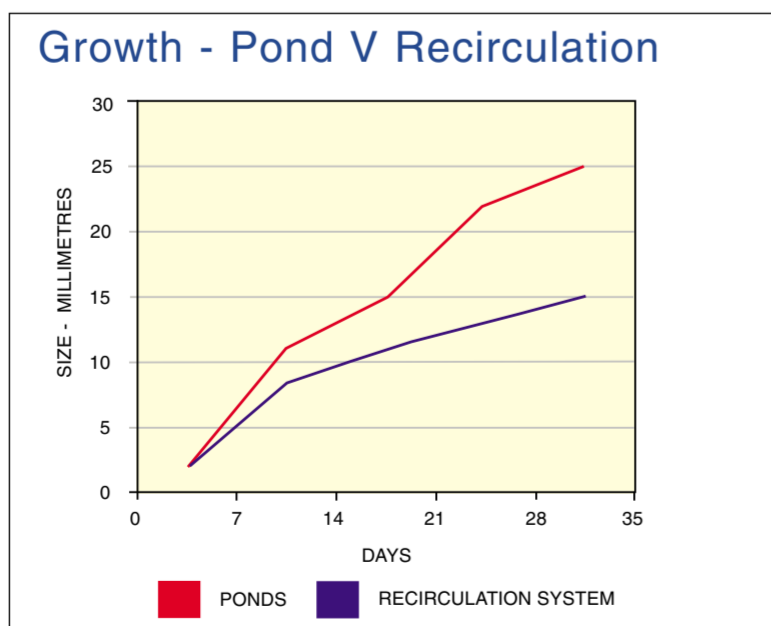
Perch grow rapidly only taking three to five weeks to reach fry stage.

## JUVENILE

> 20 mm

At the juvenile stage you can see the perches' characteristic 5-9 black bands on their sides. Perch juveniles feed on zooplankton, other perch fry and invertebrate fish.

## Life Cycle of the European Perch



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