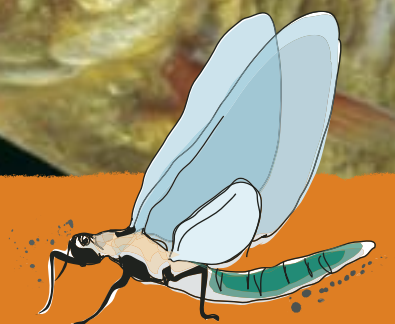




The Crucian Carp



Aims of the Crucian Carp Action Plan

- To protect and conserve populations of crucian carp in ponds in Lambeth, and identify opportunities to increase local abundance and distribution.
- To assist with research into the ecological and environmental impacts of hybridisation between crucian carp and feral goldfish or other carp species.
- To raise the public profile of the crucian carp, and its importance as a flagship indicator of the health and quality of local fish populations and fisheries.

A) What is the crucian carp?

The crucian carp (*Carassius carassius*) is a deep-bodied fish with a small round head and mouth and an up-turned lower lip. It tends to be rusty-bronze in colour with a gold-orange coloured belly. Crucian carp can grow to about 20-30 cm maximum length, and usually mature at about three to four years of age – they can live up to ten years, although older-living individuals have been known.

Crucian carp prefer small, nutrient-rich ponds and lakes rich in macrophytes in lowland areas. They are very hardy fish: they tolerate low levels of dissolved oxygen, survive water temperatures ranging from 0o to 38oC, and can live in acidic waters where the pH can be as low as 4.0. Crucian carp are also very tolerant of pollution, especially organic types.

Juvenile crucian carp feed mainly on zooplankton in the water column, but as they grow and mature they switch to a bottom feeding habit, feeding on small molluscs, worms, various insects, crustaceans and some plant material.

Crucian carp are a popular sport fish with British anglers, and has been introduced to many lakes, ponds and commercial fisheries. The current British rod-caught record for crucian carp is 2.085 kg for a fish caught in 2003. Crucian carp are considered by most to be native to the south east of England.

B) Where can I find crucian carp in Lambeth?

The only confirmed Lambeth population of crucian carp is in the ponds at Brockwell Park, Herne Hill, where over 500 crucian carp were found in two of the three ponds during a recent fish recovery programme. These crucian carp were apparently very healthy and there was no confusion as to their identity. No feral goldfish were found in the ponds at Brockwell Park nor was there any evidence of hybridisation between crucian carp and goldfish having occurred.

C) Why do we need an Action Plan for crucian carp?

Species hybridisation and loss of genetic integrity is regarded as a major threat to the future of crucian carp as a pure-breeding and genetically distinct species in British waters. Crucian carp readily breed and hybridise with the common carp (*Cyprinus carpio*) and feral goldfish (*Carassius auratus*) which are deliberately released into local watercourses.

In hybridising with common carp and feral goldfish the crucian carp produces a small proportion of fertile offspring which are themselves capable of reproduction and further hybridisation. It is now difficult to find a population of pure-breeding crucian carp due to hybridisation with introduced common carp and goldfish.

In the light of this, the fact there were no feral goldfish in the ponds at Brockwell Park, nor was there any evidence of hybridisation between crucian carp and goldfish, makes the colony of crucian carp at Brockwell Park highly significant in terms of conserving pure-breeding crucian carp.

Species competition, with common carp, is also thought to be a significant threat. High densities of common carp in lakes and ponds, which normally contained only crucian carp, can result in habitat degradation and severely affects indigenous crucian carp populations.

Habitat loss. The number ponds in the UK providing suitable crucian carp habitat has decreased dramatically in the last century due to land use changes and more intensive farming practices. This is considered to have had a significant impact upon the numbers of crucian carp populations.

Disease and parasites of specific concern include the Asian tapeworm (*Bothriocephalus acheilognathi*) introduced along with imported grass carp (*Ctenopharyngodon idella*) and *Philometroides sanguinea*, a newly recorded nematode worm. Both are a threat to native crucian carp populations, and several sites in Britain have been affected.

D) What is the legal status of the crucian carp?

Being a previously common and widely distributed species, the crucian carp is not named in any legislation relating to the conservation of freshwater fish. The Environment Agency however have recorded crucian carp as being “threatened” due to the issues previously stated above. Because it is regarded by many as a ‘native’ species, the crucian carp is also exempt from legislation relating to the control of non-native species of fish in Britain.

E) What will the Crucian Carp Action Plan do?

Objective 1. We will determine the distribution and abundance of the crucian carp population in all ponds and lakes within Lambeth. An audit report on crucian carp in Lambeth, identifying current locations, numbers and condition of existing stock, will be produced by 2006.

Objective 2. We will manage the crucian carp population in Lambeth, providing information on protecting the Borough’s crucian carp from hybridisation with other fish species, like feral goldfish, and addressing or controlling the effects of overstocking watercourses and introduced fish diseases. A ‘good practice’ information and training toolkit will be distributed to all stakeholders by 2007.

Objective 3. We will support obtaining a greater understanding of the ecological and environmental effects of hybridisation of crucian carp populations with feral goldfish and common carp. We will contribute where possible to future genetic work of this type. A report on the ecological and environmental health of the Borough’s crucian carp population, and actions to address any concerns, will be produced by 2008.

E) Who is involved in the Action Plan?

1. Partnerships

The Lead Partner for the Lambeth Crucian Carp Action Plan is Lambeth Council's Parks and Greenspaces Business Unit (Lambeth Parks).

The Lead Community Partner is the Clapham Angling Preservation Society (CAPS).

Other Partners include the Environment Agency, the Greater London Authority, London Wildlife Trust, London Natural History Society, English Nature.

2. Contact for information

For more information on the Lambeth Crucian Carp Action Plan, including copies of this plan in paper or electronic format, please contact:

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3. Further information and advice

Further advice on the crucian carp, its ecology and conservation, and the management of water bodies to protect and support the crucian carp and other freshwater fish, can be found on the following websites.

- DEFRA (<http://www.defra.gov.uk/>)
- Environment Agency (http://www.environment-agency.gov.uk/science/303327/304141/459747/?lang=_e&theme=®ion=&subject=&searchfor=crucian+carp)
- London Wildlife Trust (<http://www.wildlondon.org.uk/>)
- Greater London Authority (<http://www.london.gov.uk/>)
- English Nature (<http://www.english-nature.org.uk/default.asp>)
- Practical Fish Keeping (<http://www.practicalfishkeeping.co.uk/pfk/pages/item.php?news=99>)
- Rod and Line – Fishing Information Database (<http://www.rod-and-line.co.uk/Crucian-Carp.html>)
- Fishing Magic – crucian carp article (<http://www.fishingmagic.com/news/article/mps/UAN/2686/V/1/SP/332955698418328557598>)
- University of Hull (<http://www.hull.ac.uk/molecol/Carp.html>)
- Environment Agency – Stocking Fish: a Guide for Fishery Owners and Anglers (http://www.environment-agency.gov.uk/commondata/105385/stocking__eng_172017.pdf)

