Carp pox

What is carp pox?

Fish infected with carp pox have distinctive white, waxy lesions that appear during the low temperatures of winter and early spring. The lesions tend to reduce as temperatures rise in the summer.

A mirror carp with a low level of carp pox (arrowed)

It is caused by a virus known as Cyprinid Herpesvirus-1. It is a common disease of common carp, but can affect all varieties of carp. It may affect other cyprinids such as barbel, bream, crucian carp and rudd. It is a long-lasting, but normally non-fatal skin disease which leads to the abnormal multiplication of skin cells. Fish infected with carp pox are thought to be infected for life, but the disease only occurs at certain times of the year when conditions are right.

What does carp pox do?

Carp pox is usually more unsightly than it is harmful to the fish. The lesions can develop all over the external surface of the fish, though are commonly on the fins. At first the lesions are flat, firm, smooth and translucent, but they can grow thicker on the body. They are milky to greyish-white in colour and may cause scarring. In extreme cases individual lesions can grow and join, covering a large proportion of the body surface, but rarely the whole fish.

The disease will not normally kill the fish. If the infection only attacks small areas of the body, then the fish will not be distressed. However, lesions covering the mouth or gills may impede feeding or respiration, causing greater distress. There is evidence to suggest that the number of mucus producing cells of the fish become reduced. In severe cases, normal growth of the fish is affected and they may become thin and the skeleton damaged.

Minimising the problems with carp pox- what can I do?

Carp pox is one of the easiest conditions to spot on fish, but unless it is present in high numbers or large lesions are present, it should not be of immediate concern.

There is no treatment for carp pox. Good fishery management is the best way to avoid disease outbreaks. Water temperature is a key factor to carp pox infections occurring, although fish are more likely to experience problems when they are stressed or debilitated. The following measures will also be beneficial to a fishery:

Reducing stress within the fish population

Carp pox is more likely to infect fish when they are stressed. Stressors include high stock densities, poor habitat and poor water quality.

Careful management of stock levels

Keeping your stock densities low is important to avoid carp pox infections. High fish stocks cause stress to the fish making them more susceptible to infection.

Regular monitoring of water quality

Decreasing water temperatures are often a cause of carp pox. The temperature of the water cannot be controlled, but regular monitoring of water quality (dissolved oxygen content, pH and ammonia) that can be managed is essential to prevent problems within a fishery.

A crucian carp with a carp pox infection

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