



WHAT IS CARP POX

This is the time of year when water temperatures are dropping all over the south. This is also when Carp Pox starts to appear on some of our fish. I get a lot of calls and emails from folks that see this on their fish and want to know what it is, if it is dangerous, and if it should be treated. Let's talk about it in this article.

What does carp pox do?

Carp pox is usually more unsightly than harmful to the fish. The lesions can develop all over the external surface of the fish, though 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 color and may cause scarring. In extreme cases individual lesions can grow and join, covering a lot 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 may be damaged.



Carp Pox is not really a pox at all. It is simply a Herpes virus which causes abnormal dermal cell growth and/or neoplasms, very much like that of a wart on a human. No, it is not the same Herpes virus as in KHV (Koi Herpes Virus/ Cyprinid Herpes Virus 3).

Specifically and scientifically, Carp Pox is referred to as Cyprinid Herpes Virus -1 to be exact. It is a harmless aesthetic problem that is very common to Koi. It is very much temperature related, as most times it only shows itself in colder water temps, or dropping water temps, only to disappear later as the water warms again.

The most common way it appears is as white to pink lumps on fins, tails, or bodies of the Koi.

Because this is a virus, it is contagious. It has been found that it is not a real threat in most average situations. At least not to the degree that it is worth isolating that fish from the rest of them you may have in the same tank or pond. However, the likelihood of it spreading increases as the fish load increases, and as the organic load of the system they are housed in increases. In other words, if your pond or tanks are very crowded with fish, or extremely dirty, than it can more easily spread due to the increased degree of physical contact between fish.

It is most commonly seen on the fins and tail, but as stated above it can also appear anywhere on the body. In most cases it will only appear in cold water, and usually goes away as the water warms in the spring and summer months. It can come and go at any time of the year, and in any temperatures.



Most times a given fish with this problem will only have it come and go for a season or two. After that, it many times will go away forever. There are the rare cases of fish that get these lesions all over their bodies, and they never go away, and increase in numbers over time. In these cases, I would consider getting rid of it. These cases are very rarer. In these rare cases, and even normal cases, there is some speculation that it is brought about due to environmental conditions. Having high concentrations of pollutants, or simply dirty high organic load systems cannot help. No one knows for sure so keep your water clean.

I do not recommend that you attempt to remove these lesions, as you could cause more damage than good. In some cases they can easily be removed however, with little to know damage to the fish. If you do attempt to remove the lesions, I would then isolate the fish and treat to avoid secondary infections.

I would just leave the affected fish alone, and see if they went away on their own. The photos in this article show several examples of what the pox looks like.



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

There is no treatment for carp pox. Good water quality 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:

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.

For more information about monitoring water quality managing stock density, and good habitat, see the relevant fact-sheets in this series.

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, it's just ugly.



Joe

Note of interest:

I have experimented with several possible cures with some very good success. I have cleaned the lesion with PP and treated with Abreva My regiment is being researched at several universities

We are very fortunate to have three certified KHA's in our club. These folks are willing and able to help you with questions/problems with your fish or pond.

**Contact Joe Hatfield, Gary or JoAnn Elmore at:
http://www.atlantakoiclub.org/KHA%20Information/kha_information.htm**