

## Filamentous Algae

### Is there anything that can be done about this?

*By Stephen M. Meyer*

Q. We have several ponds, all of which contain long strands of hair-like "moss" growing everywhere. We have had fish get caught in it and die. Is there anything that can be done about this?

A. The "moss" you describe is really a filamentous algae, of which there are a number of species. Unlike the planktonic algae responsible for "green water" in which the individual cells float freely in the water, filamentous algae is comprised of strands of algal cells that join together to form long strings. Pondkeepers often refer to it generically as "long stringy algae," "blanket weed" or "silkweed." Filamentous algae is a problem that plagues some ponds, yet never appears in others. It usually appears in the spring, though in warm climates it can be present year-round.

Like other freshwater algae, its spores enter your pond in tap water, rain or via wind transport. Strands of filamentous algae can also be introduced into your pond attached to plant material, such as water lilies and iris. It "blooms" in great abundance when the growing conditions are optimal: good sunlight, high nutrient levels in the water and so on. When it has appeared in my ponds, it has been in those sections with the longest exposure to direct sunlight. It is also often found on waterfalls.

Filamentous algae, although unsightly in appearance, does have some redeeming qualities. It is often responsible for keeping the pond clear of suspended, planktonic algae (as noted above, the cause of green water) because it consumes the nutrients that would otherwise support a planktonic algal bloom. As such, it provides some degree of "vegetative filtration" of the pond water. Filamentous algae is also an excellent food for pond fish, containing some important vitamins and color enhancers.

Of course, as your question indicates, if filamentous algae gets out of control it can cause problems. In particular, small fish can get tangled in the algal mass and suffocate. Filamentous algae can also strangle desirable pond plants.

The simplest and safest way to rid your ponds of filamentous algae is to mechanically harvest it with a stick or rake. This is not much of a chore in most backyard ponds. You can then slow the return of filamentous algae by shading your ponds or adding more plants that will compete for nutrients in the water. Water lilies accomplish both goals simultaneously, but they would have to cover at least 50 percent of the pond surface to have a noticeable effect. A good crop of water hyacinth will also remove nutrients rapidly.

I do not suggest you consider chemical algicides, because many are harmful to koi, goldfish and other pond fish, as well as pond plants. Irrespective of the safety claims of algicide manufacturers, none will offer to replace your fish or plants should something "go wrong." That should tell you something about the risks of using such products.