Adopt-A-Pond has been getting lots of reports of small floating plants that cover a pond from one side to the other. Well not to panic. We see this all the time. Most likely it is one of several species of plants such as these:

- Spirodela polyrhiza - giant duckweed
- Lemna valdiviana - small duckweed
- Wolffia columbiana - water meal
- Wolfiella floridana - mud-midget

But you’ve probably got alot of this too:

For convenience we generally refer to all these plants as “duckweed”, even though they are distinct species. These little guys may look like trouble, but the fact is, they won’t hurt your pond. If anything, they’re going to help by taking up the excess nutrients that are in your pond! They won’t kill fish, in fact some fish eat them. The only problem with them, is the way they look.

If you can’t stand ‘em, you can contract someone to herbicide them, or you can gather your neighbors and rake them out. Removal is the best option because it removes the seed source, and the nutrient load stored in the plant. For best results, try the Hitchcock Pond Technique, described below.

Without complex, site-specific studies, it is impossible to determine exactly why these plants have multiplied in your pond, but we can offer a general explanation. It is important to remember that a
pond is a living system made up of many different interactions and processes. Many of these processes are driven by organisms trying to survive and reproduce. To do this they compete for resources with other organisms doing the same thing. Since resources are limited, they get used up. Naturally, the one in shortest supply runs out first and limits the growth in your pond. But various organisms are limited by different things. So if one organism, in this case those little plants, can get a little more of that one resource they need... BOOM! They grow like crazy until it’s all used up, or something else runs out. Of course since everything is connected, this sudden growth affects other processes in your pond, but that’s another story.

If you think about it, this concept isn’t so strange, just think of all those little ghost towns scattered across the country. At one point, there was something that made those towns grow. It changed, or ran out, and the town died. This concept is called “limiting factors” and it’s a fundamental principle of Environmental Science. You could call it a natural law-- that a population will continue to grow until some factor limits that growth.

Again, we can’t be specific about what the limiting factor is without detailed studies, but we’ve noticed that duckweed becomes a problem in the spring and after it rains for awhile. This means that temperature probably checks the growth, as well as nutrients in the runoff that enters the pond. We can’t control the temperature, but we can do something about the nutrients. Enter the Hitchcock Pond Technique!

The Hitchcock Pond Technique

This technique was invented by one of our pond groups in response to this very problem. Their 2-acre pond was completely covered, and they got rid of nearly all of it. Here’s how it works.

**Step 1.** Plant native wetland vegetation. These plants look nice in the pond, but more importantly they take up nutrients that are otherwise fair game for the duckweed. Don’t worry about it, plant right in among the duckweed. **Without this step, the duckweed will grow right back.**

**Step 2.** Buy a role of silt fence from a local hardware store-- you know, that black fabric-type stuff around construction sites.

**Step 3.** Anchor one end of the fence on the bank and drag a loop out into the pond using a boat or by walking it (you may need some milk-jug floats to keep it upright). Take advantage of the shape of the pond. The idea here is to block off a section of the pond, so if you have narrow spots, use’em.

**Step 4.** Get some hands to start raking the duckweed out from the bank. Use broad soft-tined rakes and nets. Take advantage of the wind. If no wind, use another section of silt fence as a seine to drag the plants to you. If you want, you can even use a solids pump to suck it off the surface like a vacuum (you can rent one from a machinery rental store). Let the plants dry and place them in your garden as mulch and compost.

Once you get one section completed, block off another one and repeat. Leave the old section of fence in place to prevent the duckweed from floating back over there. Modify the technique to fit your situation. If you come up with something good, we might name a technique after your pond!

**NOTE:** This technique will help you control the problem in the pond, but remember, the source of the nutrients is outside your pond, in people’s yards. For help controlling this problem at the source contact your local Extension Service. In Hillsborough try [http://hillsborough.extension.ufl.edu/educational_programs.htm#fyn](http://hillsborough.extension.ufl.edu/educational_programs.htm#fyn)
Look how thick the duckweed is. We planted the pickerelweed right in it.


This group used the technique as well. It really does work!

Lastly, remember we’re dealing with natural cycles here. One year is only one of those cycles. So be patient and don’t be surprised if it takes a year or more to get your pond in shape. Even then, it’s always changing, so just have fun with it and don’t stress. After all, it’s just a pond!