

Many agencies band together to battle in the fight against Hydrilla

By: Corine Burgess

Hydrilla verticillata has been called an invisible menace. It is a federally listed noxious weed. The plant was originally brought to the United States as an aquarium plant in the 1950's. It was discovered growing in Florida in 1960 and has spread throughout the state very rapidly since then. Native to the warmer regions of Asia, this tropical plant grows about one inch a day. It is "invisible" until it tops out, which means that it grows so tall that it actually reaches the surface of the water body and can be seen. The plant has remarkable reproduction abilities and can grow in just about any type of water. Hydrilla has become so widespread in Florida that it is no longer realistic to eliminate it so it must be managed. In an effort to do just that, many agencies have teamed up together to attack the green beast and keep it under control.

During the week of December 6th, a variety of professionals got together at a staging area to treat the hydrilla on Lake Huntley and Lake Istokpoga. Representatives from Helena Chemical, University of Florida, United Phosphorus Inc., Florida Fish and Wildlife Conservation Commission, Highlands County Aquatic Weed Control, and Helicopter Applicators, Inc. gathered on site to make sure the project went smoothly. The spraying is done by helicopter and applied to pre-mapped areas where hydrilla is particularly heavy. It is a team effort where support-staff from Highlands County Parks and Natural Resources Aquatic Weed Control, Helena Chemical and Helicopter Applicators, Inc. fill up the tanks with herbicide each time the helicopter lands.

According to Carl Smith, Highlands County Aquatic Weed Control Supervisor, over 2,000 acres of hydrilla was treated in this application. On Lake Istokpoga 1,805 acres were slated for treatment and on Lake Huntley, 260 acres were sprayed. Carl stated, "I oversee the entire project. We are managing hydrilla and keeping it at the lowest management acres that we can. We do leave enough hydrilla for water fowl and fisheries. We don't target all of it. Danny Copeland, Weed Control Technician, is helping out by filling up the tanks on the helicopter when it lands. The big trucks they are working off of are called nurse trucks because they have everything they need on that vehicle. Other staff members Wesley Williams and Chris Mayhew position their vessels on the lake so that they can keep boaters out of the spray zone."

Polly Ellinor, Account Manager for Helena Chemical Company, stated, "It is a well oiled machine." All of the support staff work together to get the job done.

Gerald Adrian, Business Manager for United Phosphorus Inc., stated "the chemical we use is called Endothall, the active ingredient in Aquathol K. It is used for hydrilla control in aerial application. It is a contact herbicide with a short half life in water. The microbes in the water chew it up and use it as an energy source. It breaks down into carbon, hydrogen and oxygen. This chemical has been used since the 1960's with a high rate of success. We have developed techniques within the past five years to use it on a large scale, such as Lake Istokpoga, with lower rates because of treatments during the time of year when hydrilla is more susceptible. The chemical has less breakdown in lower temperatures when the water is cooler. Factors such as less evaporation help the treatment to be more effective."

Jeremy Slade with the University of Florida was there to do research. "I study the spread, how long the residuals last and what type of control we are getting." This data helps the team to be more effective with future sprayings.

Staff from the Florida Fish and Wildlife Conservation Commission was on site to ensure that the project went as planned including staying on schedule and making sure conditions were right for the project. There is a tremendous amount of planning that goes into one of these treatments. A public meeting is always held before the treatment to get input from all the stakeholders involved. Bass fishing groups, United Water Fowlers, citizens, the Florida Fish and Wildlife standing team and County cooperators all get together in a public forum to discuss the plan and any concerns that they may have.

Many of Highlands County's lakes have a serious hydrilla problem. Istokpoga is among the worst and treatments are scheduled two times a year.

But why does the State of Florida spend millions of dollars a year to spray this noxious weed? When hydrilla invades, many important native plants and animals are put in harms way. Submersed vegetation such as pondweeds (*Potamogeton* spp.), eelgrass (*Vallisneria americana*) and coontail (*Ceratophyllum demersum*) are shaded out by hydrilla's thick mats, or are simply outcompeted, and eliminated (van Dijk 1985). In addition, it slows water flow and may clog irrigation and flood control canals. For the boater and recreator, hydrilla hampers navigation and can prevent swimming and fishing. If the plant is thick enough, it can alter water chemistry and deplete oxygen levels, which may cause fish kills.

In just 20 years the plant has spread throughout the entire state of Florida and continues to grow rapidly, choking out many native varieties of ecologically important plants. Unfortunately, hydrilla is still sold through the aquarium supply dealers and over the Internet. Thanks to the above mentioned agencies, our beautiful lakes may have a chance to continue to provide the recreational and aesthetic benefits which Highlands County residents and visitors have come to enjoy.