

W.P. OUTLOOK
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City has made efforts to control aquatic weeds in the chain of lakes

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(Part I of a series)

For some 20 years efforts have been made to control noxious aquatic weeds in the chain of lakes in Winter Park and Maitland. The activities have not always been understood by the public. We will discuss the various activities, weeds and herbicides used in your lakes in an effort to prevent or retard the process of eutrophication (contamination leading to a lake dying).

Winter Park - Maitland Lake Water Quality

The term "pollution" when applied to lakes gives rise to a multitude of meanings to the public. The gambit may run from being thought of as a cesspool to one with a greenish cast due to a summer algae bloom. Winter Park lakes are not really polluted in any dangerous sense. Chemical analysis shows the elements in the water to be normal, but stormwater runoff from the streets through storm sewers discharge debris. The debris deposit silt and muck on the lake bottom several feet thick in some locations. Removal of this muck is being programmed in an effort toward lake restoration. Bacteria counts are regularly made and found minimal. On occasions following a heavy rain high bacteria counts cause the city to close the swimming areas until the situations

clear. County monitoring of the lakes is also regularly performed.

Water quality varies with the turbidity from algae or suspended matter such as silt. Heavy growths of aquatic weeds tend to keep water clear but unfortunately such infestations of hydrilla would ruin a lake, prevent boating by the tangled surfaced masses, endanger swimmers and finally turn a lake into a swamp. Only by the city's lake weed program, using herbicides, can control be managed.

Winter Park - Maitland Lake Weed Management

What is this aquatic weed "hydrilla Verticillate" which is causing problems in Florida lakes? Originally it is found in Africa and India where it clogs waterways. It has been imported as a grass to be used by tropical fish fanciers. Again it has been reported that the spread started in Miami where it may have been introduced into Florida waters to culture a local supply.

The plant roots in the bottom soil of lakes and grows in long stalks containing small green leaves in whorls which branch. Growth is extremely rapid in summer, several inches a day. Left unchecked the plants become so dense as to impede the movement of fish and even the flow of water. The plant requires so little sunlight (1.5 percent sunlight) that it can be found at depths of 20 to 30 feet where it will soon surface to form large tangled mats through which boats cannot pass and has proved lethal to swimmers who be-

come entangled. The plant spreads easily through broken-off fragments, birds carry it to new locations and boaters introduce it elsewhere from entanglement on propeller shafts.

It has now spread throughout the southern states, as far north as Iowa and is found in the rice paddies of California. A ban on the shipment and transportation of hydrilla is now in effect.

Winter Park - Maitland Noxious Aquatic Weed Infestation and Control

Prior to 1960 the lakes underwent heavy growths of water hyacinth and Vallisneria (Eel Grass). By 1960 a new weed was found spreading through Florida lakes purportedly introduced in the Miami area by the tropical fish industry. Winter Park and Maitland lakes became choked by this fast-growing plant. Early control was by huge harvesters which cut paths in the hydrilla some five feet below the surface. Unfortunately this method spread the weeds through fragments breaking off to root elsewhere.

In 1970 the use of approved herbicides regained control but conventional use required every cubic foot of lake water to contain the herbicide. The cost would have been prohibitive. Winter Park developed the "Bottom Treatment" which placed the chemical on the bottom foot of water only. The saving in costs made possible full treatment of the lakes.

Until recently no herbicide was approved for use if it was classed as a sterilant. Therefore the root system was not killed by conventional herbicides. Now, at last, there is a new approved chemical capable of reaching the root for long-lasting control.