

County Commissioners View of the Noxious Weed Problem

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The County Commissioners of Florida are directly and indirectly concerned with noxious weed control as a part of their responsibilities for water control, mosquito control, recreational use and last, but probably the most important, the effects of this noxious weed control on property values in the various counties. Some counties have greater problems and interests than others. However, 24 counties were listed as critical counties in regard to water hyacinth, 16 counties were listed as semi-critical, 14 counties as potential critical and only 13 as non-critical in regard to hyacinth control operations by the 1957 session of the Florida State Legislature (Table 1).

In a move to increase community spirit and pride, the Citrus County Commission advertising committee has launched a vehicle bumper strip campaign. The three-color bumper strip reads "Welcome to Citrus County, Florida's Outdoor Wonderland." Initially, it was distributed by candidates for the Citrus County Beauty Crown at Citrus Plaza.

The bumper strips also will be distributed through the Citrus County and Suncoast Chambers of Commerce. It was pointed out that the bumper strips are but the first step in a concerted advertising and public relations campaign to increase tourism in Citrus County. The entire campaign is centered around developing Citrus County in the minds of vacationers as Florida's Outdoor Wonderland.

The campaign also will include a new four-color brochure on Citrus County, outdoor advertising and newspaper and tourist magazine advertising in Florida's large population centers. While the county is promoting tourism,

the noxious weed problems in the Crystal River - Homosassa River areas are reducing the beauty and utility of these famed waterways. The Crystal River - Homosassa River area of Citrus County has, in the past, had only limited water hyacinth problems and these problems were quickly brought under control by efforts of the state and county. Two foreign weeds, introduced less than seven years ago, have grown from small areas to the point that they now block navigation and recreational use of more than 12,000 acres of these waterways.

Citrus County provided a program, based on the limited information available, using mechanical weed cutters which not only did not solve the problem, but spread the problem quickly from one end of the watershed to the other. Each plant cut by these harvesters formed from 3 to 5 new stems and the floating fragments took root and formed additional plants. Hundreds of new canals have been cut in the development of this area and each of the new canals became infested with a combination of these noxious aquatic weeds. One of the plants grows in the brackish areas along the coast and is limiting the oyster and crab industry and further reducing the economy of the area. In this case, the foreign weeds Florida elodea (*Hydrilla*) and eurasian watermilfoil created the problem. Intensive research to provide efficient methods is needed to control these weeds.

At least one development, valued in the hundreds of millions of dollars, has been declared bankrupt, primarily due to the aquatic weed problems in this Citrus County area. Several groups of citizens who own property in the area are now requesting that their waterfront property be de-valued for tax purposes due to the aquatic problem. If this case is considered favorably by the courts, this could lead to statewide problems in regard to property devaluations, since it is estimated that almost 100 percent of the estuaries in Florida could be affected by the eurasian watermilfoil problem. This could lead to millions of dollars in lost taxes to our counties, further reducing their ability to participate in noxious weed programs or other valuable services required by the citizens of the county.

In Polk County, water hyacinth are the major pest plant that we have in terms of acreage, however water hyacinth can be controlled with the techniques and methods currently being used. Our two major unsolved aquatic weed problems are alligatorweed and paragrass. Both of these plants present serious problems in our drainage canals. The current recommendations provide control for less than two months. It is believed that research in this area is badly needed.

Polk County is quite concerned with the potential problem associated with eurasian watermilfoil that is presently centered in the Crystal River area. This plant constitutes a serious threat to our fresh water lakes. They feel that this pest plant warrants extensive research and that this should be followed by an eradication program.

Dade County has done an outstanding job at the local

TABLE 1. A LISTING OF COUNTIES WITH VARYING DEGREES OF A WATER HYACINTH PROBLEM.

Critical Counties	Semi-Critical	Potential Critical	Non-Critical
Bradford	Alachua	Brevard	Baker
Charlotte	Broward	Clay	Bay
Citrus	Collier	DeSoto	Calhoun
Dade	Columbia	Flagler	Escambia
Hendry	Duval	Franklin	Gulf
Hernando	Glades	Gadsden	Holmes
Highlands	Hamilton	Gilchrist	Jackson
Hillsborough	Dixie	Hardee	Liberty
Indian River	Madison	Jefferson	Monroe
Lake	Martin	Lafayette	Okaloosa
Lee	Okeechobee	Union	Santa Rosa
Levy	Palm Beach	Volusia	Wakulla
Manatee	Pinellas	Washington	Walton
Marion	St. Johns	Leon	
Nassau	St. Lucie		
Orange	Taylor		
Osceola			
Pasco			
Polk			
Putnam			
Sarasota			
Seminole			
Sumter			
Suwannee			

level in noxious vegetation control through their county weed control authority.

Their program consists of spraying with 2,4-D in the secondary canals of the county. Currently the Water Control Division of the Public Works Department employs 18 men full time in control of weeds in canals and ditches and on canal and ditch banks. These 18 men use three spray units, one of which is trailer-mounted and one of which is boat mounted; amphibious DUKWs; one truck-mounted dragline ($\frac{1}{2}$ cubic yard capacity); one underwater mower. The personnel using conventional mowers and slope mowers both on canal banks and roadways are not included in the above list.

The types of floating weeds which are controlled with chemicals include: water hyacinth, water lettuce, duckweed, pennywort, alligatorweed, and water fern. It is a rough estimate that water lettuce accounts for about 60 percent of the total, water hyacinth about 30 percent of the total, with the remaining 10 percent divided more or less evenly among the other four. Elodea accounts for about 70 percent of the spraying of submersed weeds. The remaining 30 percent is divided more or less evenly among coontail, bladderwort, southern naiad and watermilfoil.

In Dade County during 1966-67, 411.4 miles of canals containing aquatic weeds were treated by the Water Control Division. Fifty percent of this effort required removal by mechanical means. The program in Dade County for this year will be increased by more than \$20,000 and can be expected to continue to increase until suitable chemicals are available at reasonable costs and found to control elodea. The total cost of this program will approach \$90,000.00 this fiscal year. The spread of these non-native noxious weeds must be stopped.

Brevard County maintains a program to control water hyacinth, paragrass, cattails, ragweed, bladderwort, Florida elodea, southern naiad, water lettuce, alligatorweed, primrose willow, water primrose, parrot's feather and birch willow. The area of infestation in Brevard County during 1967 included approximately 11,063 acres of primary drainage canals and ditches and 527 of secondary canals and drainage canals. Their program cost \$18,000 in 1966-67 and the budget for 1968-69 was \$23,238. They anticipate expanding these operations and personnel in the next few years. The noxious weed control work outline in Brevard County under the direction and supervision of the county engineer, the county agricultural agent and the Mosquito Control Director follows:

NOXIOUS WEED CONTROL

Scope:

This is a county-wide program for the control of noxious weeds in drainage ditches and canals. A Noxious Weed Control Department (by use of herbicides) is established for this purpose. This function will be under the direction and supervision of the County Engineer. The County Agricultural Agent and Mosquito Control Director will serve in an advisory capacity to the County Engineer.

Purpose:

To control or eliminate noxious weed growth to improve drainage in designated areas.

Procedure:

District Road Superintendents will prepare a list of areas in their districts to be included in this program with designated numbered priorities on main canals, etc. These priorities will be approved by the District Commissioner and forwarded to the County Engineer.

The County Engineer will schedule the noxious weed program according to County need. Priorities once established may be altered or revised in the same manner. Priorities will be mapped for each canal or area within the district.

The Noxious Weed Control Department will be under the supervision of the County Engineer.

Annual budgets will be submitted by the County Engineer.

A daily log on spraying location, wind velocity, weather conditions, and chemical uses will be maintained. Stock records of chemicals will be kept. Materials will be requisitioned as needed.

Road and Bridge Districts will phase out duplicate facilities, supply and equipment.

Recently an infestation of Florida elodea (*Hydrilla*) has been found in the Wacissa River in Jefferson County. This 100-acre infestation could have been started only by careless boat owners or unscrupulous aquatic weed salesmen introducing the plant to this remote but beautiful, valuable stream.

The State Game and Fresh Water Fish Commission has recently joined with local groups and the Governor's Aquatic Research and Development Committee to produce a sign warning boat owners of the aquatic weed problems in the various areas of the State. These signs are produced by the Game and Fresh Water Fish Commission and are available to the counties or interested groups at a cost of \$13.50 each. I have also been told that the Hyacinth Control Society and several other groups are requesting that State Legislation be passed to control the importation of these noxious aquatic weeds; and I would like to recommend that a representative of your membership appear at one of our state association meetings to request their support and to outline the problems you have encountered. I am certain most of our county commissioners are aware of this problem.

Pinellas County noxious weed program required the full-time employment of seven personnel. These personnel sprayed 1,860 miles of ditch banks (about 5,600 acres), sprayed about 250 acres of public lakes and one lake was treated with copper sulphate. This program cost \$34,861. The primary vegetation treated included cattails, water hyacinth, miscellaneous weeds in roadside ditches and elodea.

Hillsborough County experienced a serious water hyacinth problem in the Hillsborough River during the 1966-67 fiscal year. This problem began when they were unable to use 2,4-D to control the water hyacinth since the river was a water supply source. After several months without a spray program by the state or county, more than 3,000 acres of water hyacinth floated down the river jamming access points, preventing navigation and causing mosquito problems. After several months an experimental program was approved allowing a maximum of 0.1 ppmw of 2,4-D in the water following spraying of water hyacinths and provided a complete sampling program was established. This successful program cost Hillsborough County \$14,700 during the 1966-67 fiscal year and was carried out by the County Arthropod Control Unit.

The Lee County hyacinth program is carried out by the Lee County Hyacinth Control District and has been presented to the Society in the past by its Director, Mr. T. Wayne Miller, Jr.

I note with interest that several county commissioners are members of your society, as well as county representatives from mosquito control, water control, county engineers and water conservation programs. Your organization serves as an excellent forum and can provide answers to our many noxious weed problems.

Since the expenditure by individual counties approaches \$175,000 each year, efficient control measures must be developed. It is the function of the state and national government to provide research for our local government noxious weed control programs. You can be certain that county government will support your request for funds and programs to solve our mutual problems. It is imperative that these research programs be implemented as soon as possible. Specialists in noxious weed control can expect a

welcome at the county level when your research provides these answers; whether you are from federal, state, or commercial groups. Our water resource is too valuable to ignore.

Your county commissioners recognize the tremendous value of our waterways to our economy. The control of noxious vegetation is essential if we are to make proper use of this resource.