

Presidential Address

Given at 4th Annual Hyacinth Control Meeting
in Tallahassee, Florida, on June 29, 1964

by

HERBERT J. FRIEDMAN

Distinguished Guests, Officers, Ladies and Gentlemen:

I am deeply grateful for this opportunity to come before you as the President of the Hyacinth Control Society at its 4th Annual meeting.

To most Americans, Florida is the land of oranges, beaches, bathing beauties, and sunshine; a kind of heaven to which fortunate Northerners go when the snow and ice become oppressive. To others, facing retirement, it means balmy days of relaxation and ease. To some youth, scientifically inclined, it is a strip of launch pads for rockets to the moon. To those who love the Everglades and Okefenokee, it is swamps, Seminoles and Alligators; and to those with fishing gear in hand, it is Bonefish, Marlin and Bass. Of course, Florida is all of these things. But it is a great many other things less dramatic and less poetic to those who earn their bread and who make their homes here. Our area is blessed with a marvelous climate; sunshine and warmth and an abundance of rain.

The attention you pay towards preserving and improving some of these advantages that nature gave us is the reason for this Society and this meeting today.

Speaking for our Society now in its Fourth Year, I feel that we have made some very progressive strides towards one of our most important goals — that of coordinating technical information in the field of Aquatic Weed and Hyacinth Control as well as in assisting in the transmission of this data from the research people — be they from government, university, or industry — to the practical applicators of weed control, the men who constitute the majority of our membership.

It is these research people, from our universities and various government agencies, with the support and encouragement of industry, who devote their creative energies to the exploration and investigation of fundamental weed control problems. Our Hyacinth Control Society is primarily composed of the working people in the field of weed control and Hyacinths — those folks who have to get the work done and who must also satisfy the public.

The Hyacinth Control Society performs a very important function in this field that is sometimes overlooked.

Basically, the larger regional and national organizations such as the Weed Society of America and the Southern Weed Conference are forums for research people. While the data provided by these groups is invaluable towards progress in the field of weed control, it is seldom that this information is directed towards the control applicator.

Normally, the technical papers given at national or regional meetings do not concern themselves with practicalities, and frankly are sometimes directed over the heads of the applicators. Since we find few if any of these Florida people in attendance at the national meetings, it becomes doubly important that our membership expand its purpose or action to provide practical information such as rates of application, methods, equipment to be utilized and costs — to be disseminated to all who are in need of it. It is here at our annual meeting that we have the opportunity to rehash our field

problems, solve new ones, discuss our techniques and procedures — to provide practical information unavailable in almost any other manner.

We in the Southeast are extremely fortunate in having in our midst some of the most eminent authorities in the field of aquatic weed control that our country can boast. It is these men who can translate the wealth of weed control data that is provided into the information that is needed to assist the applicator and control man in overcoming his everyday problems.

In accomplishing this, we are not only making our area a better place to live for all concerned, but we are visibly aiding the economic growth of our state and the entire Southeast. We must also bear in mind that future problems in our field will become more complex, and the need for qualified and competent men will expand. Our society must continue to bridge the gap between research and application in order to justify the support and cooperation of all of its members.

I hope that at some future meeting, when the activities of previous years are being outlined, that it will take a great number of words to tell of the accomplishments of this Society and its membership, and that from greater knowledge will come a satisfaction and confidence in a job well done.

Florida and Hyacinth Control

By

A. D. ALDRICH

First, let me welcome the Hyacinth Control Society to Tallahassee and our Capital City. The Game and Fresh Water Fish Commission is charged with the responsibility for the management, restoration, conservation and regulations of the birds, game fur-bearing animals and fresh water fish in the State of Florida.

The role of aquatic weed control in these programs is an important one. We are active in this control program through several projects and vigilant to prevent wildlife damages through unwise practices.

Undesirable aquatic vegetation can reduce and destroy fish and game habitat through competition with desirable species, shading micro-organisms, causing flooding and destruction of spawning areas.

The Game and Fresh Water Fish Commission began its weed control program in 1952 under a Dingell-Johnson Federal Aid Project to develop methods and chemicals to control the water hyacinth. This program has continued and expanded through biennial appropriations from the state legislature, matching funds from the U. S. Corps of Engineers and from the State Game Fund.

To date, we believe water hyacinths are under control in all areas of the state except the Kissimmee River watershed. Extensive operations are underway in this area now. In some areas we have even had complaints we are doing too good a job. Our biologists are presently studying the fish populations in these areas of complaint to determine any changes in fish populations.

Other aquatic weeds are causing considerable problems to our hunters and fishermen among these are alligator weed, eloeda, najas, water lettuce, maiden cane and coon-tail.

We must seek solutions to these problem weeds through research both with chemicals and biological controls.

We must continue to examine the effect of each new herbicide on wildlife fish and food organisms.

Some possible biological controls show promise, but the effect of these animals on native population must be studied.

Outdoor recreation is a number one industry in Florida. The importance of aquatic weed control to this industry cannot be over-emphasized, neither can the dangers from misuse of chemicals be forgotten.

We all have a stake in the development of our outdoor recreation industry. It is through organizations like the Hyacinth Control Society working together that our maximum potential can be enjoyed.

Aquatic Plant Control

By

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Most of you here today are concerned with either field operations and administration or scientific research for aquatic plant control. There are others of you who maintain, for personal or other reasons, a strong interest in hyacinths and other obnoxious aquatic plants. In fact, because of the nature of this Society, I can say with assurance that we are all mutually concerned in the control and progressive eradication of water hyacinth.

In our enthusiasm for controlling the hyacinth and in seeking new methods we tend to forget the basic reasons why control is needed. I would like to refresh your memories as to why we are trying to control and progressively eradicate these obnoxious aquatic plants, particularly why the Corps of Engineers is concerned and the present status of Corps control operations.

As you know, the hyacinth is believed to have been introduced into the United States at the Cotton Exposition of 1884 in New Orleans, Louisiana, from which it spread through the southeast. It was reported that hyacinth was first introduced in Florida in the St. Johns River about 1890 at Edgewater, about four miles above the city of Palatka. Considered as the beautiful flowering plant that it is, it was of no particular concern until 1894, at which time it was reported that the hyacinth had become so abundant that it began to attract the attention of steamboatmen and fishermen, although at that time the amount was not sufficient to cause trouble.

The first notice that the plants were objectionable and were creating obstructions to navigation was contained in a letter dated 9 February 1895 from Mr. E. S. Crill of Palatka to his congressman requesting aid. A description of the hazards to navigation is contained in a Department of Agriculture report of 1897, which stated:

"That the water hyacinth is becoming a serious menace to navigation in the St. Johns River is unquestionably true. Small boats with screw propellers find it impossible to penetrate a very large mass of the plants, as they lack the necessary power, and the plants soon become entangled in the screw and prevent it from revolving. Parting the plant with boat hooks, etc., is very slow and tedious. Paddle-wheel steamers

are able to penetrate the extensive masses of the plants much better, but are generally hindered and frequently entirely blocked. When a large steamer going at full speed strikes a bank of the hyacinths, it comes almost to a standstill. In side wheel steamers the plants collect between the wheel and bulkheads, packing in so solidly that it is often almost impossible to reverse the engine. This necessitates caution in approaching the landings. Steamers with low-pressure engines are troubled by the clogging of the injection pipes so that sufficient water can not be secured for the condensers. In the case of some boats the obstruction is occasionally removed by blowing steam through the injection pipe. This process, however, is rather dangerous, as the injection pipes and condensers are not constructed with a view to having heavy pressure applied from within. Floating logs frequently lie concealed in the masses of the plants and form a serious danger to navigation. Several boats have already been injured to some extent by striking such obstructions."

"In large lakes, like Lake George, and in wide portions of rivers, there is some danger of steamers being caught between floating masses of the plants, carried out of the channel, and stranded. "The City of Jacksonville," the largest and most powerful steamer plying on the St. Johns, at one time in the fall of 1896 had great difficulty in avoiding this. Small launches, rowboats, sailboats, etc., have in several instances been caught between masses of the floating plants and have found it impossible to get out without aid. In many places it has become dangerous to use small boats."

A vivid description of one such incident, printed in the *Palatka Advertiser* during the summer of 1896, read as follows:

"Three men in two rowboats attempted to cross the St. Johns River at Palatka before day, Wednesday morning and were caught in the water hyacinths. The steam tug "Frank" made two unsuccessful attempts to get to them. A rescuing party from the schooner "Russell" went out Wednesday afternoon about 3:00 o'clock with boards and, throwing them on top of the hyacinths, succeeded in rescuing two of the men who were thoroughly chilled and wet through. At 4:00 o'clock the other man was still in his boat in about the center of the river calling loudly for help and working hard to reach the trestlework of the drawbridge as all efforts to reach him had proved futile."

I was unable to find anything further regarding his rescue; however, I believe that the ending should have read, "And as the dying sun sets in the west, we leave the stranded stranger still crying for help."

These difficulties were not limited to the St. Johns River in Florida, but were also encountered in Louisiana, as evidenced by a petition to Congress from citizens interested in navigation of the Tickfaw River in Louisiana during the latter part of 1896.

Congress authorized the checking and removal of such obstacles to navigation by the Corps of Engineers in the River and Harbor Act approved March 3, 1899. At that time it was reported that the western streams of Florida which flow into the Gulf of Mexico did not appear to be affected and that inquiries which were made of engineering officers-in-charge of improvements of rivers and harbors in western Florida, Georgia, and Alabama indicated that the plant did not exist in any of the rivers in their districts. In Louisiana the plant was reported in nearly all the streams, lakes, bays, and bayous in the southern part of the state, about south of the latitude of Baton Rouge, which either by themselves or through their connections with other streams,