

of Florida to reduce the menace to navigation. The new Aquatic Plant project authorized by the Congress in 1958 provides for control and ERADICATION of the water hyacinth and other aquatic nuisances."

"It is our policy to encourage recreation fishing on all of our authorized projects and every effort is made to avoid any damage to this type of activity. In conjunction with our efforts the Florida Game & Fresh Water Fish Com. is actively engaged in hyacinth Eradication. In addition, the U. S. Fish & Wildlife Service, the U. S. Dept. of Agriculture and the U. S. Public Health Service also cooperate in the program."

At one time these Agencies did approve the use of 2,4-D spray before extensive tests were made. It was generally acknowledged pesticides did not kill fish, after fish were placed in a pool with sprayed hyacinth, but they did not test the act of feeding fish with pesticides sprayed on fish food, and taken internally. It has recently been determined by the U. S. Fish & Wildlife Service that *sub-lethal doses of certain insecticides reduce the reproduction capacity of game birds*, and the same could apply to fish. The Florida Game & Fresh Water Fish Commission has recognized this hazard to our fish and wild life population and on several occasions asked the Jacksonville U. S. Engineers to avoid spraying the shore line of the St. Johns River, and so far they have refused to recognize their requests.

The Agricultural Dept. recognized pesticides a hazard to farm lands when used along river banks, drifting to vegetable crops, etc.

The State Board of Health states: "The destruction of water hyacinth with pesticides increases the production of blind mosquitos, by increasing the fertility of the water, and also is followed by heavy production of *Culex nigripalpus* the transmitter of St. Louis Encephelitis in the state. One of the main enrichers is effluent from sewage treatment plants. There is no question but what water hyacinth do take out the nutrient materials from the water and help bring about a balance by reducing the amount of plankton in the water, which in turn makes less plankton for the blind mosquitos and reduce their terrific production.

Conclusions: The action of broadcast spraying of pesticides is a hazard to our natural resources and mankind. It destroys food and cover for fish life. It destroys habitat for food and cover of both fish and wildlife. It is destructive to fish and wildlife when taken internally. The destruction of plant life along river shore lines results in a condition of bank erosion, and falling trees unsightly and a waste of resources. The most important is man's health which we should have every reason to protect, **ROTTEN VEGETATION.**

It is now determined the U. S. Army Engineers are responsible for the existing conditions mentioned, and to my knowledge they have the determination to continue their operations of ERADICATION of aquatic plant life. How long will the people of Florida permit this act to continue? My Congressman D. R. Matthews, Senator Holland and Senator Smathers have the detailed information to proceed. I urge you to write our Congressman to stop this pesticide destruction quick as possible. They are using our tax money without a good purpose, destroying the entire river, when their only obligation is to provide an open channel for boat operation.

Comments by Commissioner of Agriculture Doyle Conner Fourth Annual Meeting, Florida Hyacinth Control Society, Inc.

7:30 P. M. Tuesday, June 30, 1964

HOLIDAY INN, TALLAHASSEE, FLORIDA

Your president, Mr. Friedman, and I were just discussing the effects of aquatic plants and weeds on navigation and outdoor recreational activities. This touches on my subject for this evening, "The Future Development of Outdoor Recreation in Florida."

Speaking as vice chairman of the Florida Outdoor Recreational Planning Committee, I believe your organization has an important role to play in this development.

Although aquatic plants are an interesting form of vegetation, they are a problem in Florida. They can choke off our waterways, limit navigation, and interfere with recreational activities.

Your organization has been doing a wonderful job of supporting projects to eliminate these drawbacks in water-based recreation, and has contributed much to the development of advance techniques in control of aquatic plants and weeds. I even noticed in the newspaper the other day that someone hit on the idea of using seacows as a control method.

Your continued efforts along these lines will enable us to reach the full potential of our water-based recreation program.

As an additional incentive, let me point out that the demand for water-based recreation is increasing more rapidly than the demand for outdoor recreation in general. Swimming, for example, appears likely to be the most popular outdoor activity by the end of the century. Boating is also growing rapidly in popularity.

In addition, a federal survey recently showed that 20 per cent of those interviewed on the subject of outdoor recreation indicated they would like to go fishing or fish more often.

To give you a better idea of what your efforts will mean to the people of this State, I would like to go into the subject of outdoor recreation more fully.

WHAT IS OUTDOOR RECREATION?

Outdoor recreation is a broad and inclusive term. In a sense, anyone who goes out-of-doors in quest of fun, entertainment, relaxation, diversion or satisfaction is seeking outdoor recreation.

There are two categories of outdoor recreation. **URBAN**—Recreation necessary to meet the day-by-day needs of modern society. This is usually the problem of municipalities and counties.

NON-URBAN—This is the category with which the Outdoor Recreational Planning Committee is concerned with, and is even more basic for it provides the most of us our only real and personal contact with nature.

The State plan (non-urban) includes 13 types of recreation. They are:

1. Hunting
2. Salt water fishing
3. Fresh water fishing
4. Camping
5. Picnicking
6. Hiking
7. Boating
8. Salt water swimming

9. Fresh water swimming
10. Water skiing
11. Visiting historical or archaeological sites
12. Nature study
13. Pleasure driving

WHY IS IT IMPORTANT?

In addition to the obvious healthful benefits of outdoor recreation for our citizens there are other important factors.

Florida has thousands of commercial enterprises, dependent upon the continued demand for outdoor recreation. These fishing camps, docks, piers, boat ramps, charter boats, hunting preserves, bathing beaches, camp grounds, picnic shelters, guided tours and equipment rentals are a major element in the State's economy.

Add to this the expenditures for boats, motors, firearms, ammunition, fishing tackle, camping equipment, swimsuits, and outdoor clothing, trailers, etc., plus the incidental costs of food, lodging and gasoline, and other expendable items it amounts to gross receipts of a *quarter billion dollars*.

The greatest impact on outdoor recreation is the tourist industry. In 1963, over 14 million tourists spent in excess of \$2.5 billion. These tourists will continue to come to Florida as long as we are able to provide them with the things they want, and one of the most important things they want is ample outdoor recreational opportunities.

In addition, practically every Floridian participates in some form of outdoor recreation.

WHAT WILL BE THE DEMAND?

The present demand is only a sample of what we can expect in the years ahead. Florida is growing rapidly and with it the need for outdoor recreation.

Future Floridians will have proportionately more time to spend in the out-of-doors, more money to spend on recreational pursuits, and better transportation to enable them to get about with greater ease.

It is estimated the average Floridian will become 13 per cent more active in outdoor recreation by 1970 — 46 per cent by the year 2000.

The tourist demand for outdoor recreation in Florida will intensify, too. By the year 2000 it is expected that at least 30 million will visit the State yearly.

WHAT IS THE AVAILABLE SUPPLY?

In a sense, all of Florida is an outdoor recreational resource. Practically every acre of land and water can contribute in some way to the satisfaction of outdoor recreation needs. But most of Florida is properly in private ownership.

Of the 15 to 20 per cent of the State in public ownership, a large part is committed to purposes other than recreation.

However, Florida is better off than most states because there are about 4½ million acres available for some form of outdoor recreation. This represents almost 14 per cent of the State's land area.

State-owned outdoor recreation areas consist of 50 State parks and historic memorials, four State forests, 27 game management areas, the three water conservation areas of the Central and Southern Florida Flood Control District, and numerous scattered boat access sites, wayside parks and bridge catwalks for fishing use.

Bottoms of all tidal waters and all navigable inland waters are for the most part also State-owned.

Federally-owned lands in Florida involve considerable larger acreages. There are six national parks and monuments, including the vast Everglades National Park, three national

forests and 13 national wildlife refuges.

Almost 900,000 acres of private land is intensively managed by the State Game and Fresh Water Fish Commission for public hunting purposes, and this is only a small fraction of the millions of acres of private forest and farmland so utilized.

Private landholdings are now used by the public for practically every type of outdoor recreation activity. Remaining undeveloped stretches of private ocean and gulf frontage, valuable and coveted as they are, still afford access to the seashore for many people.

But, private lands may or may not continue as a major supplier of public needs. To insure outdoor recreation in Florida's future, we must plan to meet at least minimum requirements with publicly controlled resources.

WHAT ARE THE NEEDS?

Outdoor recreation is vitally important to Florida both for the health and well-being of its people, and as the mainstay of the tourist-oriented economy.

The vast recreational resources which seemed inexhaustible a few short years ago seem barely adequate today in the face of Florida's rapid growth and development. In the brief period between 1950-60 the population of Florida has almost doubled.

By 1970, it will have increased by half again and by the year 2000 — only a generation away — it may well be several times as great.

During the same period, the number of out-of-state visitors to Florida will multiply in similar proportion.

Each new resident and visitor will have outdoor recreation needs to be satisfied. Needs for outdoor recreation are increasing faster than the population itself — almost 65 per cent faster.

People today have more leisure time than ever before and more surplus income with which to satisfy their leisure-time needs.

Rapidly increasing demand for outdoor recreation is only half of the problem. The vast open spaces that characterized Florida not too long ago are rapidly disappearing.

Sprawling urban and industrial complexes have arisen on long-deserted tracts of land to meet the demand for new homes, new stores, new factories.

Modern highways have crisscrossed the countryside, dividing the once remote wilderness into a thousand parts.

Agriculture, mining and forestry have wrought great changes in the landscape.

Even lands which have not been converted to an active use have become less able to serve outdoor recreation needs, as they have been fenced off and posted in the face of intensifying demand.

Intensified use, coupled with ignorance and neglect, is resulting in constant physical deterioration of many of our most valuable outdoor recreation resources.

Wildfires each year destroy thousands of acres of natural vegetation. Irresponsible drainage is just as damaging to marshes and wetlands. Water pollution has ruined many beautiful bodies of water.

Beach and soil erosion, needless dredging and filling of bays and inland waters, unharmonious developments scattered over the countryside, excessive roadside advertising, willful disregard of hunting and fishing regulations, are just a few of the items cutting back on recreation areas.

Florida is at the proverbial crossroads. Public outdoor recreation areas in the State are in many cases already

carrying maximum loads. The day-by-day increase in demand on these resources must either go unserved or be accommodated at increasingly lower levels of satisfaction — an undesirable alternative which can result only in mounting detriment to the resources themselves.

We have, therefore, reached the moment of decision. Either we must firmly resolve to meet the impending crises of outdoor recreation with a bold new program, or we must resign ourselves to the serious and lasting consequences of inaction.

WHAT IS THE GOAL?

To meet the outdoor recreation needs of 1970 at reasonable standards, it has been estimated that we must:

- Place an additional 2.6 million acres of land under intensive game management.
- Establish an additional 115,000 acres of nature preserves.
- Make available an additional 101,000 acres for wilderness camping.
- Develop an additional 25,500 picnic sites.
- Make available an additional 8,700 acres for hiking.
- Develop an additional 4,400 camp sites.
- Provide an additional 3,000 miles of scenic roadway for pleasure driving.
- Install an additional 886 boat access facilities.
- Make available an additional 130 fresh water swimming areas.
- Develop an additional 111 historical or archaeological sites.
- Provide an additional 70.1 miles of seashore.

HOW CAN WE MEET THE DEMANDS?

All of Florida's resources are so valuable that no wastefulness or inefficiency in their use can be tolerated.

We must get the most from outdoor recreation areas already in public ownership. The use-programs must be re-evaluated with an eye toward intensification and greater efficiency.

To realize the area's maximum value for outdoor recreation we must encourage true multiple-use of these outdoor areas.

Florida's uncommitted public land held by the Trustees of the Internal Improvement Fund and the State Board of Education should be integrated into the comprehensive state-wide program to the extent that they can serve valid outdoor recreation needs. These lands, some 400,000 acres in all, have been recently inventoried for this purpose.

In the final analysis, however, there can be no substitute for a well-planned and orderly executed acquisition program as a means for meeting basic needs for public outdoor recreation areas.

The Outdoor Recreational Planning Committee is presently working on this project, and is formulating a comprehensive program of development.

However, as I pointed out in the beginning of this talk, we will need the cooperation of organizations such as yours in order to reach our full potential.

Water-based recreation is especially important because of the great demand which will be placed on this type of facility.

It would be a cruel blow to the public to provide them with more boating areas, more beaches and more fishing locations, only to have their access to these facilities cut off by uncontrolled aquatic plants and weeds.

You have a big challenge ahead of you, but I know that with the caliber of people you have among your membership, you will meet it.

Thank you for inviting me here this evening, it has been a pleasure to meet with you.



Registrants at the Fourth Annual Meeting of The Hyacinth Control Society, Holiday Inn, Tallahassee, Florida, June 28-30, 1964
Front Row: Reading left to right: **Outgoing Officers** — Lester H. Hartwig, Director; James D. Gorman, Secretary-Treasurer; Herbert J. Friedman, President; John W. Woods, Director; Z. C. Grant, Director; Charles F. Zeiger, Director; (Not present) William Dryden, Vice-President.