FAPMS
AQUATIC PLANT MANAGEMENT AND TECHNICAL ADVANCEMENTS

Kelli Gladding- President
March 29th, 2019
Applicators are “Under the Gun”
Not just the Plants

Today- Everybody has a phone and their “Social Media Degree”
- Twitter Degree
- Facebook Degree
- SnapChat Degree

Mis-Information is Everywhere:
• “He just jumps in his air boat, puts on his head phones and jams out to the Charlie Daniels Band while cruising down a shoreline killing everything that a fish might live in.”
• “So who are these scientists that claim they are doing no harm? They must have got their degree from a cracker jack box.”
FWC - The Great “Pause”
Effects the Industry- Aquatics, Uplands, Natural Areas

Dear Executive Director Sutton,

The Florida Aquatic Plant Management Society (FAPMS) has long supported the successful Florida Fish and Wildlife Conservation Commission’s (FWC) invasive plant management program. The foundation for the program’s implementation lies in sound scientific research, with much of it originating from scientists at major research universities, like the University of Florida. This program utilizes integrated pest management practices in order to manage pest species to the lowest feasible level - even both an ecological and an economic standpoint. The Commission’s Invasive Plant Management Program (IPMP) is nationally recognized for its invasive weed management and has been a model for programs around the United States and abroad.

FAPMS is a professional organization founded in 1976 and represents over 300 scientists, lake managers, researchers, and aquatic plant technicians statewide. The mission of FAPMS is to provide the education and resources necessary to support responsible stewardship of Florida’s aquatic ecosystems through comprehensive plant management. A primary objective of FAPMS is to "assist research scientists, legislators, planners, state and federal governmental agencies, lawyers, engineers, educational institutions, students and others concerned with the general aims of this Society." Based on this mission objective and in response to the recent FWC directive to “pause” the aquatic plant management program, the FAPMS Board of Directors adopted the attached “Resolution Position Statement” in support of the FWC IPMP program. Aquatic weed management takes an integrated approach to be successful and all aquatic herbicides are reviewed, approved, and monitored through the Environmental Protection Agency and the Florida Department of Agriculture and Consumer Services. Utilizing the approved aquatic herbicides in rotation and in combination is a recognized and accepted scientific practice for invasive weed control and herbicide resistance management.

To provide for further maintenance for the FWC IPMP program, please review the packet of information which provides a historical perspective regarding aquatic plant management along with the Best Management Practices Handbook, developed by scientists and researchers who work in the aquatic ecosystem. Additional publications describe the history of aquatic plant management in Florida, and the benefits of maintenance control.

The Florida Aquatic Plant Management Society understands there are multifaceted and complex issues regarding the management of aquatic plants in Florida’s waterways, and we encourage personnel charged with decision and policymaking to be mindful of the more than 100 years of scientific research available. FAPMS appreciates this opportunity to provide comments to the Commission, and we will continue to support research-based approaches to program implementation and governance.

Sincerely,

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Attachments:
- Florida Aquatic Plant Management Society, Resolution Position Statement, 2019
- Schard, J.D. “Aquatic Plant Problems and Management Necessity in Florida Public Lakes and Rivers.” Aquaticus. 38: 18-24
- Igoe, J.J. 1985. “Success of Maintenance Control of Water Hyacinth.” Aquaticus. 7:11-13
- Schard, J.D. "Successful Management of Invasive Water Hyacinth in Florida's Public Waterways." The Journal of Marine Education. 21: 3-9
- Powell, L. August 2013. Lettets, regarding spraying invasive plants on Lake Okounboke.
- University of Florida, Center for Aquatic and Invasive Plants.

C.C.
Governor DeSantis
Florida Fish and Wildlife Conservation Commissioners
FWC Invasive Plant Management Section
South Florida Water Management District
St. Johns River Water Management District
South West Florida Water Management District
FAPMS- Resolution Position Statement
Support IPM Program based on Science

Florida Aquatic Plant Management Society (FAPMS)
Resolution Position Statement: Rx? Florida Fish and Wildlife Conservation Commission (FWC) State Funded Program for Management of Aquatic Plants

Passed by the FAPMS Board of Directors on February 1, 2019.

RESOLVED, that the Board of Directors of the Florida Aquatic Plant Management Society adopts the following statement as the official FAPMS position on "FWC State Funded Program for the Management of Aquatic Plants in public waters:"

The Florida Aquatic Plant Management Society (FAPMS) was formed in 1998, and is composed of over 500 professionals dedicated to supporting the responsible stewardship of Florida’s aquatic ecosystems through comprehensive plant management. FAPMS has long been a leading resource for aquatic ecologists, lake and pond managers, extension research personnel, and recreational enthusiasts who rely on Florida’s lake and river systems for fishing, hunting, boating, water skiing, tourism and flood control.

FAPMS stands in support of the longstanding and successful aquatic plant management program administered statewide by FWC and federally by the United States Army Corps of Engineers. Exotic species management efforts are an integral part of management initiatives here in Florida and are essential for protecting biodiversity, ensuring public safety, and maintaining navigable waterways for recreation and tourism. In a 2012 report, Florida freshwater recreational fisheries were documented to generate an economic impact of nearly $2.7 billion and supported approximately 14,000 jobs, benefits attributable to active aquatic plant management efforts.

As experts in the field of aquatic plant and habitat management, we want to reiterate the historic and scientific data related to the importance of controlling invasive aquatic species to the lowest feasible level.

“Maintenance (control) was defined in 1977 for management of invasive aquatic plants which has led to the success of this program and is a directly responsible for:

- Flood prevention
- Protection of property, infrastructure, and public health
- Promotion of biodiversity through integrated plant management efforts
- Guaranteeing habitat for native fish and wildlife
- Ensuring navigation and recreational access
- Reduction in mosquito borne illness
- Reduced cost of managing aquatic plants

Many of Florida’s lakes and rivers are part of massive flood control systems that are engineered to protect human health, public safety, infrastructure, and personal property. Left unmanaged, the rapid reproductive rate of exotic plant species combined with the lack of predators leads to aggressive plant populations that result in flooding and/or cause the entire ecological collapse of a lake or waterway.

Short-term pauses in management efforts allow exotic species to expand rapidly and counteract the previous control strategies that were in place, resulting in significantly increased unplanned expenditures and losses across the ecological community. Therefore, we support the continuation of FWC’s aquatic plant management program in public waterbodies statewide.

Managing Aquatic Plants - Over 130 years
FAPMS- Historical

- Founded in 1976 - 42 years strong
- Applicator based membership
  - ~500 Current members
Hyacinth Control:

- Mechanical Removal
- Biological Control
- Chemical Control
  - Arsenic
  - 2,4-D
  - Diquat
  - Carfentrazone-ethyl
  - Penoxsulam
  - ProcellaCOR
    - Selectivity

Photo: Army Corps of Engineers website
Submerged Vegetation Surveys

1978- Scuba Surveys
1976- Conway Biomass Sampler
1978- Hydrilla Sampler
Radio-Tagged Grass carp and Telemetry
1983- Advanced Hydrilla Scuba Surveys
1987- Dan Thayer- Tuber Core

1986- Range Finder Trainings
Allsop- Bodle- Barber
LORAN C- Hightech Data
1987 - Lowrance Fathometer

*Jim Kelley and Brian Nelson
Processing Data - on Paper
Today- Many Lowrance Options
Data from Lowrance
Drone- Photo monitoring
SJRWMD
GPS - Application Technology
Drones - Monitoring and Applications (?)
History of the “Frotus”

1977- David Tarver
Double rake- Frotus
Never leave home without it!

Point Intercept- Frotus
For the scientific approach
Hollywood- Frotus

State-of-Art Frotus
Manly-Frotus

Mega-Frotus
Submersible Survey Vessels

1987 - Jesse VanDyke
FAPMS- FLEPPC Cooperation

- Aquatics during FLEPPC
  - Provides information and support for members who manage aquatics
- FLEPPC session during FAPMS annual training conference
  - Provides support for members who manage natural areas
FAPMS- Annual Training Conference
October 14-17\textsuperscript{th} - 2019

- 2018- Daytona beach
- 2019- St. Petersburg
- 2020- Daytona beach
- 2021- St. Petersburg
Questions?

Thank you!

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