Aquatics

Summer 2002

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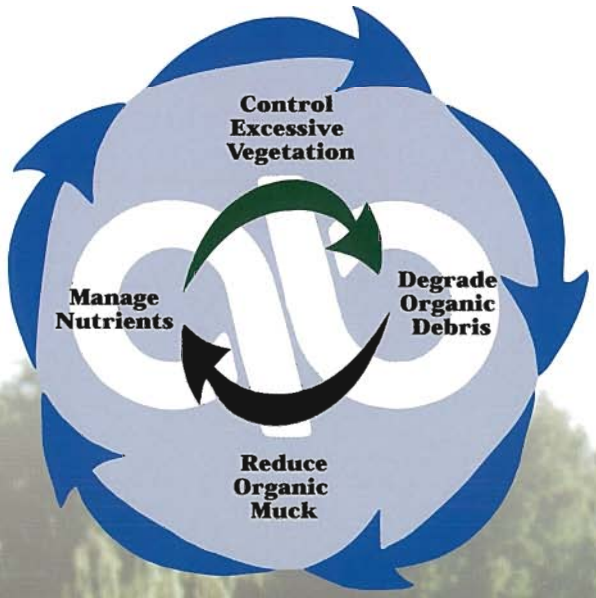

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Editorial

This is my first time to submit an editorial to "Aquatics" coming from the Aquatic Plant Management Society's point of view (I think). As a FAPMS Charter member and a former President, I think I have a fair understanding of how FAPMS and other Regional Chapters have historically viewed and related to the APMS. Sometimes all has gone well and other times, well let's say the parties could have negotiated more smoothly. Oftentimes, there has been a subtle separation or at least a difference between APMS and particular Regional Chapter issues, and expected interactions. This, to some extent, would lead to the lack of common interest, and an air of "detachment" appeared to exist at times. Times that if the communication line had been working better we would have "nipped a small issue in the bud" (early eradication), thus preventing it from becoming a larger more complex problem. In this article, I want to state that I believe our collective relationship has strengthened and improved to the point where significant accomplishments are apparent. Additionally, I've listed some of the major points that tilled the common ground responsible for the improvements. See if you agree.

The unforgettable events on September 11, 2001 united Americans in a manner unseen since World War II. Previous issues with politics, diversity and petty special interest positioning agendas all became smothered or cleansed with patriotism. Defend the USA, establish a rapid offensive response and develop a long term "management strategy." These were and are the objectives that arose from the attack.. As a nation we have a common enemy, an accepted action plan and basically a common point of view.

I make these war statements in order to help make a point, not to be over dramatic. Obviously the obstacles and challenges we face as aquatic plant management folks are a far cry from those we face in this war on terrorism. However, let's acknowledge that

Continued on page 18

FAPMS Website:
www.homestead.com/fapms/main.html

USACE crew Lynn Smith and J.D. Gillenwalters controlling waterhyacinth on Lake Dexter, Florida.

Photo by Nancy Allen

Aquatics

Summer 2002/Vol. 24, No. 2

Contents

AQUATICS (ISSN 1054-1799): Published quarterly as the official publication of the Florida Aquatic Plant Management Society Registration No. 1,579,647. This publication is intended to keep all interested parties informed on matters as they relate to aquatic plant management particularly in Florida. To become a member of FAPMS and receive the Society newsletter and Aquatics magazine, send $20.00 plus your mailing address to the Treasurer.
EDITORIAL: Address all correspondence regarding editorial matter to Judy Ludlow Aquatics Magazine.
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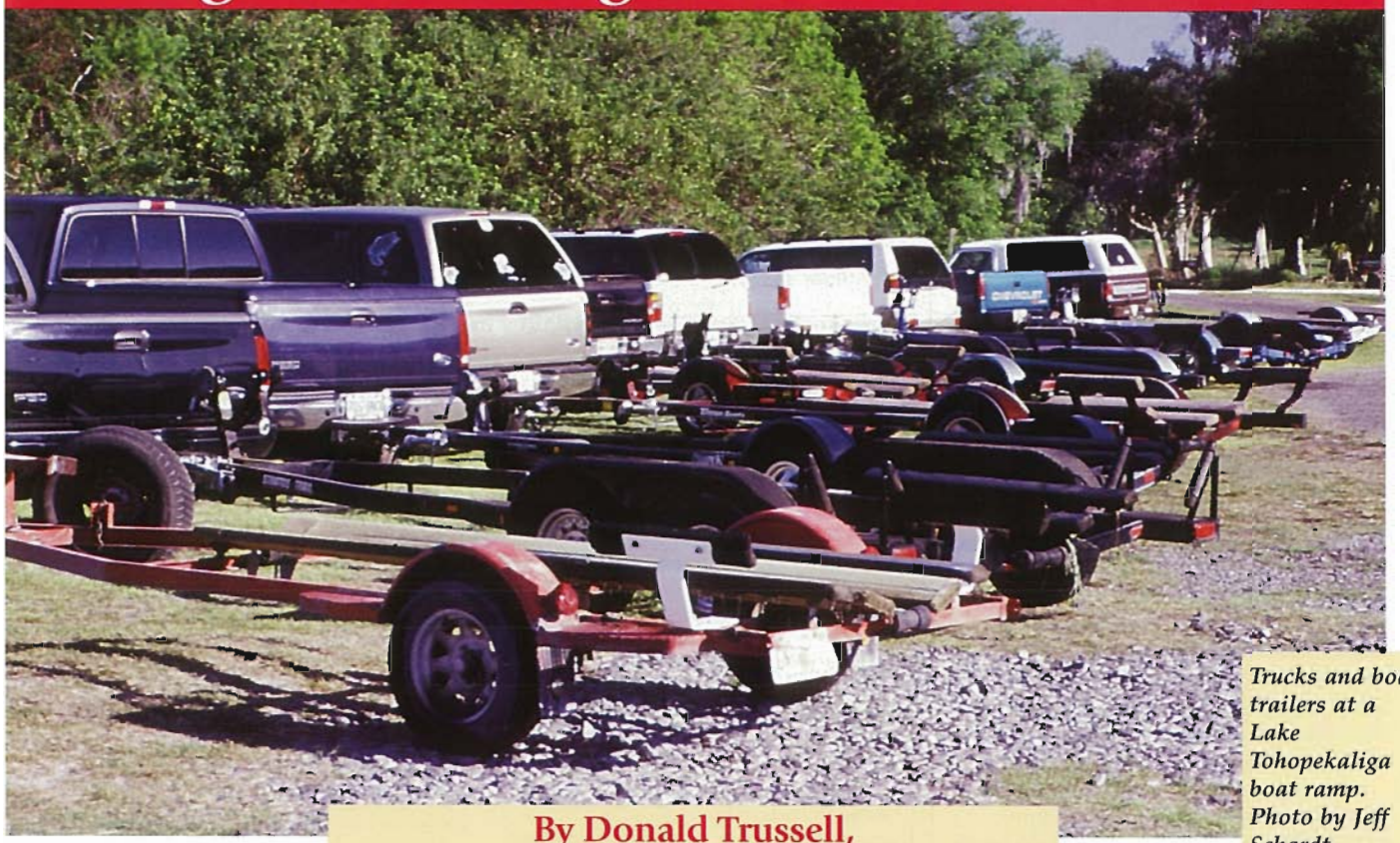
Target Hardening Your Boat and Trailer



Trucks and boat trailers at a Lake Tohopekaliga boat ramp. Photo by Jeff Schardt

By Donald Trussell,
DEP Safety and Loss Control Management

The following "**target hardening**" suggestions are provided to help you maintain possession of your marine equipment and make it more difficult for your boat and trailer to be stolen. Marine theft is increasing nationwide at an alarming rate, but you can protect your marine equipment by becoming security conscious and by implementing some common sense target hardening and crime prevention techniques.

What can you do to be sure your boat remains in your possession, remembering that locks keep out honest people? Think like a criminal; what makes your boat an easy target for a thief? Poor habits like, leaving a boat unattended with keys in the ignition an/or the motor running, leaving equipment in plain sight make your boat, trailer, and equipment easy targets for thieves.

Millions of dollars in insurance claims are made each year due to the thefts of boats, motors, trailers, and related marine equipment. Any boat can be stolen, but by taking a few steps, thieves can be discouraged and losses can be reduced. Remember, taking steps that require a thief to take more TIME, make excessive NOISE, or be OBSERVED will discourage theft. It is also important to remember that potential thieves will be discouraged when it is known that equipment is easily traced.

Many thefts can be prevented if owners will take a few simple steps to safe guard and protect their property.

- Don't leave valuables on board
- Record information about your boat, trailer, and motor
  - ✓ Take photos and videos
  - ✓ Take a hull rubbing of your HIN (Place a thin sheet of paper over the HIN and rub with a lead pencil
  - ✓ Record brand name, model, year, serial number, registration number, HIN number, and Vehicle Identification Number (VIN) etc.
  - ✓ Sign and date all photos and videos. Provide a copy to your insurance company
  - ✓ Save all recorded information about your boat (photos, videos, etc) in a safe place — NOT ON THE BOAT. Provide a copy to your insurance company
- Mark all equipment including rods, reels, and tackle boxes —
  - ✓ Engrave the trailers Vehicle Identification Number (VIN) on the trailer (i.e. under the tongue, axel etc.)
  - ✓ Engrave the boats Hull Identification Number (HIN) in several undisclosed locations on the boat
- Do not leave registration papers or keys on board
- Do not tie up to unattended or poorly lighted docks
- When not in use, shut off fuel

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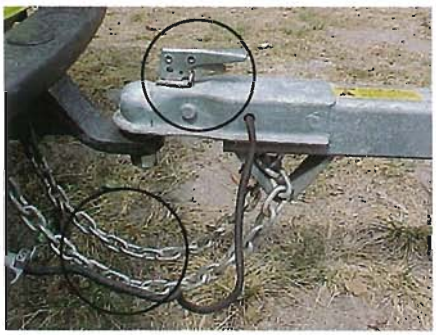
lines, remove the battery, distributor cap, spark plug, hidden kill switch etc., especially for water storage situations
- Add outboard motor locks,
- Remove the motor from outboard motor boats left unattended for long periods of time
- Substitute less valuable props for stainless steel (i.e. after market props)
- Store the boat and trailer in a locked facility or back of the yard out of sight (tongue not easily accessible)
- Park another vehicle or large object in front of boats that are stored in driveways, carports, open areas — Turn the trailer around so the hitch is inaccessible
- Remove one trailer wheel for outside storage — secure the spare tire separately i.e. inside a vehicle
- Use a top quality chain and lock to secure the boat and trailer to a permanent fixture
- Use a top quality trailer hitch lock (coupler lock) to secure the trailer while it is not hooked to the vehicle. This applies to inside storage.
- Install a lock on the coupler lever and on the receiver hitch while the trailer is hooked to the vehicle. This is not only a deterrent, but also a safe way to secure the trailer to the vehicle during travel.
- While stopped overnight at a motel, leave the trailer hooked to the vehicle as above or use a chain to run through the wheels and use a locking mechanism for the motor to keep it from being stolen.
- Leave your boat at a secured state facility i.e. State Park if you are a state employee.
- Immediately report stolen boat, trailer, and equipment to local law enforcement authorities and your insurance company. Also notify law enforcement if the boat, trailer, or equipment are recovered.
- Consider an alarm system



What's wrong with this picture? Install a lock on the coupler lever and receiver hitch to deter theives and secure the trailer while towing. Also safety chains should be crossed to "catch" the coupler should it become unhitched. Photo by Dave Tarver.

Following these suggestions will:
- Reduce the risk of loss of your boat, trailer, or marine equipment by theft
- Increase the opportunity of recovery
- Assist you with proving ownership

Enjoy your boat and boat smart!

For more boat safety information idle over to the Florida Fish and Wildlife Conservation Commission's website: floridaconservation.org/law/boatsafe/default.htm

FIRST CALL FOR PAPERS – FAPMS 2002 MEETING

The 26th annual meeting has been **tentatively scheduled** to be held at the Adam's Mark Resort, Daytona Beach on November 13-15, 2002. You don't have to be a professional speaker in order to give a paper! We are looking for papers on herbicide application and mechanical techniques (aquatic and right-of-way), mixtures, innovative control measures, revegetation projects, new plant introductions, research projects, etc. Remember that this Society was formed for the applicator and the annual meeting is a chance to share what you have learned with other members. Each year the Society awards all field applicators who present a paper with a plaque. The field applicator presenting the best paper will receive a plaque and $100.

NOTE: DEADLINE FOR SUBMISSION IS JULY 12, 2002

Title: _____

Author(s)*: _____

Organization: _____

Address: _____

_____

Telephone: _____ Email: _____

Title of Talk & Brief Abstract: _____

_____

_____

_____

_____

_____

_____

Biography of Presenter: _____

_____

- If more than one author, please circle the name of the person who will present the paper at the meeting.

NOTE: Length of talk is usually 15 minutes. If your presentation is shorter or longer, please indicate the length of talk: _____ minutes

Check as appropriate: Applicator paper ____ Slide projector ____ ; Overhead projector (transparencies) ____; Video projector ____ ; Computer (PowerPoint) ____ ; Other needs ____

Submit this form to: John Rodgers – 2002 Program Chair
Dept of Environmental Protection
8302 Laurel Fair Circle, Suite #140
Tampa, FL 33610
Phone: (813) 744-6163 or 744-6164
FAX: (813) 744-6165
Email: john.rodgers@mail.state.fl.us

Nymphoides cristata— Snowflakes in Sunny Florida

Kathy Craddock Burks
Bureau of Invasive Plant Management
Florida Department of Environmental Protection

Mat of shingled leaves shading the water column

Flowers with crested petals

Photos by K. C. Burks

Often marketed in the water-garden trade as "Snowflake," the Asian floating-leaf aquatic, *Nymphoides cristata*, has become established outside of cultivation in Florida in nearly a dozen water bodies.

First reported in 1996 from Horseshoe Lake in Naples Manor, Collier County, the species has since been recognized in scattered locales of central and south Florida, including several water management canals in the Naples area, Red Bug Slough in Sarasota, and in canals of Palm Beach County on the east coast, in the Wellington and Lake Worth areas. Last year it was identified in two lakes, Osceola and Fairview, within the City of Winter Park, Orange County. A few months ago it was found in yet another canal, this one near Belle Glade, just south of Lake Okeechobee.

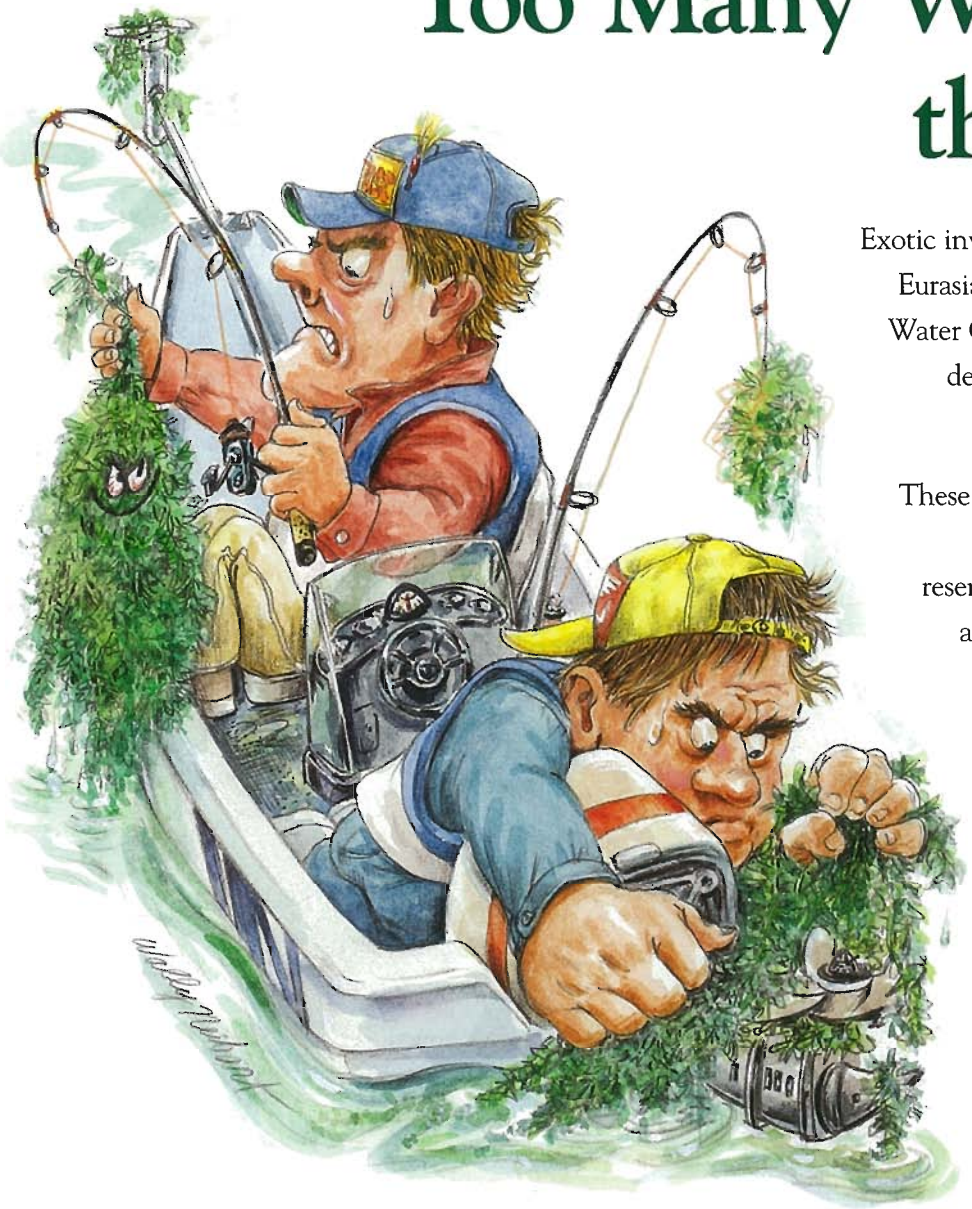
This pattern of occurrence involving distant sites suggests that multiple introductions have taken place, possibly from the discarding of excess cultivated material that grew too well, too fast for someone's water garden or aquarium. Flowing water has assisted in local spread of the species, and plants may also be dispersing at this point via boating equipment, considering the recent report from Collier County of a new stand near a boat ramp in an additional canal.

How long most of these populations have been in place is not known. Some plants in larger, deeper canals may have been overlooked for several years on the assumption that they were our common native "banana lily," *Nymphoides aquatica*.

So how do you recognize the interloper? Actually, it's pretty easy to distinguish *N. cristata* from *N. aquatica*, even if flowers aren't present. Like *N. aquatica*, the exotic produces small clusters of tuberous roots just below the floating leaves, but they are slender and tapered, not blunt-tipped and "banana-like." Also, the undersides of the floating leaves are relatively smooth, not obviously rough to the touch as in *N. aquatica*. If flowers are present, there's no doubt at all. The crested petals of *N. cristata* make it a standout among the 40 or so species in this genus worldwide. A watery field of these dainty white flowers could easily suggest a light dusting of snow.

For all its attractiveness and delicate appearance, however, this species is proving to be a tough, able survivor in the Florida environment. A small stand in the shallow 9-acre Horseshoe Lake near Naples took less than a month to cover nearly the entire surface. The population in Lake Fairview has spread into a stand of spatterdock and is overcoming it with a mat of shingled floating

Too Many Weeds Spoil the Fishing.



Exotic invasive aquatic plants such as Hydrilla, Eurasian Watermilfoil, Curlyleaf Pondweed, Water Chestnut and Water Hyacinth can be detrimental to a healthy fishery in lakes across the country.

These invasive plants when left unmanaged can alter the ecosystem of lakes and reservoirs, causing a decline in the fishery, as well as interfering with other valued uses of waterbodies.

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leaves. Small leaves with root bundles easily break off their slender floating stems and drift away to start another stand elsewhere; these vegetative propagules often stay submersed for a time, out of the reach of contact herbicides.

Managers in Collier and Orange Counties have tried many of the available herbicide tools, in various combinations, and have not yet found the "magic bullet" (or magic snow-plow!). And a better-working technique in one place won't necessarily work as well in another. Collier County Stormwater Management has gotten, at most, about four months of control, using 2% glyphosate with surfactant. Usually retreatment is required within two to three months to keep the population at minimum levels.

It seems pretty clear that year-round "snowflake" has arrived in Florida. The species' spread to other regions is not going to be greatly limited by temperature zone. In Asia, it ranges from 6° to 34° North in latitude, equivalent in this Hemisphere to a range from northern South America to about Chattanooga, Tennessee. Plants in cultivation outdoors in Tallahassee overwinter as those small, submersed green bundles of leaves and roots. Plus, seeds have been observed on a few occasions, though their viability is not yet known.

So far, this decorative little plant has certainly stayed true to its promotion in the trade as "so easy to grow." It's also shown Florida natural resource managers a great potential for "being difficult," that is, for being a real flake!

To report a new sighting, find out more, or ask for a literature reprint more fully discussing this species (*Castanea*, Vol. 67, June 2002), call the Bureau at 850-487-2600.

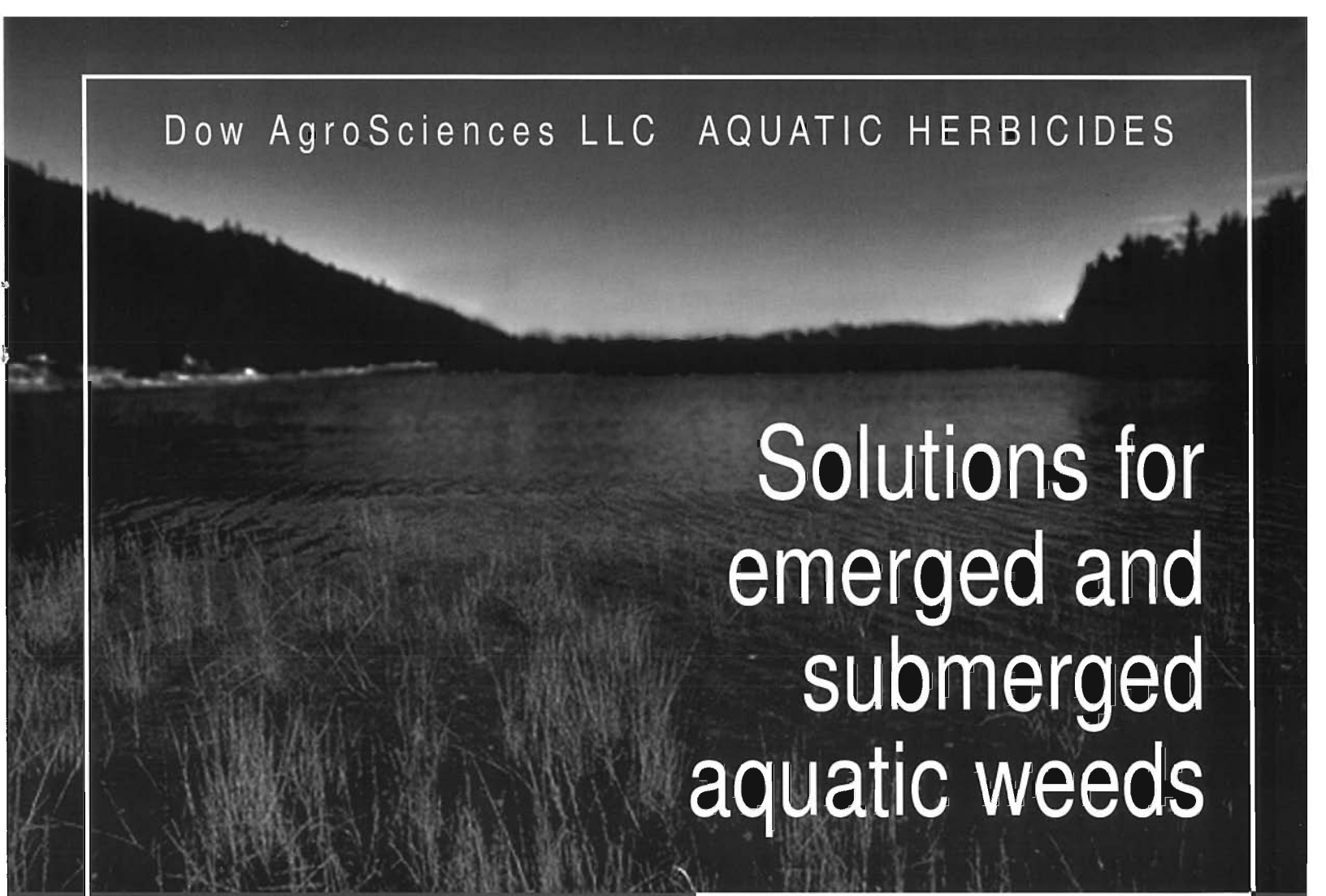
Acknowledgments

Thanks to a number of biologists and water managers who have contributed data and field experience to the "snowflake" story in Florida: Bureau regional biologists Jackie Smith and Ed Harris; Harry Alkire and Glenn Price of Collier County Stormwater Management; Gordon Baker and Dan Thayer of South Florida Water Management District; Bruce Jaggers, Florida Fish and Wildlife Conservation Commission; and Marie Wilson, Sarasota County Aquatic Plant Control.

Photos by K. C. Burks

Vegetative propagule

Leaf comparison, N. aquatica on left, N. cristata on right



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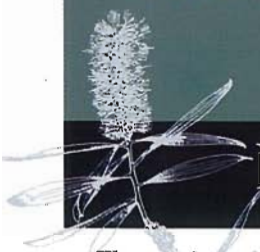
The Areawide Management Evaluation of *Melaleuca quinquenervia*

Request for Demonstration Sites



The noxious weed tree *Melaleuca quinquenervia* is distributed throughout the east and west coasts of Florida, occupying approximately 200,000 hectares of agricultural and natural areas. Successful control of invasive plants like melaleuca increases native species abundance and diversity, and contributes to the Everglades Restoration Plan objective of achieving restoration and sustainability of south Florida's natural ecosystem. While melaleuca is successfully managed on some public lands, the trees continue to spread and proliferate on many private lands. An areawide integration of available control techniques, including mechanical, herbicidal, physical (fire), and alternatives such as biological control, will be required for effective, long-term, region-wide melaleuca management.

The Areawide Management Evaluation of *Melaleuca quinquenervia* (TAME Melaleuca) was recently established under the USDA Agricultural Research Service's (ARS) Areawide Pest Management initiative. One of the specific goals of the TAME Melaleuca project is to establish control demonstration sites. These sites will demonstrate and integrate the management tactics listed above and described in more detail in the Florida Exotic Pest Plant Council's Melaleuca Management Plan www.fleppc.org/melaleuca.htm.

The USDA ARS plans to distribute limited funds to selected locations in order to develop TAME Melaleuca demonstration sites. USDA ARS and other project leaders will work with land managers from each demonstration site to develop site-specific integrated melaleuca management plans. An annual budget of $35,000 per site for five years is available to defray management cost increases that may arise due to participation in TAME Melaleuca. This is a unique opportunity for interested land managers – both public and private – to receive financial and technical support for using integrated melaleuca management tactics they otherwise may consider too complicated, costly or risky.

Ideally, the TAME Melaleuca demonstration sites will represent a wide variety of land types invaded by melaleuca, including permanently flooded, seasonally flooded, and predominantly dry sites; public and private lands; land used for grazing, wildlife refuges, and recreation.

The TAME Melaleuca Oversight Committee is seeking your assistance to identify possible demonstration site locations in your area.

Site Criteria

In order to be considered as a demonstration site, proposed locations must:

1) be infested with melaleuca,
2) be at least 20 acres in size,
3) be accessible to monitoring crews periodically collecting biological data for site assessments,
4) be accessible for group tours and field days throughout the year, and
5) for the duration of the project, not be subject to closure or removal of melaleuca because of activity, such as sale or development of the property, unrelated to the TAME Melaleuca program.

Demonstration site managers should be willing to participate in field days and to present updates at biannual TAME Melaleuca Oversight Committee meetings.

Information Requested

Contact Information Please provide contact information for land owners, managers and participating cooperators (if any). Include names, organizational affiliations (if any), postal and email addresses, telephone and fax numbers.

Site Description Briefly describe the following for each proposed site:

1. Location (example: two miles west of Sugartown on Highway 14 and 0.5 miles north on a private road)
2. Soil type (example: organic muck over sand)
3. Frequency of flooding (example: floods nearly every year with melaleuca trees in two feet of standing water for several weeks at a time)
4. Melaleuca infestation (example: dense stand of mature trees)
5. Current or past management practices (example: mowed every six months)
6. Other vegetation present on site (example: very wet hardwood forest with hickory and black gum)
7. Current use of the site (example: livestock grazing)

Contact

Please send your suggestions to:

Paul Pratt, USDA ARS
Invasive Plant Research Laboratory
3205 College Avenue
Fort Lauderdale, FL 33314
Tel: (954) 475-0541 x105
Fax: (954) 476-9169
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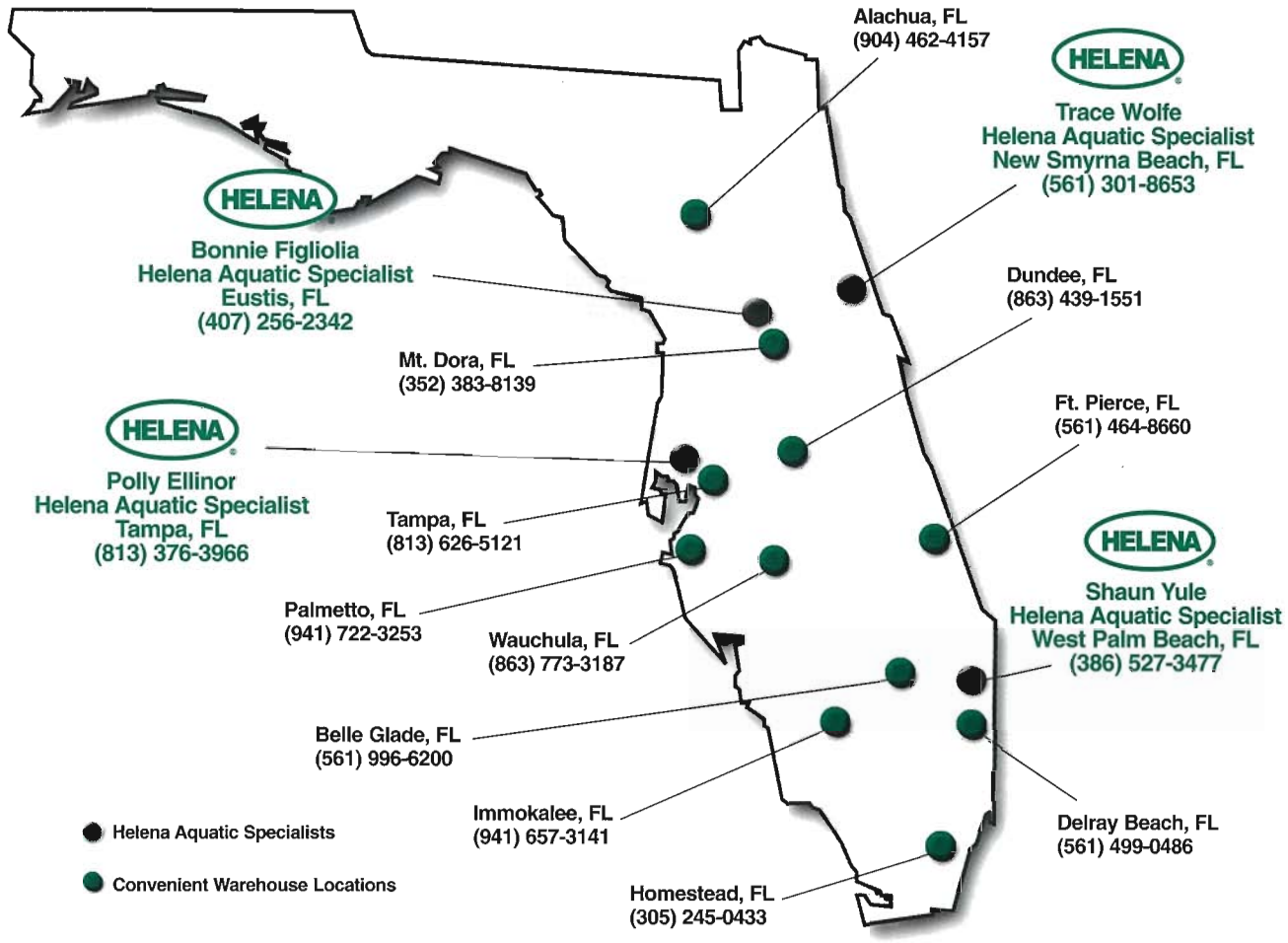

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4. The quality of the application and required 500-1000 word essay as determined by the FAPMS Scholarship and Research Foundation's Board of Directors.
5. Submission of a completed application by August 1, 2002.

For further information or to request an application to apply for the above scholarship please contact Brian Nelson, 3287 Rackley Rd., Brooksville, FL, 34604, (352) 796-7211. If requesting an application **please specify the William L. Maier, Jr. scholarship.**

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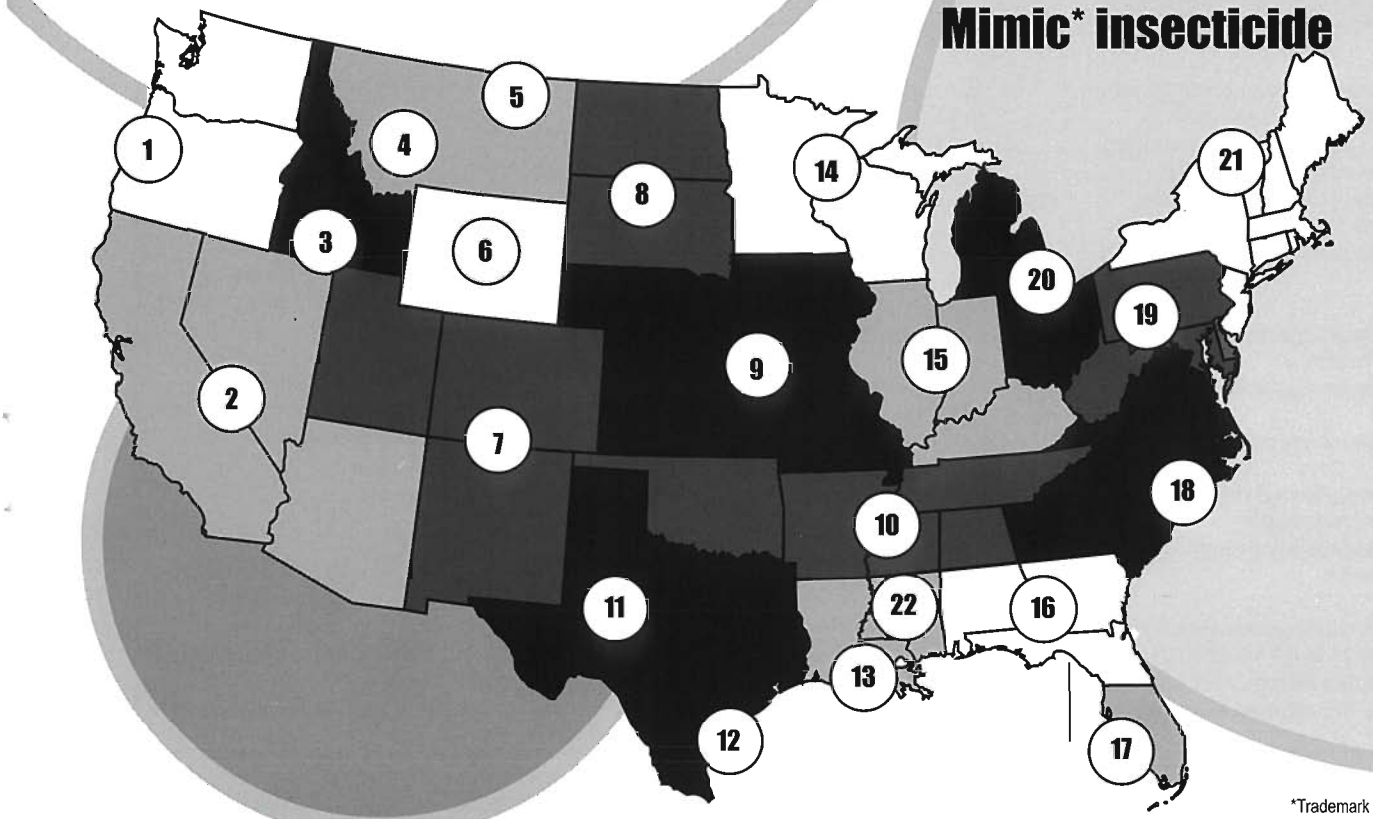

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What's your Airboat IQ?

The first test was written by Jess VanDyke and is a reprint from Aquatics Vol 10, # 2, 1988. It's funny yet relays serious safety messages. The second test below is used by the Department of Environmental Protection as part of their airboat certification program. Answers for the second test are in Aquavine. How'd you do?

1. **How long does it take for an airboat to sink?**
   a. Today's modern airboats are equipped with special flotation chambers. Even if completely "swamped," these boats will float for days.
   b. .032 nanoseconds.

2. **Even if the airboat were to sink, by some stretch of the imagination, as long as I have my flotation devices on board, everything is cool. Right?**
   a. Absolutely.
   b. If the airboat sinks like a rock and your life vest is stowed, you're in deep "_____."

3. **Big deal. So I'll have to swim a little. Flotation devices are for "candy _____." I was raised on the water and can swim like a fish. I'm still in great shape. Right?**
   a. No problem. You're immortal
   b. In your dreams, you pathetic slob. That was 20 years and 2,000 cases of beer ago! Jump in thick hydrilla wearing heavy clothing and see how long you last.

4. **Hearing protection for an airboat operator is unnecessary. Besides, white ears really detract from a nice tan. Right?**
   a. Sure thing, George Hamilton
   b. Huh?

5. **If you can't hear the thunder, lightning can't hurt you. Ain't that so?**
   a. No sweat, Slick. You can outrun any storm.
   b. More people "fry" in Florida than anywhere else in the nation. If you don't turn off the airboat periodically on summer afternoons, thunder storms can sneak up on you.

6. **All airboats are essentially the same. If I can handle one I can drive the hell out of any airboat. Right?**
   a. Nothing wrong with confidence. Let 'er rip!
   b. Each airboat is different and is just about to wreck if you don't know its special quirks.

7. **I have launched and towed airboats a million times. It's such a routine I don't even have to think about it anymore. Right?**
   a. That's right, Einstein!
   b. Tell that to the widows and orphans when you forget about the safety chains or trailer ball clamp. The new polymer hulls are so slick that airboats can launch themselves, anywhere and anytime.

8. **Racing down a river in an airboat is a thrill a minute. Right?**
   a. Nothing's better. Go for it!"
   b. Well, it's fun, but even the best airboat driver can't predict what's around the next curve, like ten canoes full of kiddies. Running into the trees with an airboat is every bit as bad as a car wreck (without a seat belt).

9. **With an aluminum hull on your airboat, running through stumps ain't no big thing. Right?**
   a. Sure, Ace. You can't punch a hole through that stuff.
   b. Tell you what, wild man (woman), drive over a big stump that's just below the surface of the water or slide sideways into one and see what happens.

10. **The cage on an airboat reduces top speed by at least 25%. Let's get rid of them or at least increase the mesh size.**
    a. Right on! Speed is everything.
    b. Anything going through an airboat prop is mincemeat. Don't get in an airboat with a flimsy cage.

1) One of the major differences in handling between airboats and outboards is
   a) one has a prop above the water the other has a prop in the water
   b) the technique used for steering
   c) none, they both handle very similar
   d) an airboat cannot be steered in deep water

2) The main reason one doesn't use full power for cruising is:
   a) an airboat may go airborne at full throttle
   b) one needs reserve power for maneuvering
   c) you are not allowed to exceed 35 mph along shorelines
   d) you could possibly overspin the prop off the motor

3) What special safety gear is required by the U. S. Coast Guard for airboats
   a) tow rope, fire extinguisher and radio
   b) tow rope, fire extinguisher , and day markers
   c) tow rope , fire extinguisher, and a push pole
   d) none

4) What boat class do airboats fall under
   a) Class A
   b) Class 1
   c) Airboats are an excluded boat from regular vessels
   d) It depends on the length of the airboat

5) If your airboat stalls suddenly, while you are on plane in deep water, you should
   a) remain seated and steer rudders in a straight line to prevent hitting waves broadside
   b) carefully but quickly jump to the bow to raise the transom to prevent swamping the boat
   c) pull out a paddle and start paddling to shore
   d) fix your gas gage

6) If you find yourself in rough water (white caps, rolling seas, etc.) you should
   a) head for shallow vegetated littoral zone if possible
   b) head at a 45 ° angle into waves
   c) avoid surfing waves with stern exposed to incoming waves
   d) avoid traveling broad side to waves
   e) all of the above

7) Most airboat noise is made by
   a) the motor, so it's a good idea to have mufflers on the exhaust
   b) the propeller
   c) the belt drive
   d) the driver

8) The main function of the "cage" is to
   a) keep loose items on the deck from going into the prop area
   b) keep limbs and debris from touching the propeller
   c) keep passengers arms and legs from entering the prop area

d) keep debris from the propeller area from hitting the passengers and driver

9) To steer left or right at cruising speed in water one to two inches deep one needs to
   a) push the stick in the desired direction and maintain engine rpm
   b) push the stick in the desired direction and apply more engine rpm
   c) push the stick in the desired direction and reduce engine rpm
   d) push the stick in the desired direction and have passengers shift their weight

10) When coming off plane in deep water one needs to
   a) let off accelerator quickly and come to a near stop at a safe distance from obstacles
   b) let off accelerator gradually and apply gas to prevent backwash over the transom
   c) let off accelerator gradually and move everyone to the bow to prevent swamping the boat
   d) don't come off a plane in deep water as it will swamp the boat

FAPMS Board Meeting—all are invited!
August 6, 2002, Todd Olson 800-327-8745

FAPMS 26th Annual Meeting,
Adam's Mark Resort, Daytona Beach, FL, November 13-15, 2002

APMS Annual Conference,
July 21-24, Keystone Colorado, Contact Richard Hinterman 810-744-0540 for more information or visit the APMS website at www.apms.org

Request For Proposals (RFP) For The Economic Impacts Of Invasive Aquatics Species

The Aquatic Ecosystem Restoration Foundation has issued an RFP to study the economic affects of aquatic invasive species. Models that result from this program will aid resource managers in decision making and defending goals in regard to aquatic plant management actions. The deadlines for submission are 1 July 2002 and 1 October 2002. The RFP is posted on the WIST web site at: tncweeds.ucdavis.edu.news/weeder.html

Invasive Species On The Move
(Notes reprinted with permission from the Texas and South Carolina Aquatic Plant Management Society Newsletters.)

Cryptocoryne beckettii, a popular aquarium plant, is invading the San Marcos River, Texas. It grows as a dense carpet in shallow water. Between April 1998 and August 2000 the number of colonies of this plant grew from 11 to 63. For more infor-

mation on the ecology and management of this plant, please see the article entitled "Expansion Of The Exotic Aquatic Plant *Cryptocoryne beckettii* (Araceae) In The San Marcos River, Texas, by Dr. Robert Doyle in the January 2002 Texas Aquatic Plant Management Society Newsletter (Vol. XV No.1) at www.tapms.org

Commelina benghalensis, a federally listed noxious weed, has been found in North Carolina. Previous populations of this plant have been documented in Florida, Georgia, Louisiana, Hawaii, and California. It grows in moist, organically rich soils and is resistant to glyphosate. Its impact on wetlands is unknown although other members of this family are aggressive wetland invaders. A key to identifying this plant is its ability to produce underground flowers! This information is from the article "New Federal Noxious Weed Found in North Carolina," by Steve Hoyle in the South Carolina Aquatic Plant Management Society, April 2002 Newsletter (Vol 23, Number 1). Pictures of this plant can be found at www.valdosta.peachnet.edu/~rcarter/research/commbeng.htm

Answers to airboat IQ test.
1-b, 2-b, 3-d, 4-d, 5-b, 6-e, 7-b, 8-b, 9-b, 10-b

Editorial

Continued from page 3

when faced with a threat, the necessity for action brings communication, understanding and often unity. And hopefully from these come joint objectives.

So let's look at some of the aquatic plant related events I think are responsible for the improved unity among the Societies. I am making the assumption that you agree with that premise. First, we have so few aquatic plant management tools in our toolbox to solve complex ecological problems. There are only a handful of registered aquatic herbicides, a few successful biological agents, limited situations for mechanical equipment and only occasionally a problem water body suitable for water level fluctuation exists. By having such a limited selection of tools, it necessitates we become proficient with them, master the craft and share that expertise among others and ourselves.

Cell phone roundup at Lake Washington, FL. Aquatic plant managers, Jerry Renney, Dave Tarver, Gary Nichols, Nathalie Visscher, and Ed Harris were actually all on the phone at the same time, and no they were not talking to each other! Photo by Jeff Schardt.

Next, unforeseen events such as that of the 9th Circuit Court and the subsequent NPDES permit ruling served as the catalyst which quickly organized and united many aquatic and non-aquatic plant stake holders. This was perceived as an "attack" on our ability to efficiently conduct aquatic plant management activities where EPA registered products were selected as the preferred management tool. It was this event that revealed a lot of common ground among aquatic plant industry players, APMS and the Regional Chapters. Subsequently, stake holder groups composed of many diverse interests united and pulled together towards a common objective – logic.

Another, we as aquatic plant managers have recognized the threat and developed a sound understanding of the ecological damage problematic aquatic plants cause. Yet, collectively on a national level, have contributed relatively little towards educating the public on these threats or the existing expertise available to manage them. Yes, individual Chapters, states and a few universities continue to work an education objective from their prospective but there are no Invasive Aquatic Plant Management Chapters in our children's science books. Only a hand full of universities even offer classes in aquatic botany or aquatic plant ecology, much less teach of the negative impacts these weeds bring to native plant based wetlands. After several years of discussing and planning, the APMS with assistance from numerous sponsors and Regional Chapter support, published and distributed (through Sea Grant) 400,000 copies of the booklet,"Understanding Invasive Aquatic Weeds". This national education effort was accomplished and is reported to be on target because we agreed on the need and the selected action. Hopefully, this type of activity fosters stronger relationships and I look forward to future educational win/win cooperative endeavors. Of all the projects I have worked on in my 28-year career, this one stands as the most rewarding and I invite others to engage in this mission.

The last factor for discussion that unites the Chapters and APMS are the invasive weeds themselves. Whenever we are faced with extremists claiming to oppose a particular aquatic plant management method, due to some potential negative environmental impact, always remember why it's necessary to manage invasive aquatic weeds. Focus on the weed and the problems they cause. Once again, the weed potential of the problematic plants and the recognized need for sound management strategies, add more commonality among our profession.

Well, that's probably more of a sermon that you expected or needed; however, I do think we have made tremendous progress in working together these past few years- APMS and the Regional Chapters. "Let's roll" !

The 42nd Annual APMS meeting is July 21-24, 2002 in beautiful Keystone, Colorado. Everyone is invited, so bring your family and turn the trip into a needed vacation.

All the Best,

David P. Tarver- President APMS

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