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Summary of Interviews with Professional Bass Anglers About Aquatic Plant Management

Every year professional bass anglers travel across the country in pursuit of an exciting yet challenging career of catching bass. Much of their success is dictated by their ability to adapt to changes in plant communities brought on by aquatic plant control programs. As career professionals these anglers work all year long to qualifying for the Bass Master Classic championship, a prestigious event comparable to the Masters Golf Tournament. These anglers are passionate about how lakes are managed and often voice their opinions to the media, which in turn can affect future plant management control practices. This editorial summarizes interviews with ten of the top bass anglers in the world: Larry Nixon (AR), Rick Morris (VA), Aaron Martens (AL), Stacy King (MO), Kevin Van Dam (MI), Terry Scroggins (FL), Tim Horton (AL), Edwin Evers (OK), Gary Klein (TX), and Rick Clunn (MO). This mix of anglers consists of seasoned veterans as well as newcomers to the sport of professional bass fishing.

During the interview anglers were asked whether aquatic plant management practices across the country had provide improved lake access and better fishing conditions. The responses were evenly mixed between yes and no, but there was a tendency for the angler’s responses to be related to their individual styles of fishing. Anglers that preferred to flip heavy weed mats responded that plant control programs hurt their fishing capabilities. Those that did well fishing open water situations responded that plant control programs helped reduce plant densities and allowed them to catch more fish.

Anglers were asked to give their opinions on how much plant growth should be allowed in a lake. Most responded with the belief that 30-50% plant coverage was adequate. Some anglers noted that 50% plant coverage would be best as long as it wasn’t hydrilla, as they knew the potential for hydrilla to get out of hand. Almost all the anglers felt that plant control levels should be decided on an individual lake-by-lake basis. The majority of anglers saw deeper lakes as self-regulating and didn’t believe that aquatic plant growth would become very problematic if left to the control of Mother Nature. They did agree that the shallower lakes required more plant control than deeper lakes.

Only one angler said that they
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Fishing events like the Bassmaster Classic rely on adequate plant control and contribute substantially to local economies.

Not everyone will agree with the opinions and concerns of these anglers. However, aquatic plant managers should be challenged by these opinions to help update educational materials and provide improved distribution to anglers. The Professional Anglers Association (PAA) is a good contact group for providing educational material to professional bass anglers like those interviewed.

The health of fish populations and associated economic benefits are directly affected by aquatic plant control techniques. Can plant management programs be modified to improve fisheries? Should they be? Do the economic benefits provided by anglers out way the cost of reduced plant control? Will the long-term health of a lake suffer from reduced plant management? As your editor I hope the opinions of these professional angler motivate plant managers to improve distribution of educational material and consider the impact of the weed treatments on fishery populations and local economies.

Editor
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Preliminary Population Responses of Sportfish Species to a

T. F. Bonvechio¹, K.I. Bonvechio², T. P. Coughlin¹, C. K. McDaniel¹, A.S. Landrum¹, C. S. Michael¹, and D. C. Arwood¹. Florida Fish and Wildlife Conservation Commission

Abstract

A habitat enhancement project was conducted at Lake Tohopekaliga, Florida, during 2003-2004 to improve aquatic habitat. This study aims to assess the preliminary effects of this habitat project on populations of bluegill *Lepomis macrochirus*, largemouth bass *Micropterus salmoides*, and redear sunfish *L. microlophus*. Population growth, recruitment, mortality, size structure and roving creel estimates will be compared between pre- and post-habitat project periods for all three species. Preliminary results indicate that for most size-structure indices, peak values were generally observed in 2004. Immediately following the habitat project, most of the indices were at or below pre-habitat project levels; however additional data are needed to determine long-term trends. Total annual mortality (A) for largemouth bass from 2001-06 was similar over time, averaging 36% and ranging from 28 to 42%. Total (A) for bluegill has fluctuated considerably and has ranged from 20% to 69% and averaged 45%. Total (A) for redear was similar over time, averaging 43% and ranging from 39% to 51%. Although angler catch rate of sunfish remained unchanged, effort declined in recent years. Fluctuations in angler effort and catch rate for largemouth bass may be related to hydrilla coverage; thus, other factors aside from the project may influence the population dynamics of these species. Additional data (2007-2011) are needed to further evaluate the effect of the habitat enhancement project on these sportfish populations, including an assessment of recruitment and growth.

Introduction

Prior to the early 1960’s, Lake Tohopekaliga fluctuated as much as 3 m but due to flood control practices shifts in the hydrologic regime have reduced annual water level fluctuations to 1 meter. The resulting effect has led to the proliferation of problematic plant species and the subsequent accumulation of flocculent organic sediment in littoral areas. In an effort to restore desirable aquatic plant communities, the Florida Fish and Wildlife Conservation Commission (FWC) has utilized extreme drawdowns and, more recently, the mechanical removal of accumulated organic sediment and plant material (collectively termed “muck”), see picture 1. The effect of these habitat projects on sportfish populations remains an issue of considerable concern for managers.

Sportfish responses to large-scale habitat projects have been variable (Moyer et al. 1995, Allen et al. 2003). Furthermore, most evaluations have been short in duration and/or focused on a single species. Heman et al. (1969) found increased growth and prey consumption for largemouth bass *Micropterus salmoides*, one year following a drawdown at Little Dixie Lake, Missouri. However, other studies have found that, depending on such factors as the degree and timing of the drawdown, fish responses can vary (Lantz et al. 1967; McAfee 1980). Paller (1997) observed that sportfish species, such as largemouth bass and bluegill *Lepomis macrochirus*, differed in their response to drawdowns, presumably due to differences in life history characteristics (e.g., growth and rate of reproduction). Similar discrepancies in sportfish species’ responses to drawdowns were also observed at Lake Tohopekaliga following an extreme drawdown in 1971 (Wegener and Williams 1975). These authors reported that although most sport-fish species exhibited an immediate positive response, black crappie *Pomoxis nigromaculatus*, appeared to be negatively impacted.
Habitat Enhancement Project on Lake Tohopekaliga, Florida.

Results described here from 2001-2006, while long-term results will be evaluated after 2011. Information gained from this study will be used to better understand the impacts of large scale, multi-million dollar enhancements on important sportfish species in Florida.

Methods

Spring (Feb-April) electrofishing (see picture 2) targeting bluegill, largemouth bass and redear sunfish have been collected from 2001 to 2003 (pre-project), in 2004 (during project) and in 2005-2006 (post project). Data collection is scheduled to continue through 2011. Length and age data was used to evaluate the changes in size structure, recruitment, mortality and growth of these species before and after enhancement.

Population size structure will be compared through time by tracking temporal trends in several size structure indices, including proportional stock density (PSD). PSD was calculated according to Anderson (1976). Length frequency distributions will also be compared using a Kolmogorov-Smirnov test corrected for experimentwise error. These analyses will determine if shifts in the population size structure (i.e., a larger proportion of the population consisting of smaller or larger individuals) occurred as a result of the enhancement.

Recruitment, as indexed by catch per-effort of age-1 fish, will also be tracked through time for all three species of sportfish. These data will be coupled with relative recruitment data obtained from an aged subsample for each species. An age-length key will be used to estimate the number of fish of each age in the total sample, and a catch-curve will be constructed for each species (Ricker 1975). Residuals from these catch curves will then be used to index relative recruitment strength (i.e., strong versus weak year-classes) (Maceina 1997, Bonvechio and Allen 2005).

In addition to recruitment, age data can be used to assess total annual mortality (A) and growth. From the catch curve, (A) will be calculated as \( A = 1 - e^{-\lambda t} \) for each species and year. The aged subsample and age-length key will also be used to estimate mean-length-at-age. Means will be compared among years to determine if fish growth differed through time. In addition, growth curves will be compared using a variance ratio test or an analysis of covariance, depending on the characteristics of the age-length relationship.

Annual roving creels have been conducted in the fall (August to November) from 2001 to 2005 and will continue through 2011. Effort, total catch, and catch and harvest rate data will be collected for sunfish species (bluegill/redear collectively) and largemouth bass. For largemouth bass, estimates will be computed for all bass as well as for different size classes of bass. Effort, total catch, catch and harvest rate
will be compared before and after project efforts using a specialized analysis of variance designed for summary statistics.

**Results and Conclusions**

Lake Tohopekaliga’s sportfish populations have been subjected to multiple environmental stressors over the past four years. In 2002-03, the lake was partially drawn down in preparation for the habitat enhancement effort, but the project was later postponed. In 2003-04, the lake was drawn down and roughly 6.4 million m³ of organic material were removed from 87% of the shoreline at a cost of $7.6 million. At the conclusion of the project, the lake received high amounts of rainfall from numerous hurricanes in 2004; thus high water and wind events prevented native grasses such as maiden cane *Panicum hemitomon* and Egyptian paspalidium *Paspalidium geminatum* from germinating. As a result, large scraped areas in the littoral zone were devoid of beneficial vegetation during 2004 and 2005. As a result, a large re-vegetation project was completed in the spring of 2006, where 250,000 giant bullrush *Scirpus californicus* stems, 50,000 maiden cane stems and 50,000 Egyptian paspalidium stems were transplanted from East Lake Tohopekaliga into Lake Tohopekaliga. Hurricanes also uprooted and removed out virtually all of the offshore hydrilla *Hydrilla verticillata* mats. Studies have shown that intermediate levels of submersed vegetation (20-40%) (i.e. hydrilla) may be beneficial to the angling community as well as maximize the economic potential of the lake by balancing the needs of the angling and non-angling communities (Bonvechio and Bonvechio 2006). Thus, Lake Tohopekaliga has experienced large fluctuations in habitat, both natural and man-induced that may have influenced the population dynamics of its important sportfishes.

Since data have only been collected for two post-enhancement years, we will address general trends in size structure, total annual mortality and creel estimates; however, no statistical analyses have yet been performed. For most size-structure indices, the highest values were generally observed in 2004, at which time the lake was drawn down and enhancement activities were in progress. Most of these values were similar between 2005-2006 and pre-habitat project years; thus it is unclear whether the habitat project itself resulted in this observed patterns in size structure or if it is an artifact of sampling at a low-pool stage. Low water in 2004 may have concentrated the fish to limited habitat. As a result, became more susceptible to electrofishing.

The proportional stock density (PSD) for largemouth bass (figure 1) appears to have increased from 2001 (54%) to 2004 (91%), followed by a slight decline in 2004 (73%) and 2005 (72%).

Similarly, bluegill PSD (figure 2) increased from 27% in 2001 to 68% in 2004 but declined in 2005 (34%) and 2006 (31%). Redear sunfish (figure 3) also increased from 37% in 2001 to 60% in 2004, but decreased in 2005 (42%) and 2006 (31%). This may indicate a larger proportion of smaller individuals composed the population immediately following enhancement; however, additional data are needed to determine if this trend continues. Furthermore, these size structure indices do not take into account abundance estimates from year to year and the

**Figure 1.** Proportional stock densities (PSD) and relative stock densities of preferred (RSDp), memorable (RSDm) and trophy (RSDt) largemouth bass on Lake Toho.

**Figure 2.** Proportional stock densities (PSD) and relative stock densities of preferred (RSDp), memorable (RSDm) and trophy (RSDt) bluegill sunfish on Lake Toho. Bluegill (BLUE) and redear sunfish (RESU) were not sampled in 2002.
Proportional Stock Densities of Redear Sunfish

Figure 3. Proportional stock densities (PSD) and relative stock densities of preferred (RSDp), memorable (RSDm) and trophy (RSDt) redear sunfish on Lake Toho. Bluegill (BLUE) and redear sunfish (RESU) were not sampled in 2002.

length frequency could be strongly biased based on the number of fish obtained in each sample. PSD target ranges for largemouth bass of 40–70% (Gabelhouse 1984a) and bluegill of 20–60% (Anderson 1985) are currently being met for these three species. It is assumed that due to similar characteristics as a sunfish, redear sunfish PSD’s are similar to that of the bluegill.

Age and catch data were used to calculate total annual mortality (\( A \)) for largemouth bass from 2001–06 remains similar over time, averaging 36% and ranging from 28 to 42% (figure 4). Total (\( A \)) for bluegill has fluctuated considerably and has ranged from 20% to 69% and averaged 45% for 2001 and 2003–06 (figure 4). Total (\( A \)) for redear in 2001 and 2003–06 remains similar over time averaging 42% and ranging from 39% to 51% (figure 4).

Additional post-enhancement age data are needed to further assess temporal trends in total annual mortality. Furthermore, using age and length data, future analyses will be performed to determine changes in recruitment and growth before and after enhancement.

Shortly after Dean Rojas’s record 45 pound, 2 ounce stringer in 2001 during a B.A.S.S. event, effort (57,000 hours) and angler catch rate (1.11 fish/hr) for largemouth bass, as well as percent area coverage of hydrilla (83%) spiked to some of the highest numbers recorded (figure 5). Thus, observed declines in angler effort and catch-rate for this species may be related to hydrilla coverage, but authors do caution that spurious correlations may not indicate a causal relationship (Jackson and Somers 1991). Although a trend in angler catch rate of sunfish was not evident, angling effort may have declined in the fall roving creel
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Trends In Total Annual Mortality

Figure 4. Total annual mortality (A) of largemouth bass (LMB), bluegill (BLUE), and redear sunfish (RESU) from 2001 through 2005 at Lake Toho. No samples were obtained for BLUE and RESU in 2002.

Fall Roving Creel on Toho

Figure 5. Fall roving creel estimates at Lake Toho for largemouth bass from 1999 through 2005. Angler effort (black bars) in hours, and angler catch rate (green line) measured in LMB caught per hour. Annual coverage of hydrilla (orange line) is also provided.

Fall Roving Creel on Toho

Figure 6. Fall roving creel estimates on Lake Toho for bluegill and redear sunfish combined from 1999 through 2005. Angler effort (bars) is in hours, and angler harvest rate (line) is measured in sunfish caught per hour.

estimate (figure 6). Authors examine these results with caution, because sunfish effort is believed to be higher in the spring and summer but is not measured during this time on Lake Tohopekaliga.

The long-term effect of large-scale enhancement projects, such as the one conducted on Lake Tohopekaliga in which nearly 90% of the shoreline was affected, on important sportfishes remains unknown. The results of this study will provide lake managers with a better understanding of how large fluctuations in habitat can influence sport fish populations, information that can be used during the decision-making process with future enhancement efforts (picture 3).

Although only preliminary results were presented here, this ten-year data set, once complete, will be analyzed extensively and final conclusions will be made available to researchers and managers.

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fish population management.
*Proceedings of the Annual Conference of the Southeastern Association of Game and Fish Commissioners* 18:483-494.


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Waterhyacinth Plant Size Study: Waterhyacinth Rate Study

By Vernon V. Vandiver, Jr.¹ and C. Elroy Timmer²

Waterhyacinth Plant Size Study

In this trial, the objective was to evaluate the effectiveness of Stingray® in controlling various sizes of Waterhyacinth plants when applied alone. Earlier work has shown that Stingray® was effective in controlling “small” Waterhyacinth plants with one application of Stingray® at 0.2 lb ai per acre, while larger plants were not completely controlled with one application at that treatment rate.

The Waterhyacinth plants were established in 20-gal containers. Three size classes of plants were used in the study. Plants which averaged 22 inches in height were termed “Large-sized Plant;” the “Medium-sized Plant” averaged 11 inches in height; and the “Small-sized Plant” averaged 6 inches in height.

To summarize the results of this study, the “Small-sized Plant” Waterhyacinths were controlled 76 DAT at the 100% level with one treatment of Stingray® at 0.2 lb ai per acre. The “Medium-sized Plant” Waterhyacinths were essentially controlled with one treatment of Stingray® at 0.2 lb ai per acre. Only one bud regrew on each of two plants in 8 treated 20-gal containers at the 88 DAT rating period. At the 107 DAT point (of the first application), the two remaining “Medium-sized Plant” Waterhyacinths were retreated with a second application of Stingray® at 0.2 lb ai per acre. At the 18 DAT point (after the second application), the retreated “Medium-sized Plant” Waterhyacinths were rated at 100% control. The “Large-sized Plant” Waterhyacinth plants were also treated with one treatment of Stingray® at 0.2 lb ai per acre. After 131 days, though the stand of plants was substantially reduced and injured, a cover of living, plants remained. At this time the “Large-sized” Waterhyacinth plants were retreated with a second application of Stingray® at 0.2 lb ai per acre. At 94 DAT of the second treatment, the “Large-sized” Waterhyacinth plants were rated at 100% control. The plants “appeared dead” long before that time, but it is necessary when rating a study to wait for almost complete decomposition of the treated plants to ensure no bud will regrow.

Other work has shown that Stingray® can control Waterl.,tuce at rates that are selective and thus not cause significant injury to non-target aquatic plants. The above data shows that at the maxi-

¹ Dr. Vernon V. Vandiver, Jr., 9715 NW 63rd Place, Gainesville, FL 32653
² C. Elroy Timmer, Biologist, Aquatic Vegetation Control, Inc. P.O. Box 10845, Riviera Beach, FL 33419

---

**Figure 1. Treatments in the Hardball® – Waterhyacinth Rate Study.**

<table>
<thead>
<tr>
<th>Herbicide</th>
<th>Amount Herbicide, Product per acre</th>
<th>Herbicide Application Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardball®</td>
<td>2.0 Pt.</td>
<td>0.435 lb ae per acre</td>
</tr>
<tr>
<td>Hardball®</td>
<td>2.5 Pt.</td>
<td>0.544 lb ae per acre</td>
</tr>
<tr>
<td>Hardball®</td>
<td>3.0 Pt.</td>
<td>0.653 lb ae per acre</td>
</tr>
<tr>
<td>Hardball®</td>
<td>4.0 Pt.</td>
<td>0.870 lb ae per acre</td>
</tr>
<tr>
<td>Hardball®</td>
<td>6.0 Pt.</td>
<td>1.31 lb ae per acre</td>
</tr>
<tr>
<td>Hardball®</td>
<td>8.0 Pt.</td>
<td>1.74 lb ae per acre</td>
</tr>
<tr>
<td>Reward®</td>
<td>6.0 Pt.</td>
<td>1.50 lb ae per acre</td>
</tr>
<tr>
<td>Rodeo®</td>
<td>6.0 Pt.</td>
<td>3.00 lb ae per acre</td>
</tr>
<tr>
<td>Weedar 64®</td>
<td>8.0 Pt.</td>
<td>3.80 lb ae per acre</td>
</tr>
<tr>
<td>Control</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

---

**Figure 2. Chart Showing the Percent Control Over Time with the Various Herbicide Treatments On Waterhyacinth.**

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Maximum application rate, Stingray™ can control the size Waterhyacinth evaluated in this study. Likely the most efficient split-treatment interval would be approximately 60 to 90 days. This, of course, is a long time to achieve Waterhyacinth control. Other work has shown that by dropping the Stingray™ application rate to 0.1 lb ai per acre and tank mixing with reduced rates of herbicides such as Diquat or 2,4-D, the mature Waterhyacinth plants can be managed while at the same time reducing the negative impact on desirable native plants.

Waterhyacinth Rate Study

Hardball® is a relatively new aquatic herbicide from Helena Chemical Company; its active ingredient is an uncombined form of 2,4-D formulated with a proprietary non-ionic adjuvant system as a 1.74 lb ae per gal product. As it is a new 2,4-D formulation, we wanted to look at the response of mature Waterhyacinth plants to treatment with a range of rates of Hardball®. Also included in the study for comparison were three other aquatic herbicides used by the industry in Waterhyacinth management programs. The treatments in this study are shown in Figure 1. A chart of the results is shown in Figure 2, while these data are shown in Figure 3.

If one is treating a monoculture of an exotic weed such as Waterhyacinth, there is more flexibility in choosing the herbicide or herbicides for your management program. However, if one is treating invasive weed mixed with native, desirable plants, the choices for the most effective and selective herbicides seem more limited. Lower rates of selective herbicides and tank mixes of selective herbicides have been shown by this and other studies to remove unwanted weeds and have little lasting impact on desirable aquatic vegetation.
Rue Hestand
Retirement dinner at
Hickory Point Recreation
Facility on the shore of Lake
Harris, December 4, 2004.
Rue (below on right)
is a charter member of
FAPMS. He had 35 years of
service with Florida Fish
and Wildlife Conservation
Commission.

Wayne Corbin
Retirement lunch at
Cracker Boys Restaurant in
Lockloosa, March 2, 2005.
Wayne had 34 years of
service with the State of
Florida. The last 24 were
with St. Johns River Water
Management District.

Terry Warson
Retirement celebration at
Citrus County Aquatic Services,
November 28, 2005.
Terry was Lead Aquatic Plant
Technician, and had 20 years of
service with Citrus County.

Vernon V.
Vandiver
Retirement celebration
at University of Florida,
Fort Lauderdale Research
and Education Center,
Vernon is a charter
member of FAPMS.
Vernon had 28 years
of service with
University of
Florida.

Bill Moore
His retirement dinner was
held at the Cerexagri national
meeting, Key Largo on
November 15, 2005.
Bill is a charter member
FAPMS. Bill had 27 years of
service with Cerexagri and 8
years of service as distributor
representative for aquatic
herbicides in Florida.

Job Vacancy Summary: Osceola County.
Transitions within the Osceola FAPMS
office will be made at a later date.
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People...Products...Knowledge™
Job Vacancy Summary: Osceola County.

The position will be during the term of U.S. EPA grant X7-96433105-1t, through Sept 2010. Applications should be made online through http://Osceola.org starting September 18. Hiring after October 1, 2006.

SENIOR BIOLOGIST  Pay Grade: 16

Major Function
To implement biological demonstration components of U.S. EPA grant X7-96433105-1 in coordination with UF/IFAS Center for Aquatic and Invasive Species. To conduct studies and demonstrations to optimize control of two aquatic plants, hydrilla and hygrophiila, in the Upper Kissimmee Chain of Lakes by evaluating emerging methods of aquatic weed control.

Minimum Qualifications
Bachelor’s Degree in Biology, or Aquatic Plant Management, Limnology or a related field, from an accredited college or university. Must be proficient in use of Microsoft Office suite of software, internet and e-mail. Prefer experience in aquatic plant research and use of GIS. Possession of a minimum of a valid Class E Driver’s License and restricted use pesticide applicators license.
AQUAVINE

Searching for the name of an aquatic plant or how to control it? Send an email to mail@fapms.org and your question will be routed to a panel of experts who will help answer your question. Visit the “Information Center” on the society’s web page www.fapms.org to see links to plant ID charts and other useful aquatic plant information.

FAPMS Aquatic Plant Manager of the Year, 2006
Applications Being Accepted

This award is designed to provide a means to recognize outstanding achievements in aquatic plant management field activities and to enhance professionalism in aquatic plant management activities in Florida. Award nominees must be active members in FAPMS and directly involved in aquatic plant management field activities. Those involved exclusively in an administrative capacity or employed in the chemical or equipment manufacturing and distribution industries are NOT eligible for this award. The winner of this award will receive an engraved plaque and $100.00 check. Nomination forms can be obtained from the “Manager of the Year” link on the FAPMS website www.fapms.org. All nominations must be submitted to Mitch Morgan by October 15, 2006. Fax: 352-334-3110 or email morganmm@ci.gainesville.fl.us.

Yearly 2,4-D Report, ITF Press Release 4/25/06.


In its registration eligibility decision (RED) released in June 2005 the U.S. EPA concluded that acute and short-term margins of exposure for homeowner applications of 2,4-D to lawns were “not of concern.” EPA’s most recent assessment included a review of animal and human data, the latter in the form of epidemiology studies (the study of the incidence of disease in populations). The EPA concluded: “The Agency has twice recently reviewed epidemiological studies linking cancer to 2,4-D. In the first review, completed January 14, 2004, EPA concluded there is no additional evidence that would implicate 2,4-D as a cause of cancer (EPA, 2004). The second review of available epidemiological studies occurred in response to comments received during the Phase 3 Public Comment Period for the 2,4-D RED. EPA’s report, dated December 8, 2004.

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and authored by EPA Scientist Jerry Blondel, Ph.D., found that none of the more recent epidemiological studies definitively linked human cancer cases to 2,4-D.

“The EPA’s assessment of the human and environmental scientific data reinforces a growing number of regulatory decisions and expert reviews that conclude the use of 2,4-D according to product instructions does not present an unacceptable risk to human health or the environment”, stated Jack Dutra, executive director of the Industry Task Force on 2,4-D Research Data. “When expert panels and regulatory authorities around the world examine all the relevant scientific evidence, they consistently reach the same conclusion that 2,4-D does not present health risks of concern.”

Historically, the original patent on 2,4-D was issued in 1945 to Dr. Franklin D. Jones, a plant physiologist. Dr. Jones was working with the naturally occurring plant auxin, indole acetic acid (IAA). IAA is present in all plant matter and humans consume it daily whenever fruit, vegetables and cereals are consumed. In an effort to work with a more chemically stable, auxin-like compound, Dr. Jones included 2,4-D, an analog of IAA, in his experiments. In 2004, The Henry Ford organization in Dearborn, Michigan identified 2,4-D as one of the 75 most important innovations in the previous 75 years. Few scientific innovations have done as much to increase food production throughout the world.

Three-Day Fishing Restriction Removed from Aquathol and Hydrothol Labels

King of Prussia, PA, August 16, 2006 – Cerexagri-Nisso LLC has announced the removal of the 3-day fishing restriction from all endothall labels by the EPA. Effective immediately, Aquathol K, Aquathol Super K, Hydrothol 191 and Hydrothol Granular herbicides for Aquatic Habitat Management do not carry a 3-day restriction on fish consumption in the United States. Submissions are pending in New York and California. A Supplemental Label must be in possession of the applicators at the time of use. For labels or more information call 1-800-438-6071 or log onto www.cerexagri.com.

FAPMS is currently accepting articles and photographs for Aquatics magazine. There is a large demand for operational photos and short articles from applicators and members working in the field. Please consider submitting your photos or articles to the editor, Jeff Holland jholland@rcid.dst.fl.us or visit the FAPMS web page www.fapms.org for additional contact information.

There was an error published in the article, “Casuarina In Florida By David W. Hall and Vernon V. Vandiver, Jr.” Summer 2006 Aquatics. The caption of the third photograph showed male flowers, not female flowers as printed. We apologize for the error.
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