ANNUAL REPORT 2009 & 10

FIVE VIDEO-BASED ONLINE COURSES EXPAND KSU AQUACULTURE’S BORDERS

Students in 36 States and 18 Countries

Kentucky State University Aquaculture
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The July 25, 2009, KSU Aquaculture Field Day at the Aquaculture Research Center was quite a success with over 50 persons participating. Twelve stations, from fish species to aquaponics to video editing, were set up so attendees could focus on their areas of interest.

Drs. Benson, Tidwell and Durborow welcomed aquaculture enthusiasts and introduced presentations conducted by KSU Extension Specialists, faculty and staff. Then it was off to the 12 stations that were hands-on for the most part. Attendees could see a variety of fish species and get their questions answered directly by experts.

Aquaculture’s Online Students Located ‘Round the World

Aquaculture’s online students can be found around the world. And these students are not just participating in traditional keyboard online courses, but engaged in video-based instruction. Students see the instructor as he/she teaches, view video clips, PowerPoint presentations and lab/field experiments.

I loved the format, it was like I was there in the classroom. R.E.

Currently, KSU Aquaculture counts past and present online students from 36 states and 18 foreign countries, and this does not include on-campus students from other states and countries.

Most students participating in online courses are seeking a bachelor’s or master’s degree; however, fisheries and aquaculture professionals also sign-on for professional development training. Five video-based courses are now available with updates under way on Principles of Aquaculture, and initial work begins soon on a fisheries course.

EEC Recipient of Conservation Stewardship Award

KSU’s Environmental Education Center was selected to receive the 2009 Kentucky Heritage Land Conservation Fund Stewardship Award. “This award recognizes excellent stewardship of a KHLCF competitive project with an approved Final Resource Management plan (FRMP). The Kentucky Heritage Land Conservation Board applauds the outstanding work of the KSU Environmental Education Center and wishes to express its sincere appreciation of the hard work and dedication that you, your staff and volunteers demonstrate in not only providing excellent educational opportunities to connect students and faculty with nature but also conserving and protecting one of Kentucky’s natural treasures.”
Dr. Benson dreamed of it, fought for it, and now it’s a reality: KSU Land Grant’s Center for Sustainability of Farms and Families.

SUSTAINABLE FARM IDEAS HAVE BECOME NATIONAL MODEL

Mac Stone, former KSU farm manager, credited KSU Land Grant’s phenomenal growth to Land Grant Director Dr. Harold Benson’s foresight and his willingness to listen to his staff’s ideas. As a result, the university began the Third Thursday workshops which have become a national model for sustainability education; added a mobile processing unit which aids farmers around the state; introduced small- and limited-resource farmers to new types of livestock and crops; and developed an organic agriculture program for limited-resource farmers.

Internationally Known Freshwater Prawn Experts Author Text

Dr. Jim Tidwell and four other internationally known aquaculture scientists from England, Brazil, and India, have teamed to produce the definitive work on the farming and biology of freshwater prawns. The 560-page book, *Freshwater Prawns: Biology and Farming*, covers general biology and every aspect of farming freshwater prawns, from current research to development and commercial practice, and is intended to stimulate further in-depth understanding of this important species which generates around two billion dollars annually. The book, which retails for $254.99, is published by Wiley-Blackwell.
This new production lab will contain the facilities needed to evaluate and develop intensive recirculating systems. Interest in the production of fish and shrimp indoors under controlled conditions continues to increase, especially since environmental concerns are paramount. These systems operate with much lower demands for water and allow year-round growth, and allow for production of species (such as ocean shrimp) far from their natural environment, near large and profitable market centers, without the risk of disease, escape or pollution.

The building will also permit the expansion of genetics research in aquaculture. Currently only 1-2% of the animals raised in aquaculture have been selected for improved genetics, which includes faster growth and greater disease resistance. This lab will greatly increase KSU’s ability to produce and evaluate promising genetic lines of different species, and allow our students to be trained in cutting-edge molecular genetics techniques and with state-of-the-art equipment.

Searching for a Chef

The fifth annual Great Annual Kentucky Seafood Cook-Off brought together the best chefs from across the state. The participants gathered at Jefferson Community and Technical College in Louisville for the competition. Winner Jeremy Ashby, from Azur Restaurant in Lexington, represented Kentucky at the Great American Seafood Cook-Off in New Orleans in August 2010.
KSU student Josh Patterson defended his thesis via video while working on his Ph.D. at LSU.

KSU Aquaculture graduate student Andrew McDonald is finishing up his thesis research at the Kentucky Fish and Wildlife Resources’ Center for Mollusk Conservation at the Forks of Elkhorn near Frankfort. Under the guidance of Dr. Monte McGregor, he has been assisting with freshwater mussel propagation efforts, as well as carrying out his own thesis experiments. Culturing freshwater mussels in captivity is of growing importance because they are the most threatened group of animals in North America, and many species are in danger of extinction.

Mussel Study Featured on PBS

The Sun Came Out and buyers lined up to purchase freshwater prawns from KSU grad students. Dr. Dasgupta (R) collected data on the buyers.

KSU Prawn Sales Provide Marketing Research for Kentucky Growers While Generating Funds for Graduate Students to Present Their Research at International Venues.
PERSONNEL

Harold R. Benson, Ph.D., Director of Land Grant Program
Charles Bennett, Ph.D., Dean of Math, Science, Technology and Health
Kimberly Holmes, Ph.D, Associate Director of Land Grant Program
James H. Tidwell, Ph.D., Professor and Chair & PI freshwater shrimp & largemouth bass
Sid Dasgupta, Ph.D., Associate Professor, Economics & Marketing
Robert M. Durborow, Ph.D., Professor, State Specialist, Fish Disease Diagnostic Laboratory
Boris Gomelsky, Ph.D., Associate Professor, Principal Investigator, genetics, crappie and koi
Steven D. Mims, Ph.D., Professor, Principal Investigator, paddlefish and sturgeon
Carl D. Webster, Ph.D., Professor, Principal Investigator, aquaculture nutrition
William A. Wurts, Ph.D., Senior State Specialist for Aquaculture, Western Kentucky
Forrest S. Wynne, M.S., State Specialist for Aquaculture, Western Kentucky
Shawn Coyle, M.S., Co-Investigator, freshwater prawn and largemouth bass projects
Richard Onders, M.S., Co-Investigator, paddlefish, and sturgeon projects
Ken Thompson, M.S., Co-Investigator, red claw crayfish & hybrid striped bass nutrition
Tod Porter, M.A., Multimedia Producer for Aquaculture programs
Nathan Cochran, M.S., Distance Learning Specialist
William Bean, M.S., K-12 Aquaculture Educator/Recruiter for Aquaculture programs
William Stilwell, M.S., Manager/Environmental Education Center
Leigh Anne Bright, M.S., Research Assistant
Kyle Schneider, M.S., Research Assistant
Charles Weibel, B.S., Digital Graphics Specialist
Daniel Yancey, B.S., Farm Manager for Aquaculture Research Facility
Karla Johnson, A.S., Administrative Assistant II
Carolyn Bolton, A.S., Administrative Assistant II
Robert Janes, Fish Culture Assistant
Pauline Jackson, Maintenance Worker III
LONG-TERM VISION

Kentucky State University will remain the lead institution for aquaculture in Kentucky, and one of the premier programs in the nation. Involvement of on-site students in relevant, real-world research will continue. Outreach through video and Web-based courses will be expanded.

FACILITIES

Kentucky State University’s Aquaculture Research Center is the only such facility in the Commonwealth of Kentucky. Facilities at the Aquaculture Research Center include 33 research ponds (24 1/10th acre and 9 1/20th acre). A 3,000-square-foot hatchery houses spawning, holding, and experimental tanks. A 4,000-square-foot office/laboratory building includes an histology laboratory, offices, and conference/classroom space. The 3,500-square-foot nutrition laboratory contains a wet laboratory for aquarium studies, a feed preparation/water quality laboratory, office/computer space, and an analytical laboratory. A 3,000-square-foot greenhouse facility contains temperature control systems capable of evaluating three temperature levels in eighteen 950-gallon tanks, as well as recirculating shrimp hatchery system. A second 3,000-square-foot greenhouse contains four 10,000-gallon tanks for broodstock holding and conditioning. A 120,000-gallon, 24-tank facility, designed as a pond microcosm facility, was completed fall 2003. These facilities may be utilized for student research and teaching.

A classroom/multi-purpose building for instruction, research, library resources, and distance learning was completed in 2005. The building also includes a Fish Disease Diagnostic Laboratory that is fully equipped with incubators, microscopes, and video microscopy. It is used to provide disease diagnostics to producers from across Kentucky and the surrounding region. A processing room is designed for food science research and has equipment for processing, freezing and packaging – all in one room. The videoconferencing facility is scheduled for an upgrade to high definition. A new Production Technologies and Genetics Laboratory is currently in the design phase.
The Division of Aquaculture is the only program at KSU that addresses all three of the traditional Land Grant university roles: research, teaching, and extension. Research and extension responsibilities are administratively housed within the Land Grant Program under the supervision of Dr. Harold Benson, Director of the Land Grant Program, and Dr. Kimberly Holmes, Associate Director. Academics are administratively housed within the College of Math, Science, Technology and Health, administered by the Dean, Dr. Charles Bennett. Both of the Land Grant functions (research and extension) and the academic functions are supervised by the Vice-President for Academic Affairs and Provost, Dr. James Chapman.

The goal of the KSU Aquaculture Research Program is to increase the knowledge-base in aquaculture, and thereby facilitate increases in farm income and the productivity of on-farm water resources in Kentucky and around the world. This is to be accomplished by examining and developing production technologies suitable for the climatic and physiographic conditions prevalent in Kentucky and similar regions. To meet these goals, the KSU Aquaculture Research Program’s initial studies were directed toward the development and adaptation of pond- and cage-culture techniques for channel catfish and trout. However, the USDA expects newly developing aquaculture species to experience rapid expansion by adapting existing production and processing systems already developed for traditional species. Development of these new species is expected to occur largely in states, like Kentucky, which do not currently have well-established production, processing, or marketing infrastructures for aquaculture.

The intent of the research, extension, and education activities is to assist Kentucky producers in this future development by investigating all aspects of the production of aquaculture species that can be produced profitably in Kentucky. The KSU Aquaculture Program is widely recognized as being the lead program nationally and internationally in the areas of paddlefish culture, freshwater prawn culture, production of largemouth bass on-feed, and fish meal replacement research for catfish and hybrid striped bass.
EXTENSION

Research information is of little practical value unless it is communicated to producers in a useful and understandable form. Training and extension programs serve as the primary means of transferring this knowledge from the researchers to the end users. KSU Aquaculture Specialists are integrated into the UK Cooperative Extension System. Specialists are housed in western Kentucky at the UK Princeton Research and Extension Center (Dr. Wurts), in central Kentucky at KSU’s main campus (Dr. Durborow), and Forrest Wynne is in the Purchase Area in western Kentucky to assist and support the catfish industry.

DISTANCE EDUCATION

Students from all over the United States and many foreign countries have become involved in KSU’s Aquaculture Program by taking online (Internet) courses. During the reporting period, three more video-based courses have been completed and are now enrolling students.

The new online courses: *Fish Reproduction and Spawning Techniques* and *Water Quality Management*, became available in the 2009 fall semester and 2010 spring semester. Additionally, *Fish Genetics*, first offered in 2002 as a traditional online course, has been updated and converted into a video-based course. Currently the Division of Aquaculture has five online, video-based courses:

- *Principles of Aquaculture* - Instructor: Dr. Jim Tidwell
- *Fish Diseases* - Instructor: Dr. Bob Durborow
- *Fish Genetics* - Instructor: Dr. Boris Gomelsky
- *Water Quality Management* - Instructor: Dr. Bob Durborow
- *Fish Production and Spawning Techniques* - Instructors: Dr. Boris Gomelsky & Dr. Steve Mims

Online students from 36 states and 18 countries have enrolled in KSU Aquaculture courses — with a success rate exceeding 90 percent.
UNDERGRADUATE AND GRADUATE EDUCATION

Kentucky State University began offering an undergraduate Minor in Aquaculture in 1992 within the Division of Math and Sciences. No other university in the Commonwealth offers an aquaculture curriculum. In 1999, the Council on Post-Secondary Education approved KSU to offer a Master of Science degree in Aquaculture/Aquatic Science. KSU now has eight full-time graduate students, and six part-time graduate students, not counting online students. The program awarded its first M.S. degree in May 2002, and has now awarded 27 Master of Science degrees.

FALL 2009

Undergraduate Courses

Gomelsky  AQU 407-V1  Fish Genetics
Durborow  AQU 411-01  Fish Diseases
Tidwell    AQU 422-V1  Principles of Aquaculture
Tidwell    AQU 451-01  Survey of Production Methods
Gould      AQU 480-01  Intro to Geographic Information Systems (GIS)

Graduate Courses

Gomelsky  AQU 507-V1  Fish Genetics
Durborow  AQU 511-01  Fish Diseases
Tidwell    AQU 522-V1  Principles of Aquaculture
Tidwell    AQU 551-01  Survey of Production Methods
Zourarakis AQU 580-01  Intro to Geographic Information Systems (GIS)
SPRING 2010

Undergraduate Courses

Gomelsky    AQU 407-V1   Fish Genetics
Dasgupta    AQU 409-01   Biostatistics
Durborow    AQU 414-V1   Basics of Fish Diseases
Dasgupta    AQU 416-01   Computer Applications in Statistics
Tidwell     AQU 422-V1   Principles of Aquaculture
Gould       AQU 480-01   Intro to Geographic Information Systems (GIS)

Graduate Courses

Gomelsky    AQU 507-01   Fish Genetics
Dasgupta    AQU 509-01   Biostatistics
Durborow    AQU 514-V1   Basics of Fish Diseases
Dasgupta    AQU 516-01   Computer Applications in Statistics
Tidwell     AQU 522-V1   Principles of Aquaculture
Zourarakis  AQU 580-01   Intro to Geographic Information Systems (GIS)

SUMMER 2010

Undergraduate Courses

Tidwell     AQU 422-V1   Principles of Aquaculture

Graduate Courses

Tidwell     AQU 522-V1   Principles of Aquaculture
K-12 OUTREACH

Overview

Traditionally, the Aquaculture Education Program has served the educational needs of three distinct groups: (1) K-12 students, (2) their educators, and (3) the general public. The largest service group is the K-12 students which are required to learn specific (core) scientific and mathematical concepts, as mandated by the Kentucky Department of Education. Due to the nature of aquaculture, its principals clearly demonstrate both the integration and practical applications of biological, chemical, and mathematical core concepts. In addition, many K-12 students have interest in vocational agriculture and aquaculture increases the choices among agricultural careers.

K-12 educators are the next service group and the teachers are divided into two categories: traditional science and vocational agriculture. Traditional science educators use aquaculture to (1) reinforce scientific core concepts; (2) illustrate the interactions occurring in “real-world” science; and (3) improve their students’ laboratory and practical skills. Vocational agriculture educators teach similar core concepts but usually from an animal husbandry perspective. In 2009-10, 46 vocational agriculture educators in Kentucky were teaching aquaculture courses. To assist both sets of educators, the Aquaculture Education Program is constantly updating its selection of aquaculture curriculum and laboratory activities. The Aquaculture Education Web site (www.ksuaquaed.org) has become an important tool for K-12 educators. Due to this increasing need, the Web site is undergoing major improvements to better serve these educators, which includes opportunities for professional development offered through KSU.

Major Accomplishments of 2009-10

• The Free Fish Program donates aquatic species to K-12 educators for the purpose of stocking educational systems. The program allows K-12 students to actively raise fish (i.e. koi and tilapia) in recirculation systems. Many schools sell their aqua crops during FFA Greenhouse Sales, with the monies being used for educational purposes. Thirty schools participated in the Free Fish Program in 2009-10.

• Served as the PACT Youth Director. PACT is a week-long summer program for 5th, 6th, and 7th graders. As the director, duties included designing the educational content (for three age groups); hiring of three leader teachers and several undergraduate student staff; and overseeing the entire program. In 2009-10, 75 students from Kentucky and Ohio participated.

• The Northern Kentucky Youth Development Center (NKYDC, an Alternative school in Crittenden, KY) has completed building an indoor production system. This new recirculation system has increased the number of students that may take aquaculture courses at NKYDC.

• Future Farmers of America (FFA) Aquaculture Impromptu Judge: Bluegrass Region Day (hosted at University of Kentucky). This marks the sixth year as an aquaculture judge in the impromptu category.
ENVIRONMENTAL EDUCATION CENTER

Within Land Grant, our Program Area designation is Aquaculture and Natural Resources. With that charge, responsibilities for KSU's Environmental Education Center have been placed within the Division of Aquaculture. This 300-acre property provides opportunities for students to learn about the environment all the way from kindergarten through graduate school. This is particularly important to urban and minority student populations who are extremely underrepresented in the natural resources and environmental professions.

Facilities at the EEC are designed to ensure access and learning experiences for students who are physically, visually, or hearing impaired. During the reporting period, the EEC received three grants totaling over $61,750: one to develop an ADA compliant trail, one to cover transportation and lodging for professional development on educating special needs students, and one for the Mobile EEC to educate students about CFL light bulbs. For those who cannot come to the KSU-EEC, the mobile EEC unit goes to them. During the 09/10 year, we have had over 726 visitors to the EEC (42 groups), the Mobile EEC unit made over 3,231 direct contacts in 58 classes in nine Kentucky counties, and the Web site, to date, has received over 22,000 contacts.

PROFESSIONAL SOCIETIES AND TECHNICAL ASSOCIATIONS

Shawn Coyle serves on the Board of Directors for the U.S. Freshwater Prawn and Shrimp Growers Association, Inc.

Dr. Robert Durborow is a member of the American Fisheries Society (AFS) and AFS Fish Health & Fish Culture Sections and the World Aquaculture Society.

Dr. Boris Gomelsky is a member of the World Aquaculture Society and the U.S. Aquaculture Society.

Dr. Steve Mims is a member of the World Aquaculture Society, the Sturgeon Specialist Group, IUCN-World Conservation Union and the USAS Subcommittee for Student Chapters.

Ken Thompson is a member of Kentucky Academy of Science (KAS) (2009-present), Kentucky Aquaculture Association (KAA), World Aquaculture Society (WAS), and the U.S. Aquaculture Society.

Dr. Jim Tidwell is a Past President of the U.S. Aquaculture Society and the World Aquaculture Society, and serves on the Publications Committee of USDA’s Southern Regional Aquaculture Center (SRAC).

Dr. Carl Webster is a Past President of the U.S. Aquaculture Society.

Dr. William Wurts, World Aquaculture Society (member, 29 years), U.S. Aquaculture Society, Phi Beta Kappa.

Forrest Wynne is a member of the World Aquaculture Society and the U.S. Chapter of the World Aquaculture Society, the Catfish Farmers of America and the Kentucky Aquaculture Association.
SCIENTIFIC JOURNALS

Dr. Boris Gomelsky is an Associate Editor of the North American Journal of Aquaculture.

Dr. Jim Tidwell serves on the Editorial Board of the “Journal of Fisheries and Aquatic Sciences,” published by the Korean Society of Fisheries and Aquatic Science.

Dr. Webster is Editor-in-Chief of the “Journal of the World Aquaculture Society,” (JWAS) an international scientific journal publishing original, peer-reviewed, English-language papers on the culture of aquatic plants and animals. It is the scientific journal of the World Aquaculture Society, the largest professional aquaculture organization in the world with over 4000 members. JWAS is published bi-monthly and covers nutrition, disease, genetics and breeding, physiology, environmental quality, culture systems engineering, husbandry practices, and economics and marketing as well as a number of other topics related to the culture of aquatic organisms.

INTERNATIONAL ACTIVITIES

In November 2009, Dr. Mims was invited to the University of Bohemia in Ceske Budejovice, Czech Republic, as a speaker at World of Science Without Borders - Celebration of Velvet Revolution. Dr. Mims also spoke at the Institute of Research Fish Culture and Hydrobiology, Vodnany, Czech Republic, via collaboration with Dr. Otomar Linhart. In addition, Dr. Mims collaborates with Dr. Akos Horvath, First Institute of Biochemistry of Semmelweis Medical University, Budapest, Hungary; Dr. Hong Ji, College of Animal Sciences, Northwest Sci-Tech University of Ag and Forestry, Yangling, China; and Dr. Vitaliy Behk, Institute of Fisheries, Keiv, Ukraine. The resulting collaboration is involved with paddlefish research including sperm cryopreservation, sex manipulation, reservoir ranching and cage culture.

Dr. Tidwell was an invited speaker at the workshop entitled “Strategies for the Development of Dominican Aquaculture 2010-2015.” The meeting was hosted by the Dominican Institute for Research in Agriculture Livestock and Forestry Research (IDAF). The resulting document is to serve as the national aquaculture plan for the Dominican Republic.

Dr. Tidwell is working with the Dominican Aquaculture Association (ADOA) and the IDAF on the adoption of current production technologies and the development of aquaculture diets based on Dominican agro-industrial products and by-products.
PUBLICATIONS – Journal Articles (Student names in **BOLD** in all sections)

**Published:**


**In Press:**


In Press


GRANTS


GRANTS (CONT)


Wurts, W. A. Sustainable small-scale catfish farming demonstration for the 2010’s. 1890s Capacity Building Grants Program. Requested $144,000. Not Funded.


BOOK CHAPTERS AND BOOKS PUBLISHED OR IN PRESS

Chapters:


Chapters:


Books:


PROFESSIONAL TECHNICAL MAGAZINES


FACULTY AWARDS

Tidwell, J. H. Awarded the 2009 Certificate of Appreciation by the United States Freshwater Prawn and Shrimp Growers Association in recognition of “tireless work in the establishment and continued promotion of the freshwater prawn industry in the United States.”
STUDENT AWARDS

Undergraduate Students

David Jones received the Outstanding Sophomore in Mathematics and Sciences award, studied with Dr. Mims, spring 2010.

Latoyah Elliott won third place in the Agricultural Sciences division at KAS for her presentation “Comparison of Morphological Percentages of Three Different Genetic Strains of Freshwater Prawn (Macrobrachium rosenbergii) Raised in Ponds in Kentucky.” She was mentored by Shawn Coyle and Leigh Anne Bright.


Triston Mullins, senior at Georgetown College, was awarded a $4,000 grant from the Howard Hughes Medical Institute to participate in research and studied under Dr. Mims and Mr. Onders at ARC, summer 2010.

Graduate Students

Jamie Greene won third place and $250 in the competition for graduate research paper poster entitled “Brine absorption and microstructural properties of paddlefish meat treated with four brine solutions and hot smoked,” Institute of Food Technologists Aquatic Food Products Division, Chicago, IL, July 17-21, 2010.

Kelly Probst won the Outstanding Graduate Student Award for academic excellence and leadership, April 8, 2010.

PUBLISHED ABSTRACTS


PUBLISHED ABSTRACTS (CONT)


EXTENSION AND LAY PUBLICATIONS


SCIENTIFIC PRESENTATIONS


**POSTER PRESENTATIONS**


**Greene, J., Xiong, Y. Liu, Z. and Mims, S.** 2010. Brine absorption and microstructural properties of paddlefish (Polyodon spathula) meat treated with four brine solutions and hot smoked. Institute of Food Technologists Aquatic Food Products Division: Graduate research paper poster competition. Chicago, IL, July 17-21, 2010.


**EXTENSION/LAY PRESENTATIONS**

Bean, W. 2009. Presented “Careers in Aquaculture” and recruiting information about undergraduate and graduate degree programs at KSU to camp participants at the Latino Leadership and College Experience Camp (40 students), about 20 facilitators, and 20 professionals coming from KSU, Lexmark, BCTCS, Georgetown College, McKendree University, University of Louisville, USDA, and KYCAN (CPE). Frankfort, KY, July 30.


EXTENSION/LAY PRESENTATIONS (CONT)

Bean, W. 2009. Presented at the Ag Awareness Day hosted by the Scott County Farm Bureau in the Mobile Classroom (600 students). Georgetown, KY, September 29.

Bean, W. 2009. Presented at the Spencer County Ag Day hosted by the Spencer County Elementary School in the Mobile Classroom (300 students). September 30.


Durborow, R. M. 2010. Viral hemorrhagic septicemia (VHS) and how it affects fish transport across state lines. Fish-Hauling Workshop at Kentucky State University, March 27.


EXTENSION/LAY PRESENTATIONS (CONT)


Wynne, F. 2009. Conducted a radio program broadcast in Lawrence County, KY, and the surrounding region with Julia Hinkle, ANR agent, regarding recreational pond management issues, October 9.

Wynne, F. 2009. Presented an aquatic plant control program for commercial pesticide applicators at the Morehead State University Demonstration Farm – approximately 75 attended December 10.

Wynne F. S., Wurts, W.A. and Durborow, R. M. 2010. Conducted an aquatic plant/algae identification and control training program for commercial pesticide applicators at the UK Research and Education Center in Princeton on February 12, 12 attended.


EXTENSION/LAY PRESENTATIONS (CONT)


Wurts W.A., F.S. Wynne and R.M. Durborow 2010. Live Fish Hauling and VHS Workshop conducted at the KSU Aquaculture Research Center in Frankfort on March 27, five attended.

Wynne F. S. 2010. Small-scale Catfish Production to Supply the Live Haul/Fee Fishing Market in Kentucky—a Non-Traditional Aquaculture Market. Presented during the annual meeting of the Kentucky Aquaculture Association at the KSU Aquaculture Research Center on March 27 – Approximately 30 attended.


SERVICE TO THE PROFESSION AND UNIVERSITY

Bean, W. 2009. Set-up and staffed a booth at the Kentucky State Fair in partnership with the Kentucky Soybean Board (28,000 K-12 students and general public attended during the 10 day event), Louisville, KY, August 19–30.

Bean, W. 2009. Represented the Division of Math and Science as well as the Division of Aquaculture at the KSU 2009 Fall Open House. Discussions were directed towards available biology (including aquaculture minor), chemistry, and mathematics options at the undergraduate level, Frankfort, KY, September 19.

Bean, W. 2009. Participated in Youth Fest at the CCU with the Mobile Classroom (250 students and parents), Frankfort, KY, September 12.

Bean, W. 2009. Participated in Richmond’s Kids Fest with the Mobile Classroom (450 students and parents), Richmond, KY, September 13.


Bean, W. 2010. Invited to discuss implementing aquaculture systems into a new agriculture facility for Eastside Tech School, Lexington, KY, February 22.

Bean, W. 2010. Future Farmers of America (FFA) Aquaculture Impromptu Judge: Bluegrass Region Day (Hosted at University of Kentucky), March 17.

Bean, W. 2010. Represented the Division of Math and Science as well as the Division of Aquaculture at the KSU 2010 spring Open House, Frankfort, KY, April 2.

Bean, W. 2010. Served as the 2010 Director of the Pathways and Access to Careers in Technology (PACT) Program, Frankfort, KY, June 4-12.

Bean, W. 2010. Summer Program for Paul Sawyier Library for two age groups. Presentations were about the Water Cycle, Aquatic Environments on Earth, and the Diversity of Aquatic Life. Hosted in the Mobile Classroom, Frankfort, KY, May 3.

Bright, L. A. 2009. Represented KSU during one day of touring in Western Kentucky at the annual meeting of Kentucky Women in Agriculture conference, Bowling Green, KY.

Bright, L. A. Moderated the session, Advances in Bass Culture for the American Fisheries Society, 139th Annual Meeting, Nashville, Tennessee, August 30 - September 3.
Bright, L. A. 2010. Attended and presented a speech for recruiting session of Kentucky high school students at the request of Roosevelt Shelton.

Cochran, N. C. 2009. Converted Chinese aquaculture video to AVI.


Cochran, N. C. 2009. Traveled to Tunica, Mississippi, to attend Freshwater Prawn Growers Association meeting, December 3-5.


Coyle, S. D. Consulted with the harvest of regional prawn growers including Susan Harkins, Nat Henton, Randy Kendall and the North Point Correctional Facility.

Coyle, S. D. Worked with Angela Caporelli from KDA to host a group of food product buyers representing Whole Foods grocery store chain. Regional farm touring and gourmet lunch were provided.

Durborow, R. M., Wurts, W. and Wynne, F. 2009. Exhibit at Princeton Field Day hosted by University of Kentucky and Kentucky State University. (1,600 contacts)


Durborow, R. M., Coyle, S. and Schneider, K. 2009. Aquaculture/agriculture field day at Hoppy and Nat Henton’s prawn farm hosted by Chris Jeffcoat (Woodford County Ag Agent). 400 in attendance.


Durborow, R. M. 2009. Farm visit in Madison County with Brandon Sears, County Extension Agent for Ag and Natural Resources.

Durborow, R. M. 2009. Farm visit in Clay County with Jeff Casada, County Extension Agent for Ag and Natural Resources.

Durborow, R. M. 2009. Farm visit in Anderson County with Tommy Yankey, County Extension Agent for Ag and Natural Resources.
Durborow, R. M. 2009. Farm visit in Spencer County with Bryce Roberts, County Extension Agent for Ag and Natural Resources.

Durborow, R. M., Tidwell, J. and Webster, C. 2009. Served on Jamie Greene’s graduate committee for her thesis defense in August.

Durborow, R. M. 2009. Office visit from Bob Anderson, hydroponics consultant (formerly of U.K.), and Dumont Gouge.

Durborow, R. M. 2009. Farm visit in Clinton County with Phil Smith, County Extension Agent for Ag and Natural Resources.

Durborow, R. M. 2009. Farm Visit in Fayette County at Brown Sharp’s farm (6200 Athens Walnut Hill Road; off of route 418).


Durborow, R. M. and Gomelsky, B. 2009. Met with KSU Curriculum Committee to approve modifying 4-credit Fish Diseases and Water Quality Management courses to 3 credit hours to make them online-compatible.

Durborow, R. M. 2009. Eleven (11) fish disease diagnostic laboratory cases involving channel catfish, largemouth bass, koi, goldfish, hybrid striped bass, paddlefish, and red swamp crawfish (*Procambarus clarkii*) from fish samples submitted from Georgetown, Bardstown, Louisville, Hodgenville, Ohio University, and Kentucky State University.


Durborow, R. M. 2009. Fish disease diagnostics case. KSU ARC paddlefish from Dr. Steve Mims and Rick Onders.

Durborow, R. M. 2009. Fish disease diagnostics case. Kentucky Department of Fish and Wildlife Resources’ Center for Mollusk Conservation; Dr. Monte McGregor, Dr. Christopher Owen and Travis Bailey. Largemouth bass serving as host for freshwater mussels.
Durborow, R. M. 2009. Fish disease diagnostics case. Kentucky Department of Fish and Wildlife Resources’ Center for Mollusk Conservation; Dr. Monte McGregor, Dr. Christopher Owen and Andy McDonald. channel catfish.

Durborow, R. M. 2009. Fish disease diagnostics case. Berea College recirculating aquaculture system; Dr. Richard Olson, Ruhiiyyih Young, Austin Delph, and Stella James. channel catfish and bluegill sunfish.

Durborow, R. M. 2010. Performed a fish health inspection of rainbow trout from Doe Run Trout Farm to be transported live into Ohio.

Durborow, R. M. 2010. Fish disease investigation of Angelfish from Franklin, KY.

Durborow, R. M. 2010. Fish disease investigation of Rainbow Trout from Bell County, KY.

Durborow, R. M. 2010. Fish disease investigation of Bluegill Sunfish from Dublin, TX.

Durborow, R. M. 2010. Fish disease investigation of Tilapia. Alltech in Nicholasville, KY.


Durborow, R. M. 2010. Performed a fish health inspection for Brush Creek Trout Farm (Akin; managed by Calvin Curry).

Durborow, R. M. 2010. Performed a fish health inspection for Joyce and Steve Kinder (koi).


Durborow, R. M. 2010. Two fish disease cases for Shawn Coyle; largemouth bass, channel catfish and fathead minnows.

Durborow, R. M. 2010. Fish disease case for Brush Creek Trout Farm, Green County.

Durborow, R. M. 2010. Two fish disease cases for Liz Toohey, Frankfort; koi.

Durborow, R. M. 2010. Fish disease case for Deep Water Pay Lake, Bonnieville, KY; channel catfish.

Durborow, R. M. 2010. Two fish disease cases for Robert Mayer, Nelson County; largemouth bass and LMB fingerlings.
Durborow, R. M. 2010. Fish disease case for Mike and Diane Neighbors’ Pay Lake, Vine Grove, KY; channel catfish.

Durborow, R. M. 2010. Fish disease case for Bob and Brenda Stover Pay Lake; channel catfish.

Durborow, R. M. 2010. Fish disease case for Don Rogers and Mary Gonda, Shelbyville, KY; channel catfish.

Durborow, R. M. 2010. Fish disease case for Kraig Koontz, Wilmore, KY; discus commercial production business.

Durborow, R. M. 2010. Fish disease case for Dr. Steve Mims & Rick Onders, KSU; hybrid striped bass from KSUARC and Frankfort Wastewater Treatment Plant.

Durborow, R.M. 2010. Farm visit to James Garrison, Clay County, to help establish Everett King in minnow production.

Durborow, R. M. 2010. Farm visit to Bill Mattingly, Lebanon for aquatic weed control.

Durborow, R. M. 2010. Pond visit to Liz Toohey, Frankfort, with Catherine Frederick.


Durborow, R. M. 2010. Served as Andy Redden’s major professor in his successful defense of his thesis research in June 2010. Other committee members were Drs. Carl Webster and Boris Gomelsky.

Durborow, R. M. 2010. Office visit from Phil Scheil, ornamental fish pond management advisor.

Durborow, R. M. 2010. Pond visit with Anderson County Agent for Ag and Natural Resources to advise pond owner on aquatic weed control.


Durborow, R. M. 2009. Meeting with Nicholas County Industrial Development Committee at Carlisle Bank to investigate a funding source for Everett King.

Durborow, R. M. 2009. New Agent orientation/tour/presentation for county staff in University of Kentucky county offices.

Gomelsky, B. 2009-2010. Member of KSU Faculty Senate.

Gomelsky, B. 2009-2010. Member of Faculty Senate Curriculum Committee.

Gomelsky, B. 2009-2010. Member of Faculty Recognition Committee.

Gomelsky, B. 2009-2010. Served as the Associate Editor of the North American Journal of Aquaculture.


Gomelsky, B. 2009-2010. Reviewed six scientific articles for different scientific journals.

Johnson, K. H. Serving as the Records Management Liaison for the Division of Aquaculture.

Johnson, K. H. Serving as a member of the Kentucky State University Strategic Plan Task Force.

Johnson, K. H. Serving as a member of the Staff Senate from 2010–2012.


Mims, S. D. 2009-2010. Member of the Animal Welfare Committee.

Mims, S. D. 2009-2010. Serve on the University Faculty Grievance Hearing Panel.


Mims, S. D. 2009-2010. Member of the Professional Concerns Committee (non-senator).

Mims, S. D. 2009-2010. Member of Paddlefish subcommittee for Aqua Task Force, Ex officio.


Porter, T. 2009. Co-authored article with Dr. Tidwell for the Kentucky Academy of Science newsletter


Porter, T. 2009. Placed Master of Environmental Studies Web site link on Aquaculture Web site


Porter, T. 2010. Technology presentations (2) for possible KSU contributors brought by Bill Wilson.


Porter, T. 2010. Negotiating with PSG on second proposal for upgrade of videoconferencing equipment to HD.


Porter, T. 2010. Designed tri-fold to promote fall 2010 classes – printed 400 for Boris’ mailing.


Porter, T. 2010. Edited KSU montage for showing at the Sustainability Center’s Grand Opening.

Porter, T. 2010. Serving with Dr. Tidwell on design committee for interpretive center at Paul Sawyier Library.

Porter, T. 2010. Working w/ Bill Wilson to fulfill all WEG requirements.

Porter, T. 2010. Attended the National Association of Broadcasters’ conference and post production workshops.

Schneider, K. 2009. Consulted with the harvest of regional prawn growers including Steve Price and the North Point Correctional Facility.
Thompson, K. R. 2009. Assisting Dr. Christopher Owens and graduate student Andy McDonald in fatty acid analysis of freshwater mussels and operation of GC located in the Nutrition Analytical Lab related to their research program.

Thompson, K. R. 2009. Assisted Nathan Bussen (Dr. Dasgupta’s graduate student) in the design and set-up of a freshwater crayfish system for his thesis project.

Thompson, K. R. 2009. Assisted Andy Redden (Dr. Durborow’s graduate student) in thesis project in which study was conducted in our Nutrition wet-lab facility and data analysis.

Thompson, K. R. 2009. Assisted Tiffany Ogunsanya (Dr. Durborow’s student) in her thesis project in which study was conducted in our Nutrition wet-lab facility and data analysis.


Tidwell, J. H. Reviewed the prawn section of the Seafood Watch Seafood Report issued by the Monterey Bay Aquarium in Monterey, California.

Tidwell, J. H. Testified before the Kentucky General Assembly – Joint Sub-Committee on Agriculture.

Tidwell, J. H. Addressed the Regional Stewardship Advancement committee concerning the EEC and Kentucky river project.

Tidwell, J. H. Met with Lee Andrews and Leroy Koch from the KYFWS - Kentucky Ecological Field Services - about graduate student internships and research projects.

Tidwell, J. H. Serve on the Editorial Board of the Korean Journal of Fisheries and Aquatic Sciences.
Tidwell, J. H. Interviewed on Frankfort Radio AM1490 concerning the KSU Aquaculture Program.

Tidwell, J. H. 2009. Mentioned for his work at KSU’s Aquaculture program for the article “Prawn of Possibilities,” by David Mudd; appearing in Business Lexington.


Tidwell, J. H. Reviewed three articles for Aquaculture, a peer-reviewed journal.


Tidwell, J. H. Reviewed three articles for Aquaculture Research.

Tidwell, J. H. Reviewed one proposal for NCRAC.

Tidwell, J. H. Reviewed one article for ARS.


Tidwell, J. H. Serve on the KSU GIS Advisory Board and Steering Committee

Tidwell, J. H. Serve on the Faculty Development Advisory Council.

Tidwell, J. H. Continues to serve on the university’s Strategic Planning Task Force.

Tidwell, J. H. Continues to serve on the university’s Biohazard Committee.

Tidwell, J. H. Continues to serve on the university’s Institutional Research Committee.


Tidwell, J. H. Continues to serve on the Graduate Council.

Tidwell, J. H. Serving as Co-Chair of Environmental Education Center Steering Committee.

Webster, C. D. and Thompson, K. R. 2009. Mentored REAP students in USDA Summer Internship program (Jasmine M. DiProspero and Gina Guillen)
Weibel, C. 2009. Attended two-day class “Introduction to ArcGIS.”


Weibel, C. 2009. Assisted Wyvette Williams with servicing the large format printer.


Weibel, C. 2009. Assisted William Stilwell with maintenance at the EEC.

Weibel, C. 2009. Provided AV support for the Nursing Department in the large classroom.


Weibel, C. 2009. Proctored Extension staff meeting in Distant Learning Classroom, June 09.


Weibel, C. 2010. Visited Centre College, Danville, Kentucky, and reviewed HD equipment for DLC Upgrade.

Weibel, C. 2010. Provided audio tracks and photos for video project at the Grand Opening of the Center for Sustainable Family and Farms.

Weibel, C. 2010. Published eight photos in “Freshwater Prawns, Biology and Farming.” 2010 by Blackwell Publishing Ltd.

Weibel, C. 2010. Posted “Goat Hoof Care” on YouTube for Ken Andries.


Wurts, W. A. Served as proposal reviewer for the National Oceanic and Atmospheric Administration for the 2010 Saltonstall-Kennedy Grant Program.

Wurts, W. A. 2009. As project director, attended the organizational meeting for the 1890s Capacity Building Grant Program at KSU in Frankfort, November 24.


Wurts, W. A. Served as journal reviewer for Reviews in Fisheries Science, 94-page manuscript.


Wynne, F. 2009. Presented a pond management and aquatic plant and algae control display at the UK Research and Extension Center Field Day in Princeton on July 23 – approximately 100 visited the display.

Wynne, F. 2009. Presented an aquaculture extension program display during the KSU Aquaculture Research and Extension Center open house on July 25, 38 attended.

Wynne, F. 2009. Made a site visit to a Fulton County pond to evaluate the site for a potential pond management demonstration program – July 20, three attended.

Wynne, F. 2009. Made site visits to a number of McCracken and Graves County ponds to collect aquatic plants and algae specimens for the UK Agricultural Field Day at Princeton – July 22.

Wynne, F. 2009. Made a site visit to a Carlisle County pond to discuss filamentous algae control – September 11.

Wynne, F. 2009. Made a site visit to a McCracken Co. pond to evaluate water quality and discuss general pond management – September 11.

Wynne, F. 2009. Made a site visit to a western McCracken County location to evaluate the property for the construction of a 2.5 acre pond – September 11.

Wynne, F. 2009. Made a site visit to a southern McCracken County pond to evaluate an aquatic plant control problem and to recommend liming – September 11.

Wynne, F. 2009. Made a site visit to a Ballard County pond to evaluate an aquatic plant control problem – September 17.

Wynne, F. 2009. Made a site visit to a Woodford County freshwater shrimp/tilapia pond to evaluate the lined pond environment and determine the size of shrimp and fish for harvest – September 29.

Wynne, F. 2009. Made a site visit to the NKU campus pond to evaluate water quality and to monitor a nuisance water fowl population – September 30.

Wynne, F. 2009. Made a site visit to a McCracken County pond to evaluate a rooted aquatic plant problem – October 6.

Wynne, F. 2009. Made a site visit to a McCracken County pond to evaluate a filamentous algae and water primrose control problem – October 6.

Wynne, F. 2009. Made a site visit to an ornamental subdivision pond/canal system to evaluate a structural problem and aquatic plant control issues – October 28.

Wynne, F. 2009. Made a site visit to Ken’s Bait and Tackle Shop in Lake City to evaluate bait minnow holding systems and related fish losses – November 2.

Wynne, F. 2009. Made a site visit to a 75-acre, abandoned Graves County clay mine pit to evaluate water quality and discuss fish population management options – November 3.

Wynne, F. 2009. Made a site visit to Ponderosa Farms catfish operation with Tamara Fookarian, regional director, National Algae Association, to discuss catfish farming and how ponds may be used for harvesting algae for alternative energy uses – November 6.
Wynne, F. 2009. Made a site visit to four Crittenden County sport fishing ponds to evaluate water quality and evaluate sites for new ponds – November 23.

Wynne, F. 2009. Made a site visit to a resort pond near Hardinsburg, KY, to evaluate water quality and a blue-green algae bloom complaint – December 2.

Wynne, F. 2009. Made a site visit to the Murray State University fish production ponds with Drs. Bill Wurts and Jim Davis (MSU) to evaluate the structures for potential demonstration project use – December 4.

Wynne, F. 2010. Made a site visit to Lynn Grove to sample female paddlefish with gill nets from catfish ponds to determine egg development – March 8, five attended.

Wynne, F. 2010. Made a site visit to two Hardin ponds to evaluate water quality in a newly constructed four-acre pond, and a small woodland pond in need of renovation and damaged trees removed from the 2009 ice storm – March 10.

Wynne, F. 2010. Made a site visit to a one-acre Graves Co. pond to evaluate water quality for potential liming - March 17.

Wynne, F. 2010. Made a site visit to a west Paducah borrow pit pond to evaluate a filamentous algae problem and to recommend the addition of agricultural limestone – March 19.

Wynne, F. 2010. Made a site visit to Lynn Grove to assist with the harvest and processing of approximately 800 lbs of male paddlefish for test marketing – March 23, 10 participated.

Wynne, F. 2010. Made a site visit to the Purchase Medical Center complex pond to evaluate an aquatic plant management problem – April 23.

Wynne, F. 2010. Made a site visit to Clinton, Kentucky, to evaluate a fish kill that occurred in a small livestock pond – April 27.


Wynne, F. 2009. Attended the Southern Regional Aquaculture Center meeting in Memphis to determine project funding for the upcoming year August 6-7, approximately 40 attended.

SERVICE TO THE PROFESSION AND UNIVERSITY  
(CONT)


Wynne, F. 2009. Attended a KSU Land Grant Staff meeting via video conference from the Princeton Research and Education Center – October 27.


Wynne, F. 2009. Continue to serve as the Technical Committee member representing KSU Aquaculture Extension on the Southern Regional Aquaculture Center reviewing aquaculture funding proposals and requests for proposal.

Wynne, F. 2010. Participated in a WKMS Public Radio (Murray State University) interview with Dr. John Murdock regarding catfish farming and aquaculture in Kentucky, conducted by reporter Angela Hatton on February 24.


TOURS AND PROMOTIONAL ACTIVITIES

Bean, W. 2009. ARC Tour KSU School of Nursing NEEP students (14 students) and “Introduction to Aquaculture” Presentation, July 27.

Bean, W. 2009. ARC Tour Mr. Phillip Garret from Mary Hurst (40 students); “Introduction to Aquaculture” Presentation; and seine demonstration with a large paddlefish (hands-on activity), July 24.

Bean, W. 2009. ARC Tour KSU SEED students (18 students), October 8.

Bean, W. 2009. ARC Tour Quest Farm students (15 students and staff), December 11.

Bean, W. 2010. ARC Tour YMCA Black Achievers (30 students), February 2.
TOURS AND PROMOTIONAL ACTIVITIES (CONT)

Bean, W. 2010. ARC Tour Frankfort Leadership Group (Frankfort Chamber), March 11.

Bean, W. 2010. ARC Tour for Bill Wilson and two guests, April 14.

Bean, W. 2010. ARC Tour for KSU Admissions (60 students), April 21.

Bean, W. 2010. ARC Tour LSAMP Bridge Program (30 students); “Importance of Applied Science” Presentation; and seine demonstration with a large paddlefish (hands-on activity), June 24.


Wurts, W.A. 2009. Organized, developed and coordinated hands-on, Kentucky State University Aquatic Weed Identification and Aquaculture exhibit for the University of Kentucky College of Agriculture Field Day in Princeton, KY, July 23.


Wynne, F. 2010. Made a site visit to a Paducah housing development retention pond to evaluate a blue-green algae bloom complaint – April 28.

Wynne, F. 2010. Made a site visit to a Wingo, KY, catfish operation with Bob Durborow to collect catfish for VHS sampling and potential sale within West Virginia – May 3.

Wynne, F. 2010. Made a site visit to Oxford, MS, to evaluate a perspective site for a large fee fishing operation – May 13.

Wynne, F. 2010. Made a site visit to a Priorsburg, KY, catfish pond to evaluate a low dissolved oxygen related fish kill – May 26.

Wynne, F. 2010. Made a site visit to a Caneyville, KY, farm to evaluate the site for a potential recreational pond field day – May 28.
TOURS AND PROMOTIONAL ACTIVITIES (CONT)

Wynne, F. 2010. Made a site visit to a Graves Co. pond to evaluate a low dissolved oxygen related fish kill – June 2.

Wynne, F. 2010. Made a site visit to a McCracken Co. pond to evaluate a watermeal problem – June 4.

Wynne, F. 2010. Made a site visit to a large property containing three ponds to evaluate an algae control problem and monitor water quality – June 4.

Wynne, F. 2010. Made a site visit to an ornamental pond in Mayfield to evaluate water quality and a fish kill – June 8.

Wynne, F. 2010. Made a site visit to Ponderosa farms in Lynn Grove to evaluate the harvesting and loading of catfish into a live-haul truck that had lost two previous loads of fish (Approximately 5,000 lbs) – June 9.

Wynne, F. 2010. Made a site visit to a Paducah pond to evaluate a fish kill and monitor water quality – June 18.

Wynne, F. 2010. Made a site visit to a Hickory, KY, farm pond site where the water treatment plant had accidentally discharged lye into the pond via a drainage ditch. Monitored water quality and made management recommendations – June 21.

Nathan Cochran (L) and Tod Porter record audio and video for a seafood sustainability video production.
INFORMATION TECHNOLOGY


Cochran, N. C. 2009. Installed new 2TB external hard-drive and began transferring online course AVIs.


Cochran, N. C. 2009. Enrolled students for fall semester FRST, FG & POA.


Cochran, N. C. 2009. Set up Blackboard courses for fall semester FRST, FG, POA.


Cochran, N. C. 2009. Enrolled students for spring semester online courses (POA, FRST, FD).


Cochran, N. C. 2009. Recorded classes 1–9 of Fish Genetics with Dr. Gomelsky.
Cochran, N. C. 2009. Edited classes 1 – 5 of *Fish Genetics*.


Cochran, N. C. 2009. Layed JPEG & animations to class 1 – 5 *Fish Genetics*.


Cochran, N. C. 2010. Recorded Class 10-17 FG.

Cochran, N. C. 2010. Edited Class 6-7 FG.


Cochran, N. C. 2010. Enrolled students for POA summer semester courses.

Cochran, N. C. 2010. Enrolled students for fall semester *FG, FRST & POA*.


Cochran, N. C. 2010. Running summer semester course *POA*.

Cochran, N. C. 2010. Connected to Georgetown University for teleconference call to assist SEED program.


Cochran, N. C. 2010. Setup and ran teleconference meeting with Princeton for Land Grant Extension meeting.


Durborow, R. M. 2009. Recorded Water Quality Management online course as part of USDA Teaching Capacity Building Grant.

Gomelsky, B. 2009-2010. Taught Online Courses: *Fish Genetics* and *Fish Reproduction*.

Gomelsky, B. 2009-2010. Worked on recording *Fish Genetics* online course to video format
Porter, T. 2009. *Sustaining Our Seafood* video: shot video at sewer plant twice, met w/ Ken Bates on animation, & wrote script based on Dr. Mims’ content outline.


Porter, T. 2009. Downloaded Squeeze 5.1 which resolved Sorenson conversion problems with 5.0.

Porter, T. 2009. Several calls to COT resulting in replacement of CSU/DSU in DL lab.


Porter, T. 2009. Assisted with Kentucky Highway Dept. videoconferences


Porter, T. 2009. Three-day trip to Alabama to shoot catfish video for sustainability video

Porter, T. 2009. Shot video of paddlefish harvest at sewer plant for inclusion in sustainability video


Porter, T. 2009. Did color state fee-fishing map of all counties with Ken Bates.

Porter T. 2009. Shot video of Small Farmers’ tour of ARC.

Porter, T. 2009. Took photos of Heritage Board at EEC and provided copies to three members.


Porter, T. 2009. Did audio and video on two *Water Quality* lab shoots.


Porter, T. 2010. Designed WEG exhibit and worked with Corman and Associates in developing 3-D mockup, and did POs for seven other companies that will provide hardware; presented to President’s cabinet; met w/ WEG rep Marilee Myers to discuss KSU exhibit; got three quotes for Microsoft Surface; met w/ Best Buy consultant to select four monitors; registered 11 persons for ID check; wrote three exhibit descriptions; got quote from Post Printing and KSU Copy Shop for tri-fold production.

Porter, T. 2010. Setup one-month student recruitment TV commercial to run on eight cable networks through the Frankfort Plant Board cable system.

Weibel, C. 2009. Backed up Dr. Webster’s files onto an external hard drive.

Weibel, C. 2009. Tackled over 109 computer hardware/software and network issues at the ARC.


Weibel, C. 2009. Reviewed and ordered computers, computer software/hardware for the ARC.


Weibel, C. 2009. Replaced and upgraded software for Karla’s, Carolyn’s and Wes’s computers.

INFORMATION TECHNOLOGY (CONT)

Wurts, W. A. Updated content and links, and collected/analyzed user data for Aquaculture Information Web site. Over 369,234 publications and slideshows were downloaded from July 1, 2009 to June 30, 2010. This represents an average of 1,011 information downloads per day by unique IP addresses.

Wurts, W. A. Continued work with county agents and public to use digital photos via e-mail and the Internet for aquatic weed identification to improve speed and efficiency of service to agents and farmers and broaden effective service area.

INTERAGENCY INVOLVEMENT

Coyle, S. D. 2010. Worked in cooperation with the Kentucky Department of Agriculture to evaluate an aquaculture farm for a prospective producer in Shelby County.

Durborow, R. M. 2009. Worked with American Fisheries Society Fish Health Section Professional Standards Committee on conference call (serving as past committee chair).


Durborow, R. M. 2009. Helped to host federal inspection team for the National Catfish Inspection Program, a branch of the federal Food Safety Inspection Service, led by Dr. Otis Miller, DVM.

Durborow, R. M. 2009. Served as information source for CESO (Ohio engineering firm) bidding for a construction job with the Kentucky Department of Fish and Wildlife Resources at the Minor Clark Hatchery.

Durborow, R. M. and Owen, C. 2009. Interaction with Dr. Tom Fox, malacologist from North Carolina State University consulting with our lab on freshwater mussel culture.

Durborow, R. M. and Owen, C. 2009 - 2010. Collaboration between Kentucky State University Fish Disease Diagnostic Laboratory and Kentucky Department of Fish and Wildlife Resources for freshwater mussel culture.

Durborow, R. M. 2009. Participated in Online Incentive Program directed by Dr. Penny Smith, Jennifer Miles and N’Namdi Paskins.

Durborow, R. M. 2010. Reviewed a CSREES research article.

Durborow, R. M. 2010. Tour for Midway College biology class for Dr. Elizabeth Vaughn.


Mims, S. D. Working with Mt. Vernon (Lake Linville), North Laurel Water District (Wood Creek), Madisonville, Mt Sterling, Springfield, Russellville in paddlefish ranching projects. Sampling water quality, phytoplankton and zooplankton in Lake Linville and Wood Creek Lake where paddlefish are stocked.

Mims, S. D. Demonstration with Aquila International, Inc. (Tim Parrott) and Big Fish Farm, Inc. (Renee Koerner) to grow commercial numbers of paddlefish and hybrid striped bass at Frankfort and Cincinnati wastewater treatment plants, respectively.

Mims, S. D. Assisted Winchester Municipal Utilities (WPU) in getting approval from Kentucky Division of Water to incorporate aquaculture into WMU’s plan in preventing demolition of their decommissioned sewer plant and allowing its use as an aquaculture hatchery facility. Aquila International has a five-year contract to raise fish at this site.

Mims, S. D. Collaboration with Jack Stickney of Kentucky Rural Water Association to identify municipalities that have water supply lakes for reservoir ranching of paddlefish.

Dr. James Tidwell was invited by the USDA, Agricultural Research Service (ARS), Office of Scientific Quality Review to organize and Chair a review panel to evaluate proposals submitted by ARS Aquaculture scientists. The review panel convened by Dr. Tidwell had scientists and industry representatives from six states. They met in Beltsville, Maryland, for two days of discussion and deliberation.

Tidwell, J. H. 2009. Worked with Angela Caporelli from the Kentucky Dept. of Agriculture at the Franklin County Farmers Market to distribute information about aquaculture in Kentucky as well as cook and serve locally grown tilapia and prawn.


INTERAGENCY INVOLVEMENT (CONT)

Tidwell, J. H. 2009-2010. Serve as a representative for the Translational Research Conference Committee which is chaired by President Ramsey and reports to the Council on Postsecondary Education.

Tidwell, J. H. 2009-2010. Continues to chair a committee to study the feasibility of intensive recirculating saltwater shrimp production under Kentucky conditions for the Governor’s Office of Agricultural Policy. Members include representatives of UK, GOAP, WKU, and Sygen.


Wurts, W. A. Worked with Vo. Ag. teacher at Caldwell Co. High School to trouble shoot recirculating system design for Vo. Ag. Program, 07/17/2009.

Wurts, W. A. 2009. Organized and coordinated with UK College of Agriculture Specialists to develop Kentucky State University Aquatic Weed Identification exhibit at the University of Kentucky College of Agriculture Field Day in Princeton, KY. Exhibit was setup and staffed in collaboration with Forrest Wynne and Bob Durborow, 07/23/2009.

Wurts, W. A. In collaboration with the UK County Extension Agent in Morehead, KY, enlisted the participation of Forrest Wynne to develop and conduct an Aquatic Weed Control In-service Training program for county agents and pesticide applicators, 12/10/2009.

Wurts, W. A. Served as proposal reviewer for National Oceanic and Atmospheric Administration for the 2010 Saltonstall-Kennedy Grant Program.

Wurts, W. A. As project director, collaborated with Dr. Jim Davis (MSU), Dr. Carl Webster (KSU) and Forrest Wynne (KSU) to develop and submit a proposal for the 2010 Capacity Building Grants Program.

Wurts, W. A. As organizer and principal coordinator, collaborated with Dr. Peter Perschbacher and Dr. Joe Tomasso to develop a novel program, recruit speakers and schedule an invited special session for World Aquaculture 2010, the triennial international conference of the WAS, AFS and NSA (March 2010).

Wurts, W. A. In collaboration with Dr. Peter Perschbacher (UAPB), co-moderated a special session at World Aquaculture 2010, March 4 & 5, 2010.

Wurts, W. A. In collaboration with Forrest Wynne, conducted Aquatic Weed Control In-service training programs for UK county agents and pesticide applicators (02/12/2010 & 03/26/2010).
INTERAGENCY INVOLVEMENT (CONT)

Wurts, W. A. In collaboration with Forrest Wynne, conducted a Live-Haul Workshop in Frankfort, KY (03/27/10).

Wurts, W. A. Continued work with UK County Agents to use digital photos via e-mail and Internet for aquatic weed ID.

Wurts, W. A. Member of national eXtension community/group since 2007.

Wurts, W. A. Began serving as Extension Coordinator for the multiple-university NIFA-AFRI proposal addressing the use of alternative plant protein sources for aquaculture feeds.

Wurts, W. A. Began work with Forrest Wynne revising the Fact Sheet No. 390 for the USDA Southern Regional Aquaculture Center (SRAC).

Wynne, F. 2009. Worked with Purchase Area Resource, Conservation and Development District Officer, Bob Johnson, regarding the operation and maintenance of their dissolved oxygen meters for the Water Watch Program – August 17.

Wynne, F. 2009. Met with KYDFWR Director of Fisheries, Gerry Buynak, to discuss how Kentucky catfish growers may supply the department’s Urban Fishing Program and to secure functional data lists of fish transport and fee fishing operation license holders – September 30.


Wynne, F. 2010. Continued work with Dane Balsman, KYFWR Urban Fisheries Biologist, regarding potential live-haulers to stock fish for their urban ponds and lakes during spring and summer 2010.

Wynne, F. 2010. Participated in a conference call to plan the 5th National Extension Specialists’ meeting to be in Memphis in 2011 – April 26.

Wynne, F. 2010. Continue to serve as the Technical Committee member representing the KSU Aquaculture Extension Program on the Southern Regional Aquaculture Center reviewing aquaculture funding proposals and requests for proposal.
SERVICE TO THE COMMUNITY


Coyle, S. D. 2009-2010. Provide therapy dog work to children at The King’s Center.


Mims, S. D. 2010. Concession manager for Franklin County High School Lady Volleyball team, Frankfort, KY.

Mims, S. D. 2010. Committee member of Capital Campaign for Good Shepherd Church, Frankfort, KY.

Porter, T. 2010. Serving with Dr. Tidwell on design committee for interpretive center at Paul Sawyier Library.

Thompson, K. R. 2009. Manager, Little League Boys Baseball (10-12 yrs-old; Major League; Summer League), Anderson County Little League, Inc., Lawrenceburg, KY.

Thompson, K. R. 2009. Manager, Little League Boys Baseball (9-12 yrs-old; Fall League), Anderson County Little League, Inc., Lawrenceburg, KY.

Thompson, K. R. 2010. Manager, Little League Boys Baseball (11-12 yrs-old; Major League; Summer League), Anderson County Little League, Inc., Lawrenceburg, KY.

Thompson, K. R. 2010. Manager, Travel Baseball Team (11-13 yrs-old), Lawrenceburg, KY.


Tidwell, J. H. 2009-2010. Chairing the Comprehensive School Improvement committee for Frankfort High and Frankfort Middle schools.


Weibel, C. 2009. Provided photo and video support to North Point Training Center.

Weibel, C. 2009. Worked with REAP students on their presentations and attended the event on July 18.

Weibel, C. 2009. Photographed and supplied prints to the Franklin County High School JROTC.

Weibel, C. 2009. Supplied DVD of Small Farm Conference photos to Lois Jackson, State Public Affairs Specialist, USDA NRCS.

Weibel, C. 2010. Photo support for DARE Program graduation, Second Street School, March 5.


Children from the Heritage Elementary School in Shelby County exit the Environmental Education Center’s mobile unit.
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KSU Division of Aquaculture * A Land Grant Program
KSU Program of Distinction
College of Mathematics, Science, Technology & Health

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