NEWSLETTER OF THE WESTERN INTEGRATED PEST MANAGEMENT CENTER

June 2006

WIPMC Confirms 2006 Competitive Funded Projects

Development of a "Yellow Starthistle Management Guide" for the Western United States

Dr. Joseph DiTomaso, University of California, Davis, Calif.

Abstract: Yellow starthistle (Centaurea solstitialis) is the second most widespread invasive plant species in the western United States, occupying an estimated 14.8 million acres. Numerous control strategies, particularly integrated approaches, now exist for managing this noxious weed. Joe DiTomaso, Guy Kyser, and Mike Pitcairn wrote a comprehensive "Yellow Starthistle Management Guide." The valuable, educational guide reviews more than 240 references and is a handy, decision-making tool for land managers. The project provides funds to produce a high-quality, glossy manual for distribution at no cost to land owners throughout the West. The publication will help to develop effective, economical, and safe strategies for managing this serious invasive weed using IPM approaches that maintain the function and integrity of ecosystems.

Predator Control of Rodent Pests

Jackie Hastings, Polk Soil and Water Conservation District, Dallas, Ore.

Abstract: The project implements an IPM program that uses natural predator populations as a control mechanism for rodents. Rodent damage to agricultural crops has been identified as a significant resource problem. Project cooperators will conduct outreach for agricultural producers, private landowners, and other natural resource managers; visit sites to discuss pest issues; and make recommendations for locations of perches and nest-boxes. They will provide stakeholders with predator perches and nest boxes, who will be required to install, monitor, and maintain them. The project goal is to stimulate a growing acceptance for alternative forms of pest control and reduce participants' use of rodenticides.

A New IPM Delivery Method to Increase Adoption Rates Ronda Hirnyck, University of Idaho, Boise, Idaho

Abstract: A matrix of data containing crops, key pests, and various pest management practices for controlling each pest will be developed. Pesticide options will be linked to the NRCS WIN-PST database. A compilation of accepted IPM practices for each crop and crop/pest combination will be formatted into a userfriendly design on the OnePlan Web page that will allow users to develop a basic IPM plan for each crop of interest. The proposed matrix will deliver IPM information to producers and provide a tool for NRCS to use with producers for program enrollment and for including Conservation Security Program enrollment. It also provides a mechanism to work collaboratively with NRCS to provide incentives for producers' adoption of IPM practices. The results of the matrix will be usable for other states in the PNW region with similar pests and growing conditions.

Research and Extension on Integrated Biological and Cultural Management of Canada Thistle

Dr. Fabian Menalled, Montana State University, Bozeman, Mont.

Abstract: Canada thistle (*Cirsium arvense*) is an aggressive, creeping

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perennial weed that infests crops, pastures, rangelands, roadsides, and non-crop areas throughout the northern and western United States. Several stakeholders, including organic growers and alfalfa seed growers, have expressed their concern about the lack of viable management options for Canada thistle. This project's main goal is to evaluate if the joint usage of pathogens, insects, and cultural practices can provide efficient, economically durable, and environmentally benign management of Canada thistle. To achieve this goal, we have formed a multidisciplinary team composed of a cropping system specialist, an entomologist, and a weed scientist. We will complement field and greenhouse experiments with extension material for on- and off-farm presentations to illustrate the effect of synergistic interactions between biological and cultural practices on Canada thistle management.

WIPMC Joins Water Quality Discussions

The Western IPM Center joined the Region 10 Water Quality Program meeting in January. Both programs are funded by CSREES under 406 Integrated Programs and are interested in finding ways to work more closely together.

The results of this meeting are a better understanding of the goals and objectives of each program and a commitment to identify ways in which these programs can work more closely together.

To further this effort, WIPMC is providing support to our state contacts within this region (Washington, Oregon, Idaho, and Alaska) to meet jointly at the next Region 10 Water Quality Program meeting in June, where they will discuss the possibility of submitting a proposal to develop a WIPMC Water Quality Workgroup.

Grants and Mid-term Review Reflect Commitment to Pest Management

By Rick Melnicoe

The Western IPM Center has been busy with a number of projects during the winter and spring. The most time-consuming project was preparation for the mid-term review (see separate article). In preparation for the review, we assembled a self-study document that is now available on our Web site at www.wripmc.org, and we made a presentation to the review team. Each regional IPM Center prepared similar materials, although we all made strikingly different presentations. The differences reflect the uniqueness of each region and highlight the need for continued flexibility in approaching regional issues. The review team was impressed with each IPM Center and noted strengths of the centers. I have to boast that the Western IPM Center got a lot of praise for "doing things right." Each of our partners in the West should take pride in their contributions in making the Western IPM Center successful.

The Regional IPM Grants Program recommended seven projects for funding to the Cooperative State Research, Education, and Extension Service (CSREES) for \$653,159. Project PIs and titles cannot be released until CSREES finalizes the contracts. The process for submission reviews (both relevancy and technical) went smoothly. However, there were five submitters who failed to include a relevancy statement. This was unfortunate since the review panels cannot evaluate incomplete proposals.

We had the best response yet to our March call for priorities for the various RFAs. We made this request to obtain stakeholder input for priority needs in the West. The WIPMC has a strong commitment to addressing pest management needs that are identified by stakeholders. The language included in our calls for proposals and subsequent funding attests to this commitment. All funded proposals must show relevance to these identified needs. The WIPMC has funding available for IPM issues related to pest management in agriculture, urban, and natural systems. The WIPMC also manages the Regional IPM Grants process, including issuing the call for proposals and making recommendations for funding to USDA-CSREES. Regional priorities are placed in the USDA Pest Management Alternatives Program (PMAP) call for proposals.

Relevancy statements for all western region PMAP proposals were ranked at least "fundable." Regional directors from each of the IPM Centers were present during the technical review of all proposals in April to provide comments and relevancy rankings. The West did well in the number of funded proposals. Details will be available once USDA-CSREES lets the contracts.

The requests for applications for Information Networks and Workgroups were released on June 8, with a due date of August 4. The IPM Issues RFA will be released at the same time as the Regional IPM Grants RFA, tentatively scheduled for September. The later date will better coincide with next year's research season, allowing PIs to better plan and coordinate other sources of funding. It also means we will have a better idea of carryforward funds from previous years to augment the total funds for this program.

The Western IPM Center advisory and steering committees met in Portland, Ore., on March 28-29. Reports of Center

progress and the mid-term review were made to the committees. The advisory and steering committees reviewed the priorities from stakeholders and incorporated them into broad and specific headings in the IPM Issues, Regional IPM Grants, and Pest Management Alternatives programs.

Budgets and funding levels for the programs in the Western IPM Center were also discussed at the annual meetings. Funding levels for all programs will remain level or increase as we close out the current grant. The steering committee recommended funding Information Networks for more than one year, but we'll defer this to the next grant cycle, as we only have one year left in the current grant.

On May 9, the House Appropriations Committee marked up the FY 2007 agriculture appropriation for USDA, including the CSREES. Based on the department's current understanding of committee action, \$1,185,792,000 is proposed for CSREES. This is an increase of \$147,735,000 over the FY 2007 President's Budget proposal of \$1,038,057,000 but is a decrease of \$13,529,000 from the FY 2006 appropriation with rescission of \$1,199,321,000.

Highlights of the CSREES appropriation as proposed by the committee are:

- Provides increases for the Hatch Act, McIntire-Stennis Cooperative Forestry, Smith-Lever 3 b&c, 1890 Research and Extension formula programs over the FY 2006 appropriated level.
- Maintains the current formula distribution for the Hatch Act and McIntire-Stennis Cooperative Forestry funds.
- Restores funding for the Animal Health and Disease Research Program at the FY 2006 level.
- Provides a 5 percent increase for the National Research Initiative over the FY 2006 appropriated level.
- Maintains Section 406 programs in the Integrated
 Activities account but with reductions in funding from the
 FY 2006 appropriated level for Water Quality, Food Safety,
 Pest Management Centers, Crops at Risk from FQPA
 Implementation, and FQPA Risk Mitigation Program for
 Major Food Crop Systems. However, the funding allocated
 for Regional IPM Centers is reduced by \$235,000. Other
 406 programs, except Methyl Bromide Transitions and
 the Organic Transitions programs, saw similar proposed
 reductions.
- Proposes an increase over the FY 2006 appropriated level for EFNEP and includes General Provision Sec. 746 which ensures that each eligible institution receives no less than \$100,000.
- Increases the indirect cost cap on competitively awarded research, education, and extension grants to 22 percent from the current cap of 20 percent. (General Provision Sec. 706)
- Increases to up to 30 percent of NRI funds which may be used to carry out a competitive grants program under the same terms and conditions as those provided in Sec. 401 of AREERA. (General Provision Sec. 718) This is an increase from the current cap of 22 percent.

House floor action is scheduled for May 17. However, this date could change. No schedule has been announced for Senate action.

"OnePlan" Conservation Planning Tool to Deliver Information

The OnePlan is a Web-based, conservation-planning tool used by farmers, ranchers, and consultants. A team of folks in Idaho has been working with NRCS to develop an IPM planning tool that will deliver IPM information to producers and provide necessary documentation for USDA-NRCS conservation programs.

Currently, the team is developing a matrix for a selected group of commodities. This matrix will outline biological, cultural, and chemical pest control tactics for a variety of pests at crop stages identified in the commodityspecific Pest Management Strategic Plan.

The producers will be able to select the practice or practices they wish to use. That information will be recorded and summarized, along with scouting records and pesticide use records. If pesticides are used, the NRCS risk assessment tool, WIN-PST, will rank the pesticide choices to allow the producer to make the best environmental selection based upon their soil types and pesticide properties.

The Idaho team has joined with the University of California Statewide IPM Program to share programming information, especially use of WIN-PST. We anticipate this linkage with UC IPM will enhance the OnePlan information delivery, and both groups hope to expand future IPM information delivery by sharing resources and capturing the most current technology available.

— Ronda Hirnyck, Associate Professor, University of Idaho Boise Center, rhirnyck@uidaho.edu



The UC IPM Program Partners with NRCS

The University of California Statewide IPM Program (UC IPM) has been working closely with the Natural Resources Conservation Service (USDA-NRCS) in California to promote and implement IPM programs that will protect the environment and enhance pest management for California farmers. Although traditionally associated with soil and water conservation programs, NRCS's mandate has expanded to include other environmental protection areas including minimizing the negative impacts of pesticides in air, water, plant, and animal resources, as well as on human health.

As part of larger conservation plans, NRCS works closely with land owners to identify environmental risks associated with pest management practices and mitigation practices that address potential problems. In 2005, the California NRCS adopted a state Pest Management Standard (595) that encourages growers to create IPM plans incorporating practices identified on the UC IPM Web site. Growers who include IPM components in their conservation plans are often able to obtain funding to support innovative IPM practices such as new field sampling programs, or use of new tools such as mating disruptants or release of biological control agents.

The California NRCS also established a certification process for NRCS employees, many of whom are experts on soil or water conservation but have more limited training in pest management, to qualify them to approve pest management components of a conservation plan. UC IPM has created a two-day, comprehensive training program for NRCS staff to give them the fundamentals of IPM and some practical experience in developing IPM plans.

NRCS has funded a special project by UC IPM to develop comprehensive IPM programs for 15 major crops that can be used as templates by growers wishing to participate in the IPM aspects of NRCS programs. Having clear templates will make it much easier for NRCS staff to help define, approve, and evaluate IPM components for conservation plans. Each year-round IPM program includes an annual checklist that guides farmers through a year of implementing preventive cultural practices, monitoring pests, making sound management decisions, and planning for the next season. The programs have been specifically developed to outline IPM programs that reduce water quality risks and other environmental problems.

The year-round IPM programs provide easy-to-use checklists and monitoring forms that allow growers, or their pest management advisers, to document for NRCS or other interested groups, such as certification programs or water quality coalitions, that essential elements of the IPM program have been carried out. Also included are photo pages to help growers identify pest problems, as well as beneficial insects that they may see as they monitor their fields. A user-friendly WaterTox database that incorporates NRCS's WIN-PST data makes it easy for growers to quickly assess the potential water quality risks associated with pesticide choices for every pest in the UC IPM's extensive pest management guideline database.

Currently, year-round IPM programs have been completed for almonds, cotton, grapes, peaches, prunes, and plums. Additional programs for alfalfa, avocado, tomato, walnut, pear, strawberry, and nectarine are under way. View these programs on the UC IPM Web site at www.ipm.ucdavis.edu/PMG in association with the pest management guideline for each crop. WaterTox data is available for all pest management guidelines. — Mary Louise Flint, UC Statewide IPM Program, mlflint@ucdavis.edu.

Mid-Term Review of Integrated Pest Management Centers

Editor's note: Much of the following is taken directly from the report of the Mid-Term Review Team. Individual questions have been removed. The National Recommendations section summarizes the findings.

The four regional IPM Centers are required to have a midterm review of their programs as a condition of their grants. Centers provided written materials and presentations to the review team, which also heard presentations from government and university organizations and held conference calls with stakeholders from each of the four Centers. The team also held

The IPM Centers have proven to have the capacity and flexibility to coordinate a positive response among land grant university, public agency, and private partners to emerging pest management issues on a regional and national scale.

individual meetings with the leadership of each Center. The team felt the review provided an opportunity for assessment, recognition of accomplishments, and the implementation of corrective initiatives by IPM Center directors.

The team noted that the IPM Centers are potential models for other USDA-CSREES regional efforts since many of their guiding principles and protocols are applicable to other regional center-based programs. They recommended that communications among existing regional center programs should be enhanced to strengthen and permit shared learning and synergy among USDA-CSREES centers.

The review team was impressed with the success of the IPM Centers in transitioning from the former National Pesticide Impact Assessment program to a broad-spectrum IPM program. The Centers have been successful individually and as a network. Engaging a wide spectrum of nontraditional partners and reinforcing established IPM networks have facilitated IPM adoption across the nation. The IPM Centers have proven to have the capacity and flexibility to coordinate a positive response among land grant university, public agency, and private partners to emerging pest management issues on a regional and national scale. State IPM programs have been positively impacted through multi-state efforts fostered by the IPM Center grant programs. New relationships among scientists, educators, agency personnel, non-governmental organizations, and private businesses built in response to IPM Center grant requests for application continue to reap benefits through more externally funded IPM activities.

National Recommendations

Issues currently being addressed

The following recommendations are currently being done, and the review team encourages continuation and expansion where feasible:

- CSREES should provide future funding for continuation of the IPM Regional Centers on an equal distribution basis.
- Continue support of the Regional Centers and the benefits therein derived.
- Maintain the freedom of individual Centers to develop their own programs and priorities; Centers each have their unique priorities for their stakeholders.
- Endorse Center communications with stakeholders in their region and the interregional communication and collaboration among Center directors and staff.
- Sharing of resources and programs across regions is one
 of the strengths of the Centers. These collaborative efforts
 should continue to be fostered wherever appropriate.
 - Pest alerts
 - Crop profiles, crop timelines, Pest Management Strategic Plans
 - Information technology
 - Web-based development
 - Soybean rust project
 - School IPM initiative (in progress)
 - Newsletters
 - Insecticide Resistance Action Committee
 - National IPM Conference
 - Phone training sessions
- Support broad-based representation of stakeholders on advisory committees.
- Consider the Regional Centers' success as a model (prototype) for other future CSREES programs.

Issues that need to be addressed or significantly improved

The review team believes that the Centers could benefit from additional support in Washington. The role of CSREES in leading and supporting the Centers should be defined. CSREES management and the Center directors need to agree on the details of this support in the following ways:

- Centers strive to be timely in response to stakeholders' needs, and by and large, are doing a good job. However, CSREES also needs to be more assertive in response and provide leadership to the Centers. The Centers should clearly communicate their needs to CSREES in Washington.
- Centers need to continue efforts to establish positive relationships with other federal agencies. CSREES enlisting collaborative efforts of other federal partners can be helpful in this endeavor.
- Strong efforts should be made by Centers to continue to secure external funds to leverage the funds received from CSREES and to help support the additional program efforts required.
- To be in compliance with the National IPM Roadmap, strategic plans (as developed by the Northeast IPM Center), and Impact Assessment Evaluations should be developed by all Centers.
- The Centers should continue to encourage full participation of state IPM coordinators into Center

- activities.
- Partnerships with other organizations should be expanded to create greater awareness of and benefits for the Centers.
- CSREES should develop a remittance plan for other agencies that benefit from the use of and request crop
- timelines, crop profiles, and PMSPs. Such agencies should establish a means to provide the Centers with advance notice of their needs for new or revised documents to help the Centers prioritize their efforts.
- Develop user-friendly, informative annual reports for mass distribution to enhance Center visibility.

Organizations Form National IPM Interagency Group

In October 2004, representatives of various IPM entities (American Farmland Trust, CSREES, EPA, USDA Regional IPM Centers, universities, and others) formed the National IPM Interagency Group.

This meeting was a unique opportunity for people to enter into a cooperative, interagency effort to examine IPM on a national level. More specifically, the group began to develop a long-term strategy of cooperation to evaluate the current status of IPM throughout the nation and determine the next steps needed to drive the IPM Roadmap forward. The National IPM Interagency Subcommittee on Evaluation was formed to examine the economic, environmental, and health impacts associated with the adoption of IPM at the national level.

IPM Matrix

	IPM Focus Areas			
		Production Agriculture	Residential and Public Areas	Natural Resources & Recreational Environments
IPM Impact Areas	Environmental Impacts (Reduce environmental risk)			
	Health Impacts (Reduce risks to health)			
	Economic Impacts (Cost/Benefit)			

(Hoffman 2004. See above)

The subcommittee has been actively working with the IPM Roadmap (www.ncipmc.org/ipmroadmap/), the IPM matrix (Hoffman 2004 see above.) and logic models (University of Wisconsin-Extension 2004) to develop a framework to evaluate IPM. IPM models have been developed for each cell of the IPM matrix. Each model provides a visual representation of how IPM can impact the environment, health, and economics in production agriculture, residential/public areas, and natural resources/recreational environments. To date, the subcommittee has developed 16 IPM models.

In the near future, experts in the respective areas of IPM will review each IPM model. The revised IPM models will be used to develop outcome-level indicators. Pilot programs will be conducted at the university and regional levels to determine the usefulness of the indicators in grants programs and reporting systems. Ultimately, the products from this committee will be the framework for conducting an outcome-level evaluation of IPM. — Carol Pilcher, Interim Coordinator Pest Management and the Environment, Iowa State University.



Entomologist Dawn Gouge earns Environmental Achievement Award.

EPA Honors Entomologist with Environmental Achievement Award

Dawn Gouge, University of Arizona urban entomologist, received an Environmental Achievement Award from the U.S. Environmental Protection Agency (EPA) Region 9 on April 18.

Dawn leads the Arizona Children's Environmental Health Coalition and is being recognized for her outstanding work to promote adoption and implementation of IPM in Arizona's school districts. These school districts represent public, rural, border, inner-city, suburban, and Indian Land school districts. The program has impacted 347,000 children and has demonstrated more than 80 percent reduction in pesticide use and pest complaints, without significantly increasing staff workload or district expense. Arizona's IPM in Schools program has also been recognized by EPA and others as a model for sustainable statewide implementation of IPM in schools.

Now in its eighth year, the U.S. EPA Region 9's Environmental Achievement Awards program seeks to recognize those working throughout several western states (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations) to protect and preserve the environment. The program received more than 160 nominations this year. Winners were selected based on numerous criteria, including their innovativeness, ability to work with others, and the possibility of replicating the project.

5th National IPM Symposium Honors IPM Champions

by Sherry Glick, U.S. EPA

More than 650 people gathered in the Gateway City of St. Louis to share innovations that lead to a safer food supply, enhanced human health, and an improved environment. The 5th National IPM Symposium, "Delivering on a Promise," was April 4-6.

With more than 23 countries represented, the program included mini-symposia, workshops, roundtable sessions, and social events that revisited roots by remembering the basic tenets of IPM and addressing challenges to educate the public about the importance of IPM. Sessions addressed state-of-the-art strategies and technologies that will successfully solve pest problems in agricultural, recreational, natural, and community settings.

A key event at the symposium included the presentation of the inaugural National IPM Achievement Awards, honoring programs that demonstrate effective IPM practices and programs that deliver economic, health, and environmental benefits. The National IPM

Achievement Award winners are:

- Glades Crop Care
- Hawaii Area-Wide Fruit Fly Integrated Pest Management Program (HAW-FLYPM)
- Integrated Pest Management Program City and County of San Francisco
- Dr. Marc Lame, Indiana University's School of Public and Environmental Affairs
- Wisconsin Potato and Vegetable Growers Association

The Western Region winners are listed here:

Hawaii Area-Wide Fruit Fly
Integrated Pest Management Program
(HAW-FLYPM) This program includes
representatives from the USDA, University
of Hawaii, and the Hawaii Department
of Agriculture. The HAW-FLYPM
Program pioneered IPM techniques for
the area-wide control of four fruit fly
species using pilot locations on three of
Hawaii's farming islands. The program
uses a "1-2-3" approach consisting of

population monitoring and traps, field sanitation, and protein bait sprays. The HAW-FLYPM Program also integrates the use of population suppression (male annihilation, sterilization release, and biocontrol strategies), education and training for both residential homeowners and farm growers.

Integrated Pest Management
Program City and County of San
Francisco The City of San Francisco's
IPM program has pioneered aggressive
and creative strategies to reduce pesticide
use through deployment of innovative
pest management strategies in city parks,
buildings, the port, airport, and municipal
golf courses. IPM innovations have
reduced the city's total pesticide use by
more than 70 percent as of March 2006.

PMSP Update

- California Garlic PMSP Workshop was April 28 at the UC Westside Field Station.
- Hawaii Macadamia Nut PMSP is in the final edit stage and is expected to be completed and available on the national Web site by July 2006.
- Rangeland Beef PMSP is in the final edit stage.
- Sweet Cherry PMSP is in final draft and expected to be sent to our PNW PMSP editor for review May 2006.
- PNW Potato PMSP Revision Workshop was Jan. 26 in Pocatello, Idaho.
- National Pulse PMSP Revision Workshop was Feb. 27 in Spokane, Wash.
- PNW Forage PMSP Workshop was Feb. 22 in Boise, Idaho.
- PNW Organic Potato Workshop was Feb. 16 in Buhl, Idaho.
- The draft Hawaii Papaya PMSP has been sent to workgroup members for their comments, and a final draft is being developed.

State Briefs Alaska

The biggest agricultural pest issue in Alaska this year is late blight disease. Late blight occurred last year for the first time since a late-season infestation on potatoes in 1998 affected a widespread area in the major potato-producing region in south central Alaska. In addition to significant losses on some potato farms, commercial greenhouse tomatoes were lost in some locations. Farmers are preparing for the possibility of an earlier recurrence of late blight this year, due to potential for high inoculum following last year's outbreak.

The potential establishment of invasive plant species, especially in wilderness areas, is also a growing concern in Alaska. The first known establishment of purple loosestrife in an uncultivated area was eradicated last summer near Anchorage. Orange hawkweed is difficult to control in parts of Kodiak Island and the Kenai Peninsula, and has become a problem in Talkeetna and other areas farther north.

Arizona

On June 6, the University of Arizona (UA) Maricopa Agricultural Center will host a statewide Arizona Pest Management Center Summit. The purpose of this unique one-day workshop is to assemble UA faculty members involved in pest management-related research and outreach, along with key stakeholders from urban, agricultural, and natural resource sectors, in a forum to identify program needs and priorities. They will also discuss the role of the new Arizona Pest Management Center and the Cooperative Extension Service in helping to address these challenges. The meeting will include breakout sessions focused on agriculture and cross-commodity IPM, urban and school IPM, and noxious and invasive weeds, among other topics. The priorities developed through this process will help UA to focus limited resources on the most urgent needs in insect, weed, and disease management statewide, and also will be shared with the WIPMC as they develop priorities for the West.

WIPMC Names 2006 Funded Workgroup Projects

The Western IPM Center continued funding for two existing workgroups, the Crop Insect Losses and Impact Assessment Working Group and the Small Fruits Working Group for Oregon and Washington. Listed below are three new or revised workgroups.

2006 Pacific Northwest Workgroup on Agricultural IPM Issues

Dr. Catherine Daniels, Washington State University, Puyallup, Wash.

Abstract: The state Information Network contacts in the Pacific Northwest (PNW) states of Oregon, Idaho, and Washington, and the neighboring states of Alaska, Montana, and Utah, have formed a productive and highly functional workgroup. Formation of this regional workgroup has allowed member states to maximize expertise and leverage resources over a wide geographic area, as well as across project types. The PNW Workgroup has been able to achieve a variety of useful outputs, specifically because of its rich regional collaborations. The ability to respond to the varied needs and issues of our region is because the PNW Workgroup is geographically based, has multidisciplinary and multi-institutional members, and provides a structure for constructive brainstorming, critique, and regional project design.

The Western Region Structural Pest IPM Workgroup

Carrie Foss, Washington State University, Puyallup, Wash.

Abstract: Washington State University, Puyallup, is currently constructing a Western Region Structural Pest Research and Demonstration Facility where inspectors and pest managers will be trained in the identification of structural pests and conditions conducive to pest infestations and IPM. Our goal is to reduce the number of inaccurate wood-destroying organism inspections and the potential health risks from pesticide misapplications through education. A regional workgroup comprised of stakeholders working in indoor IPM is needed to coordinate the development of the Structural Pest IPM Program, the 2007 IPM curriculum, and to prioritize research efforts for the facility. The workgroup will be formed with university specialists, state regulatory staff, professional applicators, and inspectors representing many western region states to ensure a regional perspective for the facility's urban IPM program. Regional communication and collaboration between the structural pest stakeholders will be increased.

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PROFILE

Steve Balling

Director, Agricultural and Analytical Services, Del Monte Foods

Dr. Steve Balling has been a member of the WIPMC's advisory and steering committees since the Center was first formed. He is the director of Agricultural and Analytical Services for Del Monte Foods, the largest manufacturer of canned fruits and vegetables in the United States.

Steve is in charge of four functions within Del Monte's Technology Group: new variety research in Washington, Wisconsin, Illinois, Texas, and California; seed operations based



in Idaho Falls; Midwest and West pest management operations to develop and implement IPM programs and manage pesticide use; and analytical services that test for pesticide and other residues. He also has regulatory responsibility for agricultural issues, particularly pesticides and pest management.

Over the past 19 years, Steve's primary role has been to develop and implement Del Monte's award-winning IPM programs and manage its widely recognized pesticide control program, which involves the oversight of pesticide applications on 17 crops grown on 110,000 acres by 1,500 growers.

Steve has been involved in the development of pesticide regulatory policy at the national level. He was a member of the Keystone Food Safety Dialogue, where many pesticide regulatory policies in the 1990s had their origin. During early 1994, Steve served as a special advisor on pesticide policy to USDA's Assistant Secretary for Natural Resources and Environment, where he helped frame the department's IPM strategy. He currently serves on U.S. EPA's Pesticide Program Dialogue Committee and Committee to Advise on Reassessment and Transition.

After graduate school, Steve worked for the Navy teaching medical entomology until joining Del Monte. Del Monte has given him free reign to build an IPM program that would not just protect the crop, but that truly followed the spirit of reducing risk. "Now our job is to keep up the momentum, continue to refine programs, and make IPM part of the larger effort to integrate agriculture into a sustainable way of doing business."

Steve has published 21 articles, presented over 100 invited talks, and twice provided congressional testimony on pesticide regulatory policy. He has received awards for his activities from such groups as Center for Science in the Public Interest, U.S. Department of Agriculture, and California EPA.



Mark Your Calendar

2006 June

- Turning the Tide: Implementing Sustainable Strategies, June 25-28, University of California, Santa Barbara.
 www.sustainability.ucsb.edu/conference/
- Second International Biofumigation Symposium, June 25-29, University of Idaho, Moscow, Idaho. www.ag.uidaho.edu/biofumigation/
- International Registration Workshop, June 28, San Francisco. minorcrops.org/intl_workshop.html

July

- Coffee PMSP Workshop (first of 2), July 20, Kauai, Hawaii.
- American Phytopathological Society Annual Meeting, July 29-Aug. 2, Quebec City, Canada. http://meeting.apsnet.org/default.cfm

August

- International Conference on the Future of Agriculture: Science, Stewardship, and Sustainability (Integrating Technology, Science and Policy to Address the Environmental Challenges in the Agricultural Setting), August 7-9, Sacramento.
 www.dce.ksu.edu/dce/conf/ag&environment/
- Hazelnut PMSP Workshop, August or September 2006 (TBD).

September

 IR-4 Food Use Greenhouse Workshop, Sept. 11, Indianapolis, Ind. http://ir4.rutgers.edu/Binars/FUW06announcement.pdf IR-4 Food Use Workshop, Sept. 12-14, Indianapolis, Ind. http://ir4.rutgers.edu/Binars/FUW06announcement.pdf

October

- IR-4 Ornamental Horticulture Workshop, Oct. 10-12, Denver, Colo. http://ir4.rutgers.edu/OrnWorkshop.html
- Pacific Northwest Grass Seed PMSP Workshop, Oct. 19-20, Corvallis, Ore.

November

- Biological Pest Control Agents: Communicating with the Regulated Community, Nov. 7-9, Washington, D.C.
- Integrated Pest and Nutrient Management Options: Practices and Tools to Protect Water Quality and Crop Yields, Nov. 8-9, Corvallis, Ore. http://isnap.oregonstate.edu/
- The annual meetings of American Society of Agronomy (ASA), Crop Science Society of America (CSSA), and Soil Science Society of America (SSSA). Nov. 12-16, Indianapolis, Ind. www.acsmeetings.org/
- National Soybean Rust Symposium, Nov. 29 Dec. 1, St. Louis, Mo. www.apsnet.org/online/sbr/

December

• Entomological Society of America Annual Meeting, Dec. 10-13, Indianapolis, Ind.

www.entsoc.org/annual_meeting/current_meeting/index.htm

For more information, see "Other News/Announcements" and "Funding Opportunities" on the WIPMC Web site.

Funded Projects

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Western IPM Center Workgroup on Weather Systems

Dr. Walter Mahaffee, Oregon State University, Corvallis, Ore. **Abstract**: The mission of this workgroup is to further science-based principles and procedures for the acquisition, utilization, analysis, and distribution of weather and climate data that enhance IPM management decisions and improve plant biosecurity. Our activities will focus on meetings, member recruitment, preparation of publications and reports, development of collaborative research proposals, and interaction with user groups relative to our vision for weather and IPM networks. Additional anticipated outcomes include standards and guidelines for weather driven IPM and plant biosecurity networks, and planning for a scientific meeting on weather driven IPM networks. Our ultimate goal is to increase user confidence in and utilization of weather data, pest, disease, and crop phenology models to enhance IPM management decisions in crop, rangeland, forest, horticultural, and urban environments, thereby ensuring that pesticides are strategically used.

CENTER SCOPE

WIPMC enhances communication between federal and state IPM programs in the western United States: Alaska, Arizona, California, Colorado, Hawaii and the Pacific territories, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. It serves as an IPM information network, designed to quickly respond to information needs of the public and private sectors.

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