

**Advisory Council meeting
December 2, 2008**

Present: Bill Norman, Dave Close, Mike Fitzner, Harold Coble, Carlos Bogran, Mike Weaver, Tom Brennan, Carrie Harmon, Harold Lambert, Kathy Shay, Henry Fadamiro, Lora Lee Schroeder, Keith Douce, Bob Bellinger, Russell Duncan, Ames Herbert, Clayton Hollier, Conrad Lavender, Ples Spradley, Eric Young, Steve Toth, Jim VanKirk.
Recording: Rosemary Hallberg

Regional Updates

RIPM projects: Jim explained that the Center manages the competition and gives recommendations for the RFA. The projects listed in the annual update (handout) are from last year's competition. The panel will probably meet February 9.

Question: was the deadline earlier this year? (Carlos)

Yes, there was an issue with grants.gov switching from PureEdge to pdf, so it had to be earlier. In the future, we might try to stick with the schedule we had this year.

Question: how does the Center manage the grants? (Lora Lee)

CSREES sends us a CD with the proposals on it, and we make recommendations about which ones to fund. After that, it's between the university and USDA.

School IPM Update

School IPM happens on at least 3 levels: the national level, the national PMSP, and the state level. Last year, we set up the school IPM group. The group has taken off since. It is led by Janet Hurley, Faith Oi and Fudd Graham. They have also received 2 other grants: PURE, with Tom Green as PD (\$49,000 for demonstrations), and Coalitions, which Godfrey Nalyanya has agreed to do. The group is a real success story because they work together.

ipmPIPE Update

PIPE started with the soybean rust issue. It is a national program clearinghouse center that is fed with data from the field, climate data, economics, etc. The program produces raw output via a map by county level and advice from extension specialists about whether to scout, spray or whatever. The advice goes out to the growers.

- PIPE costs about \$2 million dollars for a season.
- ZedX is about \$350,000
- NCSU gets \$150,000 for management
- Soybean rust field work costs \$1 million
- Soybean aphid: \$100,000 – there are developmental issues about which states should get the money; some states may not really need it.
- Other legumes: \$400,000

- Diagnostics: \$200,000

Year 1 was \$2.27 million. Year 2 was \$3.5 million, and Year 3 was \$4.5 million and added cucurbits and pecan nut casebearer.

This year:

- RMA didn't fund anything initially but has agreed to cover the PIPE for \$300,000 for one more year.
- Soybean Checkoff program is contributing \$350,000.
- We are using about \$300,000 in unspent funds to cover the rest.
- We are cutting out several northern states that don't ever get soybean rust.

Henry F.: How long is the PIPE going to continue? Jim: Farmers will never pay for the IT system. But they will have to pay for their own fieldwork and a common infrastructure.

Carrie: there is some transition happening right now.

CSREES / Specialty Crops Initiative (Mike Fitzner)

Mike Fitzner explained details about the Specialty Crops Research Initiative (SCRI).

The Farm Bill made this possible. There were about 27 projects funded this past year. About \$5 to \$6 million could be specifically categorized for IPM.

A Specialty Crop is a horticultural crop. Tom Buick is working with the ag marketing service to come up with a common definition to have a consistent interpretation of what that means. The RFA will come out in mid January. There should be \$50 million for 2009.

Henry F.: How was the review process?

It was a standard peer review—Tom Buick and Dan Schmolt put the review panels together. The panels had 1-2 weeks to review 240 proposals. About 300 were submitted, but several had problems so they didn't make it to review. There were 3 panels, broken up by funding type. There were about 40-50 panel members.

Jim V.: the major complaints involved the complexity of the proposals, especially with the matching funds, and the limited time for proposal preparation.

Mike: The match caught a lot of people. There will probably be some technical corrections on the Hill for that. We couldn't change the timeline because the money had to be spent by September 30. For complaints, contact Tom Buick or Dan Schmolt.

Henry: what was the difference between the two Carnegie-Mellon proposals? Mike said that they involved several land grant universities.

CSREES Name Change

CSREES becomes the National Institute of Food and Agriculture by October 1, 2009. The agency head will be appointed to a 6-year term by the President and will report directly to the Secretary of Ag.

Russell: How long has the director stayed there so far? Mike: Colien Hefferan has been director for a number of years. The stature of the agency will be similar to NSF and NIH.

REE Program Office will coordinate agricultural research USDA wide. Six divisions: Renewable energy, food safety, plant health, animal health, agricultural systems, and agricultural economics. They will be responsible for developing a roadmap for Ag research and extension.

Jim: what will happen to non-agricultural IPM? Mike: we don't know.

As a result of the Farm Bill and the reorganization, there will be about \$100 million more per year for ag programs. Eligibility is opening up to anyone, not just land grant universities.

Steve T: does that mean that Smith-Lever may go away? Mike: It would be a long time before that happens.

CSREES Funding Changes

Smith-Lever 3(d) Authority changed by 2008 Farm Bill: affected 6 or 7 programs; pest management is one of those programs. All the money has to be moved through a competitive process. Eligible institutions have expanded to include 1890 institutions, Tuskegee, West Virginia State University, and University of DC.

Section 406 programs were also affected: CAR, RAMP, methyl bromide transitions, and the IPM Centers. The Farm Bill expands eligibility to include Hispanic serving agricultural colleges and universities. The agency must develop a legal definition. The other issue affecting the Centers, because of the expanded eligibility, is the question of having to re-compete before the contracts are up.

National Research Initiative becomes the Agricultural and Food Research Initiative.

Carlos: will the programs within NRI stay the same? Mike: Yes, they should stay the same, but one of those programs may be declared Extension only.

Smith-Lever 3(d) Funding Change

Mike gave a short history behind the start of Smith-Lever 3(d), beginning with Richard Nixon. The 2008 Farm Bill has changed the way the money is designated.

The timetable for this year's 3(d) funding:

- RFA Posted: November 20
- Deadline: January 6. Panel manager: Harold Coble.
- Awards will be obligated by March 20.

Funding: \$8.5 m total

Coordination program \$8.2M for institutional IPM programs

Support program: \$300,000 for special projects

\$200,000 for IPM evaluation

\$100,000 for critical extension issues in IPM.

Eligible applicants include 1862, 1890, and others.

- One coordination program/institution
- One separate support program per institutions.
- Institutions cannot allow more than one proposal to be submitted, or the institution will be out of the running.

Discussion:

Henry: if a proposal is not supported by the Extension director, it should not count and should not affect the second point. I can't go to my grant office and ask them not to submit another proposal.

Ames: in order to submit a proposal, you have to be an IPM Coordinator, and you'll have only one of those per state.

Henry: when the proposal came out, several people came out and said anyone could designate themselves as an IPM Coordinator.

Stakeholder comments from the listening session were:

- Should be a transition year
- Revert to formula funding (CSREES can't do that, but there has been a lot of activity through lobbyists to get it reverted back) It won't change for 2009, but it may change in 2010.
- Limit to one proposal per institution or per state
- Release the funds as soon as possible
- Provide a mechanism for long-term or multi-year funding.

Bill Norman: why did you not do anything about comment #1? There are still changes being made to the Farm Bill. There is already a mechanism in place to change it back to formula funds. This is not just an issue among the land grants—it goes down to the producers. We're still trying to finish the Boll Weevil Eradication and the IPM funds are crucial to that.

Ames: there are salaries tied to this money, and we're now trying to put in proposals.

Bill: These funds affect the state and county funds. Because they were hard dollars, it allowed the state and the county programs to do what they do.

Mike: one of the silver linings to this is that IPM is back as an issue on the Hill. Everyone was shocked about the reaction to this change. We've been given a directive, and we have to follow it.

Bill: we've had comments from the 1890s that they're worried about competing with the 1862s.

Mike: If this change continues, we envision that this funding will continue for one year, but if it continues, it will probably be a 3 or 4 year commitment.

Other comments from the Listening Session:

- Support core programmatic infrastructure
- Award a high percentage of grants
- Fund both individual and multi-institutional opportunities
- Allow pre-award costs

The program is made up of two funding opportunities: coordination program and support function for a basic need. Each proposal must have an evaluation component.

The program is composed of 3 major components: coordination, collaboration and areas of emphasis.

- Coordination is required in all coordination applications. It executes the basic infrastructure.
- The Collaboration component is not required, but it allows for multi-institutional/multi-state programs
- Areas of programming emphasis must have a minimum of 2 and maximum of 6 from 10 programming areas.

Jim V.: in many of the programs, they do a mini-grants program that may cut across many of these areas. Is there still a way to do that? Mike advised against including mini-grants in the proposal.

Ames: you could solicit those objectives and put those into the RFA.

Mike: you could still include it under whatever areas of emphasis you choose.

Jim: mini-grant programs have done great work in many of the states. Mike: you can have a mini-grant program within a certain definition.

Ames: when the RFA went out, we have faculty who want to be a part of this, so we picked the 6 areas that we want to pursue. You have a page and a half for each emphasis area, and now we're trying to figure out how to fit cotton, soybeans, etc. into each emphasis area. I hope that if this stays in place, there will be some changes to this.

Mike: There will be another listening session scheduled in March.

The support program is designed to address critical regional or national needs. It replaces the EIPM program.

There is \$200,000 max for Critical IPM Issues, which include citrus health and greening.

Friends of IPM Award program

We received 15 nominations for 6 potential slots. Award panel: Bob Bellinger, Tom Brennan, Harold Coble, and Conrad Lavender

EPA-funded IPM projects (Lora Lee Schroeder)

EPA did a webcam on IPM in universities and colleges.

We had \$665,000 that we awarded to IPM for Region 4. That's not a typical year. Region 4 goes from Mississippi to Kentucky. All four awards went to nonprofit organizations. This is the first time that's happened. We have seen a decrease in applications coming from land grants and an increase in nonprofits.

- One for Center for Ag Partnerships for \$112,000 looking at NRCS EQIP funds looking at IPM on the farm.
- Nature Conservancy: Georgia chapter, looking at long-term rotations for turf soybeans and peanuts
- BF Smith Foundation—Delta Farm targeted to IPM in row crops in Miss. Rice, soybeans and corn \$170,000
- Florida Organic Growers Association: had worked with Georgia organic farmers and have transitioned many to organics.

EPA has advanced the knowledge of using beneficials in blueberries, peaches, mating disruption of peachtree borer, and furthered IPM in sweet potatoes, application technology to reduce risk, further organic production and training in the southeast.

One of the IPM challenges in the past year is IPM for crops being grown for biofuels. That's something we need to be thinking of in the future.

The other one is the resistance management issues. There is some concern about some of the newer, safer pesticides that farmers are relying on, and we're starting to see resistance to some of those. We have been working with people in Georgia on resistance management.

Lora Lee works with the Sustainable Ag Initiative. They have spent time in program evaluation. They got recommendations for improvement from an Office of Inspector General audit in 2007, and had several more from a summit in October 2008. The program is considering going to a national RFP from the individual ones they have been doing so far.

Ames: in reference to the question about why land grants weren't applying for the grants, it sounds like there are research components, so I don't understand why the land grants aren't applying. Lore Lee: the grants process has become more time consuming, so if people are going to apply for dollars, they feel that they should apply for larger dollars.

Henry: we have received grants from Lora's program. It could be that the grant process for EPA is getting a little more complicated.

Tom Brennan: Some of EPA's other grants include:

- Pesticide Assurance Renewal Act grants—greenhouse grant to control whiteflies in tomato greenhouses.
- Biodemonstration grant program with IR-4—with Mississippi State for control for dollar spot on golf courses, and two for University of Georgia. They are relatively small grants.

Henry expressed some concern about changing the program from regional to national.

Tom: we will make sure we do a good job of maintaining regional flexibility.

Master Gardeners and IPM (Dave Close)

Background: A little over a year ago, Jim asked if Dave would sit on the Advisory Council after Master Gardeners and the IPM Center Directors met in DC. This past October, we met again with the Master Gardener coordinators to see how they could work with the regional IPM programs.

Dave: There is a broad interest nationwide to work more closely with the IPM Centers. In October, we talked about how the MG program could get out the same message as the IPM Centers.

New issue: Emerald Ash Borer. Now we're getting phone calls from CSREES about how MGs can help. Pulling IPM Centers into that issue will help, as will figuring out how MGs can be first line detectors.

We also talked about taking advantage of the internal grants programs and tailoring them to fit horticultural needs. In other regions, the MGs or hort specialists have developed working groups to deal with IPM issues. Another population to target is the 9000 MG volunteers to help them help their neighbors deal with pests like EAB.

I will be working with colleagues across the region to see what resources exist in the IPM Center and how MG programs can fill the holes that may exist. My colleagues nationwide are interested in working with the IPM Centers.

Bob Bellinger: what is the term for a Master Gardener? Dave: It's a one-year term. Once you get certified, it's not a lifetime guarantee. We can keep 65-75 percent of the people certified for about 3 years.

Carrie: the National Plant Diagnostic network has some training sessions that would be good resources for your certification process.

Tom B: Recommend that you decide what you want to make an impact on and what you will measure. Dave: one of the things that came out of the discussion in DC was to define the deliverables.

Jim: We don't want to reinvent things, but one of our roles is to introduce Dave to Carrie and vice versa. The other thing is that the best thing we have to offer is to add priorities to our system.

Regulatory Update

Steve gave a Powerpoint on regulatory activities in the region (included in folders).

Topics:

- Methyl bromide phase-out
 - Russell: growers are using VIF film, which allows them to use less, and many are using alternatives. Iotamethane may be a viable alternative, but researchers don't all concur on it.
 - Jim: there is \$4.5 million in the MB transition. Is it time to repurpose those funds? Russell: it's not time to completely do away with it. Conrad: the whole thing boils down to economics.
 - Mike F: there is a real focus in the MB transition program towards economics. There is also a strong constituency on the Hill to keep that in the budget.
 - Henry: one researcher has a viable alternative in terms of cost, in sodiomecete.
 - Tom B: my group has to come up with grants with soil fumigant alternatives as part of them.
 - Mike W.: We see a lack of education in terms of adoption. There needs to be a big push in that area.
 - Henry: As long as MB is still available, adoption of the alternatives is going to be slow because growers will want to continue to use it. Steve: the amounts are going down, so the economics is driving growers toward the alternatives anyway.

- Lora Lee asked about the revisions for the crop profiles. The revisions typically include the worker safety, or updating the information, new products, usage information.
- Information requests: the next round of requests will involve endangered species.
 - Tom: will see more proactive questions and more up front information. This round will have more questions about endangered species and environmental effects. Will try to match GIS decisions with geographical area.
 - Harold: the questions that we're hearing in our office are not appropriate to ask State Contacts. The types of things that have been asked in the past will be decreasing.
 - Lora Lee: hoping that some questions will be asked during re-registration about resistance management in relation to certain chemicals.

Member discussion:

The Advisory Council was charged with identifying positive and negative experiences with IPM.

Positive experiences:

- Communication and funding via PDN and IPMCenters
- Additional impact evaluation of programs
- Integration of principles of agencies, cropping systems, etc.
- School IPM teamwork among organizations
- Boll Weevil Eradication project
- Broad ag interests and environmental
- Regional Centers: horizontal
- Public awareness of IPM presence in SBR
- Broadening stakeholder groups
- Funding on county level
- Tomato spotted wilt management
- Projects funded via PMSP
- Improve soybean yields
- Integration of IPM in production
- Adoption and buy-in by growers in IPM elements
- Foundation of knowledge by crop profiles
- Honeybee PMSP—working across states
- EPA presence in field of IPM
- Research on alternatives to pesticides
- Weed and feed reduction program
- Gratification when growers adopt programs
- Independent practitioners have key implementation role
- IPM in forest health
- IPM Roadmap
- Prediction models to real world applications

- Interest among buyers in marketplace, labels
- Expansion to non-traditional areas
- More less-toxic products in big box stores
- Available dollars allows grad students to become the next generation
- New people connections
- Sustainability
- Human resources

Negative experiences

- Economics is not a high enough priority (e.g., static thresholds)
- Weed and feeds for fire ants
- Not enough tactic integration
- IPM support system declining (e.g. agents, specialists, etc.)
- Slowness of weed resistance issue response
- Wholesale adoption of tank mixes for plant health
- Mosquito misters
- Failure to sell IPM to consumers/homeowners
- Not articulating a balanced/rational approach to chemicals (i.e., some are safe, etc.)**
- FL completely abandoned citrus canker eradication program
- IPM warped to be “no pesticides” **
- Confusion of terms such as IPM, organic, sustainable (there is a positive middle of road rationale)
- Failure to document national impact
- Marketing of biotech products as silver bullets
- Floundering of NIPMEG
- Sold IPM way short...long term, societal benefits (nickels v. millions of dollars)
- Dilution effect – IPM on back burner
- “IPM” name
- Need more ag private consultants
- Too pesticide intensive
- Expectations increase as well as risk/cost
- Means so many things, dollars diluted in university system
- Lack of good science education in school, missing the boat
- Silver bullets wipe out IPM
- Producers don’t recognize snake oil (we haven’t trained them)
- Only popular in a crisis
- NO solid core of funding for core expertise
- Lack of quality measures is threat to government funding
- General misconception that we’re holding out the biological solution
- No “endpoint” to IPM; it’s like breathing

What the Center should do

- Make state visits—more of them**
- Include PSEP and other stakeholders***
- Side by side of organic/conventional/IPM*****
- Grant writing workshops*
- Printed copy of AC contacts
- More outreach to university administrators*****
- Technological innovator****
- Invasives and wide impacts**
- Keep AC in the loop with DC events
- Field trips by Federal regulators, etc. (e.g., OPP, BEAD)***
- Fund and/or share existing efficacy test on homeowner IPM
- More support for small holder/resource limited farmers**
- More support for small minor crops in the region*****
- Bridge-building between sustainable ag and IPM*****
- Some national leaders in forest/invasive species don't have a clue about LGUs, etc.*
- Continued preserve for sustained state IPM programs*****
- Crisis communications center*
- Be proactive in uninvolved states**
- AC could put consistent message together that could go to many political reps*
- Some agenda time each meeting to proactives – less updates

Wednesday, December 3

Success story: Cotton IPM Project (Herbert, Blinka)

This was a 3 year project, the last year of which was funded partially by an IPM Enhancement Part 2 grant. The project involved developing thresholds and decision making systems for stinkbugs in cotton. Cotton Inc. also provided funding for the grant, which involved North Carolina, South Carolina, Virginia and Alabama. In addition to establishing the thresholds, they needed to produce a grower publication.

Scouting is usually done by popping the cotton boll and looking for an internal wart on the wall of the boll. Consultants wanted to know if there was a way to scout without popping the boll since it was time-consuming. So Ames and post-doctoral student Eric Blinka looked for a correlation between brown lesions on the outside of the boll and stinkbug damage. Their research showed that there was not a 1 to 1 correlation, but if a boll had 4 or more lesions, there was a 90 percent certainty that the boll was damaged.

The team conducted an experiment to see how the external method compared to the internal method in terms of speed and accuracy. They divided scouts into 3 groups: less experienced, medium experienced, and highly experienced. They conducted the test in 2007 and 2008. In 2007, because of the time of year, the boll-popping (internal) method

took twice as long, but in 2008, although it was still slower, it was not as different from the external technique in terms of time. In terms of accuracy, there was very little difference between the two methods. They are currently working on an eXtension publication with pictures of the damage.

Bugwood Network (Douce)

David Moorhead and Keith Douce began the Bugwood Network in 1994. The website developed from CDs that they had created from images they had, but they found they were always in need of good images with good information. Bugwood initially began as a database of forestry images.

Now it has expanded to include invasive species, forest health, natural resource management and agricultural management. All of the systems are database driven, taxonomically-based and fully searchable. There are three components: Bugwood IDS, a Wiki and EDDMaps, a mapping system.

One of the main focuses is the digital images, which are tagged, credited, identified and used in many different ways. One of the features of Bugwood IDS is that you have can do batch downloading and not have to house the actual images on your machine. We get about 700 hits per day, and have about 12 million hits on IPMImages alone. We work a lot with the Southern PDN, and are also working with the University of West Hungary and the national Forest Center in Slovakia.

We have also developed a diagnostician's cookbook on the techniques used in the diagnosis of plant diseases in the wiki. We are trying to focus on identify and support user needs. In the last year, Bugwood Network systems received 195 million hits from around the world.

In terms of funding, they are trying to find some long term sustainable funding, perhaps by using Invasive.org as a resource for USDA PPQ to use. Some people give private donations as well.

Enhancement Grants

Enhancement Grants are divided into two parts: Part I projects include State Contact projects and IPM Documents. Part II includes IPM Seed and IPM Capstone projects.

Ames: with the new competitive grant for state IPM projects, it will put a lot of pressure on programs. Also, both systems overlay a period of 2 weeks where there is nobody there. Jim: The due date will be January 30, so there will be a good 3 weeks after the other deadline. The issue has to do with our own grant. The one year grants have to be in the March 1 cycle because we can't have a grant outside our own master grant.

Henry expressed concern because he will have both proposals to write. Ames suggested getting it out earlier and keeping the deadline the same. There are a number of other

things due at the same time. Clayton: in the beginning of January, we start grower meetings. Mike asked for 2 weeks longer. Jim: we would have to make retroactive decisions, but you wouldn't know about the grant until after the old grant runs out. If the 3(d) issue goes away, we could go back to the old deadlines.

Working Groups are now going to be in Part 1:

- \$15,000 suggested cap (including indirects)
- Core project and core funding—must include appropriate array of stakeholders and be issue-based.
- Needs to be multi-state and cut across private and public sector
- Needs to make an action plan and explain how the issue should be addressed. (i.e., needs assessment and/or prioritization)
- Deliverables (e.g., workshop, publication)
- Have the opportunity to apply year after year if they can show that they can do new things.

Discussion:

- Put the limit as up to \$25,000 in case it's national; allows the flexibility to give more (Clayton)
- Any project type should have a well-justified budget. Might be able to do that for all project types (Jim V)
- Doesn't NC State force you to have that level of detail on the budget? (John M)
- Having a tiered system is good—have core activities, and then if you want to function at a higher level, you can apply for the additional funding (Ames) Maybe set it as \$15K for core and \$25 for upper level.
- Stakeholders identify a need and justify the budget, and if they identify additional funding for the deliverable, it may merit additional funding. Make it a 2 tier within the working group (Conrad)
- Can't just apply for core funding for 2 years in a row (Jim)
- If you had core meeting, that would be good justification to submit the following year for the publication (Ames)
- Future RFAs could give priority to a special need.

New capability of the system:

In our proposal and project system, we have just added the capability to log invoices. We can divide the budget lines into personnel, travel and supplies. It's not finished yet, but when it is, PIs will get a monthly alert about what has been spent.

Mike: On the guidelines, would be good to have clear definition of what is expected from the working groups. Steve T: we would be willing to fund groups that have a momentum but don't want to force having a certain number of working groups.

Elections:

Ames nominated Bob Bellinger. Clayton seconded. Bob was voted as the next chair-elect.

Location of the next meeting:

Suggestions for location of the next meeting:

- Washington, DC (Tom B)
- Have a tour (Conrad)
- Western part of NC (Jim V)
- Schedule meeting in DC when Congress is in session (Keith and Bill N)
- Have one of the Friends of IPM winners conduct a tour (Lora Lee)
- We like to have it here (Carrie)

A subcommittee was appointed to decide the location of future meetings. Members: Ples, Russell, Tom B. and Jim V. The subcommittee needs to think about local arrangements, expense, and convenience, and field trips.

Harold: field trips need to be viewed in terms of how they benefit the Center.