



IPM Coordinating Committee
January 13, 2006, 11:00 am – 3:00 pm
Maricopa County Extension Office
4341 E. Broadway, Phoenix

Membership:

Paul Baker (Entomology)	Pat Clay (Maricopa County)
Peter Ellsworth (Entomology, MAC)	Lin Evans (stakeholder)
Rick Gibson (Pinal County)	Dawn Gouge (Entomology, MAC)
Rick Melnicoe (ex-officio, WIPMC)	
Kim McReynolds (Cochise County)	Mary Olsen (Plant Sciences)
John Palumbo (Entomology, YAC)	Bob Roth (ex-officio, MAC)
Jeff Silvertooth (SWES)	Deb Young (ex-officio, CE)

Guest: Kai Umeda (Maricopa County)

Al Fournier (IPM Program Manager)

Note: All committee members present except for Bob Roth and Jeff Silvertooth.

Summary of Action Items
(Also listed by topic below)

- *ACTION:** We will plan a discussion about the future of PITO on next meeting's agenda.
- *ACTION:** Al will send out the URL for the ACIS EVENTS page to everyone (APMC list) as a reminder for them to forward info about training/CEU opportunities to be advertised on ACIS.
- *ACTION:** Al will submit his APR to committee members for review.
- *ACTION:** Peter to discuss with Bob Roth as to whether input on Al's APR is provided directly to him only or at the same time is provided to Al for guidance.
- *ACTION:** Al will revise the planning document for the 2006 APMC Stakeholder Workshop to incorporate ideas that were presented by the group in the meeting, then circulate it by email for further comment and input. Everyone should respond to the outline in a timely fashion so we can move forward with the planning.
- *ACTION:** Deb suggested that Al work with Sandra Saad to help coordinate the facility, meals, and details for the APMC Workshop.
- *ACTION:** Al will work with a subcommittee (Pat, Kai, Dawn, Peter, and a few others to be verified) to help contact stakeholders, identify the best date for the APMC Workshop, finalize the list of invitees, etc. Al will contact this group to get the ball rolling.
- *ACTION:** IPM CC members will need to help out in getting verbal invites out to stakeholders along with explanation of what the APMC is and why the workshop is important.
- *ACTION:** Al will initiate an email dialog among committee members on plans for distributions of 2006 IPM funds, to summarize key points from our discussion and tally votes from the members.

Meeting Notes

Vision for the Arizona Pest Management Center (Ellsworth)

Handouts: APMC flowchart, APMC logic model, notes from previous meeting

As a reminder, Peter Ellsworth presented some slides originally presented to the Executive Council about the vision and goals for the APMC. The goal was “to create a working environment in which the science and implementation of IPM can thrive in Arizona.” This was consistent with President Linkins’ campaign on “focused excellence” and the strategic use of limited resources. Specific objectives of this reorganization of UA IPM resources were to:

- Enhance individual & statewide IPM Programs
- Better meet the needs of our local stakeholders
- Improve regional & federal communication & reporting
- Localize regional IPM efforts as part of federal re-organization of IPM resources

The position of the IPM Program Manager was conceived to coordinate and help manage these efforts of the APMC. Al Fournier came on board in May 2005 to serve this role, including,

- Coordination, facilitation, and team-building
- Planning and reporting role
- Communication and dissemination role
- Stakeholder engagement
- Program evaluation and documentation of impact

The APMC invites broad membership and input, to support the pest management program goals of faculty.

Preliminary needs assessment: what I've learned so far (Fournier)

- a. Activities overview/upcoming APR
- b. Some early observations and opportunities for the APMC

Handouts: IPM Program Manager Activity Highlights

Al Fournier provided the committee with a summary of his activities and some preliminary observations on critical gaps and needs related to pest management.

1. Grant Involvement:

CALS grants

Al has spent considerable time helping us fund the APMC. He applied to CALS for several IPM and extension “minigrants” and was funded on several projects (Arizona Crop Information Site, APMC Statewide Initiative, Cross-commodity Research and Outreach Program and Crop Insect Losses and Impact Assessment). He expressed his gratitude for this support.

External grants

Al's position is 50% funded through external grants. Currently, part of this funding comes through projects funded by the Western IPM Center, including:

- a. Arid Southwest IPM Network (25k) [Ellsworth, Fournier, Palumbo, Baker] – This project is a communication network that includes low desert regions of AZ, MN, NV and CA. A large part of this is coordinating pesticide use information requests among the participating states and reporting back to federal agencies through the WIPMC.
- b. Crop Insect Losses and Impact Assessment Working Group (9k) [Ellsworth, Fournier, Palumbo, Baker] This involves the collection of data on crop yields, yield losses from various sources (e.g., insects, weeds, pathogens), economic data, pesticide use, etc. Currently this project includes annual surveys in cotton, lettuce, and melons.

Additional external funding for Al's position comes from a Western IPM Competitive grant (2005), Spatially Explicit Approaches for Measuring and Implementing Higher Level Multi-Crop, Multi-Pest IPM [Ellsworth, Fournier, Palumbo, Carriere] (60k over 2 years). This project is focused on the use of a pesticide use reporting (1080) database and GIS maps to quantitatively assess adoption of cross-commodity guidelines for whitefly control. Acquisition of the 1080 data is important to the overall goals of the APMC, since it can be used in research and program evaluation college-wide, and also because it will facilitate communication with federal agencies on pesticide use and other pest management issues.

In addition, Al has applied for or partnered with other faculty on several proposals, including the following. He has assisted faculty by discussing or reviewing additional proposals (not listed) and has sent out RFP reminders to faculty.

- Arizona Cotton Growers Association 2005: Web-based Delivery of Priority Research Information to Arizona's Cotton Growers [Fournier, Reid, Ellsworth] (not funded)
- Western Regional IPM 2006: Development of Educational and Training Materials to Support the Preparation for the Arizona Pest Control Licensing Exams [Silvertooth, Ellsworth, Fournier, Palumbo, et al.] (submitted)
- Western Regional IPM 2006: Applications of Remote Sensing in w/UAVs for IPM in cotton and rangelands in AZ and NM [D. Slack, A. Rango, P. Waller, P. Ellsworth, D. Byrne] (submitted)
- RAMP 2006: "Lygus Movement and Management in Western Crops: a Systems Approach" [Ellsworth, Goodell, Bundy, Parajulee, Carriere, Rosenheim, Naranjo, Fournier, Blackmer, Godfrey, Palumbo, McGuire, Bancroft, Hagler] (in prep.)

A discussion ensued about the Silvertooth proposal listed above. This is an effort, initiated at the request of the Arizona Crop Protection Association (ACPA) and Arizona Department of Agriculture (ADA) to revise educational materials supporting the Arizona Pest Control Licensing Exams. The proposal, if funded, will allow UA to coordinate the revision and development of critically needed educational materials to support preparation for the Arizona Pest Control Licensing Exam. This effort will involve several UA faculty listed as co-PIs and will require considerable coordination. It will include materials to support the Core exam plus specialty areas. Jeff asked Al to convey to the committee that it is important that the educational approach, like most of our programs, address the broad needs of pest managers and growers,

addressing Integrated Pest Management as well as Integrated Crop Management, and an overall systems approach so common across our programs. Peter noted that this project is likely to go forward in some way, regardless of the pending proposal.

Q: Will revision of the exams be part of this? The proposal itself does not call for the revision of the exams, although this is a potential positive outcome of this project.

Q: How does this relate to the Pesticide Information Training Office (PITO)? We see the function of the APMC subsuming PITO, as shown in the flow chart. Peter and Al have had discussions with Paul Baker on various functions of PITO and how they relate to the APMC. Paul Baker will be involved with the development of the training materials.

Q: Who does Pesticide Applicator Training in AZ? PITO has reduced its investment and time in PAT, while ADA and private consultants and the structural pest control commission have provided more training. Funding from the feds to PITO has been gradually reduced and is currently at \$12795/year. Paul Baker, who joined the meeting later, let us know that Louis Carlo is now on half-time, soon will at 40% with no benefits, through June. Paul would like to visit with IPM CC once Louis is done (7/06) on the future of PITO. Louis is looking for a new job. He answers the phone and is finishing some old projects.

***ACTION:** We will plan a discussion about the future of PITO on next meeting's agenda.

***ACTION:** Al will send out the URL for the ACIS EVENTS page to everyone (APMC list) as a reminder for them to forward info about training/CEU opportunities to be linked and advertised on ACIS.

2. CALS engagement:

Al has participated in a number of working groups, committees and meetings. For example: CALS faculty conference and new faculty tour, Urban Horticulture working group, Vegetable IPM working group, Noxious Weed group, Cotton IPM/ICM, Professional Development working group, AZ Plant Diagnostic Network. This engagement has given him a sense for our programs and people, the fact that faculty members wear many hats, and that interdisciplinary collaboration is high. One important role he can play is to help improve communication of outcomes from these various groups on a broader level. Deb Young noted that there are 28 working groups in CALS.

3. Articles / Awareness of APMC:

One of the goals of the APMC is to create awareness of UA's excellent programs and outcomes related to pest management. An important early task is creating awareness of the APMC itself. The following were outcomes in the previous 8 months:

- a. Arizona Crop Protection Association article
- b. Western IPM Center Newsletter Arizona update article
- c. Western IPM Center Annual Report (projects described)
- d. CALS Ag Exp Station Annual Report (APMC sidebar)
- e. Working with Joanne Littlefield on an upcoming radio interview (Ag-network)

Al noted that he is especially interested in making faculty aware of opportunities to share program outcomes with a region or national audience. An excellent venue for this is the WIPM Center newsletter. Al will continue to make faculty aware of the deadlines and work with them to edit/submit articles or short program updates as appropriate.

4. Stakeholder engagement:

This is a critical function of the APMC, and very important to obtaining funding for our programs. Al has engaged stakeholders at various meetings, most notably those listed here.

- a. CROP meeting (May 2005)
 - ii. Mini-CROP mtgs (A. Anderson, M. Reid)
- b. Melon Insect Losses (Summer 2005)
- c. Cotton Insect Losses (Nov – Dec 2005)
- d. IPM/IAQ in Schools Coalition meetings (2 so far)
- e. Industry whitefly 2005 summary meeting (Nov 2005)

A stakeholder position statement to support the importance of ACIS was generated at the May CROP meeting, which helped us to get CALS funding for this important stakeholder communication channel. The Crop Insect Losses effort (in cotton, melons, and lettuce) is valuable for us because it generates important data for evaluating IPM and other purposes. This effort is also valued by growers and pest control advisors, who provide input on our programs. IPM/IAQ coalition has been an excellent engagement of stakeholders under Dawn Gouge's program. A development here has been new legislation to change the status of pest management practices/regulation in child-care facilities. Child care providers have a professional development (CEU) / training requirement, and Dawn and Al have had discussions with Patty Merk about integrating some IPM training into other education already provided.

By way of observations/needs assessment, Al pointed out that faculty may be missing many opportunities for documenting stakeholder input at meetings. Every training/meeting that involves clientele provides an opportunity to conduct program evaluations (important for program improvement and documenting outcomes) and to document stakeholder needs (important for successful grantsmanship). The upcoming APMC Stakeholder Engagement Workshop will provide an opportunity to remind faculty and provide tools for effective stakeholder engagement.

5. Regional and National Activities:

Another function of the APMC is to engage with IPM resources and activities on a regional and national level. Al and Peter have been doing this in various ways.

- Participation in the Western IPM Symposium last fall (Al)
- Participation in Sweet Cherry PMSP and Pesticide Comments Coordinator Database training in Portland (Al)
- National IPM Committee meeting and WERA 069 2005 (Peter)
- Entomology Society of America 2005 meeting (2 posters – copies passed out to committee, several presentations)
 - Cross-commodity IPM Guidelines

- Evaluation of the Cross-commodity Guidelines

These interactions are very important to the profile of our research and extension activities.

6. Additional Observations and Identified Program Gaps:

AI has compiled a short, preliminary list of some identified needs based on informal interactions with faculty and stakeholders during his first eight months. The APMC workshop will be an important avenue for a more formalized method of documenting faculty/stakeholder input.

- There is a need for an urban entomologist focused on commercial horticulture. The appearance of the Lerp psyllid last spring provided an example of this need. A potential function of this committee is to advise the college and departments on the need for strategic hires. This could be done through stakeholder engagement and documentation of community needs. [Precision Ag position for MAC mentioned as example brought forward by CE office]. We need to generate ideas for this process and get stakeholder interest. Good topic on what is needed for APMC workshop.
- Invasive weeds is another major issue in the state (e.g., bufflegrass). There is a need for a more organized effort or coordination of existing efforts. Perhaps part of this is a lack of complete knowledge/understanding on AI's part of the groups involved statewide and how they interact. The governor has an invasive weeds advisory council. Steve Fenn (PCA from Willcox) is on it. Ed Northam on it, John Brock. UA presence and involvement with the group should be a priority.
- Another concern some have expressed is a shortage of pesticide applicator training in some parts of the state, discussed above.

AI's APR Process:

Peter discussed AI's APR process with the committee, which is responsible for evaluating his performance, although Bob Roth is technically his supervisor. How should the process go?

- a. Peter can collect and collate input from committee members and forward that to Bob to discuss with AI. OR
- b. Peter could provide their input (anonymously) to AI at the same time as it goes to Bob?

***ACTION:** AI will submit his APR to committee members for review.

***ACTION:** Peter to discuss with Bob as to whether input is provided directly to him only or at the same time is provided to AI for guidance.

PMSP-101: An overview of the Pest Management Strategic Plan (PMSP) process (a presentation by Rick Melnicoe, Director of the Western IPM Center)

Handouts: Powerpoint presentation and notes, PMSP checklist, list of completed PMSPs (81 nationally, 40 in the Western Region).

Rick Melnicoe provided an excellent presentation and handouts on the PMSP process. The rationale for conducting a PMSP is that it can be a valuable planning tool for a commodity group, is helpful for identifying research needs, communicating pesticide issues, and in successfully applying for federal grants. His presentation detailed what is involved in planning a meeting, carrying one out, and producing the final document. He pointed out that the WIPM Center provides funding to support these meetings (5-20k), and that they have funded every request so far. One of the goals of the APMC, and a role for Al Fournier, will be the development of PMSPs for commodities/research areas that the IPM Coordinating Committee deems as most important. Participation in this process is extremely time consuming for the lead individual. We discussed future possibilities for PMSPs for turf, IPM in schools, cotton, vegetables, or rangelands. Rick pointed out that the most important factor is the cooperation of the commodity group involved. So we should work to make stakeholders aware of this process and its benefits and identify the best group to move forward with our first PMSP. Another important consideration is to do a PMSP for crops where Organophosphate, carbamate, or pyrethroid-based insecticides still have important niches, since PMSPs can be cited as documentation of a need for maintaining registration of critical chemistries. PMSPs are another important, broad topic we should probably include in the APMC Stakeholder Engagement Workshop.

Q: Has this PMSP process replaced the crop profiles, or are those still being done? New crop profiles are not being funded by the WIPM Center, although they will fund revisions of existing ones if there is a need. PMSPs have more or less replaced the crop profiles and are often built upon them. However, crop profiles are still being developed and posted regularly out of Steve Toth's office (NCSU).

APMC Stakeholder Engagement Workshop plans

Handouts: 4-page handout with workshop goals, key contact list and draft agenda.

Al presented a handout with preliminary plans for a 2006 APMC Stakeholder Engagement Workshop and asked the committee for input and support in pulling this off.

Workshop Purpose: To assemble CALS faculty members involved in pest management programming, along with key stakeholders from urban and agricultural sectors, in a forum to identify program needs and priorities, and to discuss the role of the APMC in addressing these challenges. The goal is to create awareness of the APMC and to get input and buy-in from all parties. The workshop will revolve around stakeholder engagement and teaching the process to faculty on how to do that and how to measure and document impacts.

The committee reviewed the draft list of key contacts and made some additional suggestions, which Al will add to the revised list (e.g., members of county advisory boards). Al described a general outline of his plan for the meeting, which will include an initial plenary session, breakouts by commodity or topic, then a final plenary which will include priority-setting.

Q: What level members of these commodity/stakeholder groups will we invite? For example, Executive V.P., member President and a few key members.

***ACTION:** Al will revise the handout to incorporate ideas that were presented by the group and then circulate by email for further comment and input. Everyone should respond to the outline in a timely fashion so we can move forward with the planning.

***ACTION:** Deb suggested that Al work with Sandra Saad to help coordinate the facility, meals, and details for the meeting.

***ACTION:** Al will work with a subcommittee (Pat, Kai, Dawn, Peter, and a few others to be verified) to help contact stakeholders, identify the best date for the meeting, finalize the list of invitees, etc. Al will contact this group to get the ball rolling.

***ACTION:** IPM CC members will need to help out in getting verbal invites out to stakeholders along with explanation of what the APMC is and why the meeting is important.

USDA CSREES 2006 – 2008 Plan of Action submitted (Fournier)

Handout: Executive summary of report with list of “areas of emphasis”

Al recently submitted the 2006-2008 USDA CSREES IPM Plan-of-Action (formerly “plan of work.”) This is a federal reporting requirement and is used to measure progress in our IPM programs. Al worked with various faculty and staff to develop the report. He suggests that the committee members review the full report and offer comments and suggestions for revisions. The report has not been officially submitted. It requires administrative approval from Deb.

ACTION: Al will make the report available online for committee review.

IPM Assessment: Goals & progress on 1080 pesticide use database

Peter and Al provided an update on efforts to secure and maintain the 1080 pesticide use-reporting database managed by ADA and AZ Ag Statistics. The data have many uses, including research, IPM program evaluation, and responding to federal information requests, which are all important functions of the APMC. Historically, Ag Stats received funding from UA through Agricultural and Resource Economics (ARE) to support a data-entry and management position to ensure that data on 1080 forms (pesticide prescriptions) submitted to ADA were entered into a database. This makes it possible to query the data with questions related to pesticide use, etc. The database created by Ag Stats is checked for errors and finalized by ADA. This is the same database that Paul Baker’s lab worked with years ago, and he maintains that historical data. A few years back, ARE cut funding to Ag Stats. Since then the data entry position has been maintained through soft money, which has been difficult to sustain. We have an interest in helping to stabilize this position to ensure continued availability of 1080 data. Furthermore, we would like to obtain our own copy of the 1080 database to be managed by the APMC.

In the past several months, Peter and Al have met with the folks at ADA (Jack Peterson, Gary Christian) and Ag Stats (Steve Manheimer, Sharon Cochran), ARE dept. head Alan Ker, Colin Kaltenbach, and industry representatives to discuss our goals and to learn the history of the

database. We have also asked about willingness of these groups to financially support the Ag Stats position. ADA have offered to let us clone their “final” version of the database, which they keep going back 5 years. As far as financial support, Colin has asked us to submit a proposal and has expressed that CALS may be willing to backstop the position and provide a nominal amount of support if we can leverage it with other resources. Certain industry representatives have indicated a willingness to contribute if they are granted access to the data. It is less clear at this point if certain CALS departments with an interest in the data might be willing to chip in. We also feel that this is important enough that some of the APMC funds should contribute to this effort.

(Deb Young left.)

Plan for distribution of 2006 IPM monies (general discussion)

The committee had a discussion about the plan for distribution of 2006 IPM monies. (Last year about 40k was available.) Should this be a general call for proposals as it has been in the past few years, or should the priorities determined through this committee influence these decisions? Several points were raised:

- What is the value of the projects that have been funded through this general call so far? Are final reports filed and have they been reviewed to determine if these projects have had important outcomes/impact?
 - Al has not reviewed final reports from previous years, though it is a good point.
 - Peter predicted that the likely outcome from such a review would be mixed: some projects achieve a great deal through these small grants, others not so much. How would knowing this influence what the committee decides to do?
 - **ACTION:** All agreed that final reports should be a requirement of these grants (if they aren't already) and that these should be review by the committee (Al can provide a summary report). These final reports will be posted on the APMC website.
- Al's duties as IPM Program Manager include conducting a college-wide needs assessment and reporting to the committee. A goal of the APMC is focusing limited resources on critical needs, so there is an argument for letting the committee determine the types of projects that should be funded. This could be done by annotating the call for proposals to focus on specific priority issues, either exclusively, or by accepting all proposals, but giving priority to those that address the key issues.
- For example, if the committee agrees that the 1080 database project is important and will impact many programs, funds could be set aside for this before the call, or, it could be submitted as a proposal like any other potential project. Either way, the committee ultimately decides on what gets funded.
- Options:
 - Continue with the broad call (no defined priorities)
 - Continue with the broad call (invite all proposals) but designate key priorities and preferentially fund projects that address those issues
 - Provide a call that only accepts projects related to specified priorities
 - Discontinue the call and make decisions in committee

- Q: Should some amount of funds be held back from the call each year to deal with any urgent or unanticipated issues that might arise? Not decided.
- One benefit of maintaining the call in some form is to encourage broad participation and buy-in to the APMC.

***ACTION:** No consensus was reached during the meeting. Al agreed to initiate an email to continue this dialog among committee members, to summarize the key points and then accept votes from the members.

Future changes/broadening of IPM Coordinating Committee membership

This is an expected outcome of the APMC Stakeholder Engagement Workshop.

Brief update on IPM-related working groups and grants (time permitting)

- 1. Arizona Crop Information Site (Fournier)**
- 2. Evaluation of whitefly IPM guidelines (Ellsworth, Fournier)**
- 3. Commercial scale evaluation of replacement strategies, Q whitefly (Ellsworth)**
- 4. Children's environmental health program (Gouge)**
- 5. Encouraging adoption of IPM practices for desert turfgrass (Umeda)**

Unfortunately, we ran over on other topics and did not hear reports on last year's projects. Final written reports should be submitted by the PIs.