Advisory Council Meeting
November 8, 2010

Present: Jim VanKirk, Harold Coble, Conrad Lavender, Tom Royer, Carrie Harmon, Lora Lee Schroeder, Keith Douce, Dave Close, Steve Toth, Ames Herbert, Mike Weaver, Bob Bellinger, Russell Duncan, Rosemary Hallberg, Fudd Graham, Paul Smith, Denise Delaney, Mike Fitzner, Carlos Bogran, Caydee Savinelli, Billy McLawhorn, Charles Allen

Situation for IPM at NIFA (Fitzner)

- There is uncertainty regarding the future of the Section 406 programs, including IPM Centers, RAMP and CAR, Methyl Bromide and Organic Transitions.
- However, there are new opportunities for IPM, including:
    - Specialty Crops Research Initiative,
    - AFRI Wide Area Pest Management Monitoring, and
    - Organic Research and Extension Initiative.
- Extension IPM Coordination and Support transition continues
- Critical Issues money goes to start up projects for new and emerging pests.

Other IPM projects at NIFA:

- ipmPIPE
- National Plant Diagnostic Network
- IPM3
- Master gardeners People's Garden
- Public Housing IPM/Healthy Homes
- Citrus Greening
- Extension Disaster Assistance Network

Section 406 Programs:

- History: Several funding authorities were started during FQPA.
- Methyl Bromide and Organic Transitions were returned to the budget because they had active constituents who advocated for them on the Hill.
- Food Safety and Water Quality also got put back in to the budget by the Senate, also because constituents actively advocated for them.

Discussion:

- We need someone like those advocates who can advocate for IPM (Royer)
- We had initially hoped that the Centers' Advisory Committees would advocate for the Centers (Fitzner). However, most of the advocacy came from the land grant universities.
- People still need to know what IPM is. We need a brand and advertising (Harmon)
- It's going to take educating the public and the leadership. We need to make sure we're in contact with the media and that they do a story about it (Fitzner).

- Because the Centers are in an enabling role, it's hard for them to promote what they do. Administrators know about the IPM program, but they don't connect it back to the Center (Herbert)
- Educating the people above us is a challenge because of scheduling difficulties (VanKirk)
- Keep an eye on the AFRI RFA this year and see if there isn't a positive direction for IPM and the Centers. Is there isn't, suggest improvements for the next iteration. AFRI wants to showcase useful projects like the IPM Centers to show that the program isn't just research. (Fitzner) You need to communicate your successes in terms of one of the five challenge areas.

NIFA Grant workshops are November 30-Dec. 1 and Jan. 25-26 in Washington, DC.

406 Funding and ipmPIPE

Last date for our funding is August 31, 2012. We have about $377,000 to put out in another call for proposals. In December, we'll put out an RFA and give out $377,000. Worst case scenario is that we'll find out how much of that is there. Whether or not there's a new RFA for Centers, this project will end. At this time next year, we may talk about how to spend the rest of our money.

The problem is if we can't get any kind of security, we'll have turnover.

ipmPIPE: The ipmPIPE started in 2005. It's a wide area monitoring system. It takes extension and research and uses technology to help with communication.

- First year was about $2 million
- Second year was $3.2 million
- Third year was $4.5 million. We had a competition to fund PIPEs for new crops and new pests.
- We asked for a no cost extension for PIPE 3, but that will end at the start of 2012.
- ARS has provided a little money to fund legumes.
- NCSRP and the Soybean Checkoff has kicked in money for soybean rust monitoring.
- There is a new onion ipmPIPE that has just been funded through Specialty Crops Research Initiative.
- RMA came up with another $1.5 million to do a west coast ipmPIPE to focus on the apple moth and spotted wing drosophila.
- This year, there was a new line put into AFRI for Wide Area monitoring. Scott Isard and everyone who was involved in PIPE figured the RFA was created to fund the ipmPIPE. We wrote a proposal for $6 million to fund all of the crops that were in the current PIPE. The proposal wasn't funded.
- The Southern Region IPM Center is nearly done with ipmPIPE.

National Strategy for IPM

Coble: Six months ago there was a challenge put forth by leaders at NIFA to propose a new structure for IPM Centers. When the IPM Centers were zeroed out, it became obvious that IPM doesn't have a champion in DC.

When the US Government Accountability Office (GAO) evaluated IPM in the 1990s, they said no one was in charge. They developed a federal coordinating committee comprised of representatives of every agency that handles IPM.

If we had a champion for IPM, what happened wouldn't have happened.

This proposal recreates the four regional centers as they are and creates a national IPM office. The person in the national IPM office could communicate with someone who could champion IPM.

Discussion:

- IPM doesn't have a consistent message, like Coca-cola does (Douce)
- What needs to be added is a plan to develop IPM as a consistent brand. It needs a logo and a slogan that is less than 6 words. (Harmon)
- We need to have the public understand IPM, but for now, we need to get the federal government to understand the structure of IPM (Coble)
- Does this document need to add any of the NIFA buzzwords? (Douce)
- Of the various federal agencies in IPM, how many have statutory responsibilities in IPM, and how many have federal advisory committees who can address this? (Schroeder) All of them do (Coble)
- Look at the responsibilities that may overlap those of another agency, and take those out (Bogran)
- There is a newly explicit role for a national IPM database and a national regulatory information network. Are these good or bad ideas? (VanKirk)
- Do you feel there are things that Centers are not doing? (Toth)
- We need to define at the consumer level what would happen if the Centers went away
- Cam you create an office of IPM? (Herbert) We can create an office for IPM and it doesn't have to be funded in the agency in which it's housed (Coble)
- What about CAR and RAMP? (Toth) Those responsibilities are included in AFRI (Coble)

Stinkbug Guide Project (Jack Bacheler)

After the boll weevil was eliminated, stinkbugs emerged as a new pest. In Cleveland County, NC, boll weevils cause only .3 percent damage, and caterpillars cause only 1.4 percent damage. Louisiana and Mississippi have more damage from plant bugs than they did during the boll weevil days.

Stink bugs do most of their damage when the bolls are the size of a quarter. So Bacheler and a team of researchers from Virginia and Tennessee developed a scouting card with

two holes the size of typically susceptible bolls. They also developed a dynamic threshold for stink bugs depending on the type of insect pressure. The dynamic threshold has been saving growers money.

The card has helped growers adopt scouting and thresholds. Each state has its university logo on the card.

Discussion:

- This tool has helped us tremendously. We have a lot more confidence that we're doing things right because of the card. (McLawhorn)
- We included the threshold number on the card in VA and NC (Herbert)
- When might data about reductions of applications be available? (Coble)
- Having growers adopt this is slow, but at least the grower has been informed (Herbert)
- I like the dynamic threshold on the card. (Bellinger) We've had trouble getting growers to trust dynamic thresholds because they weren't easily accessible.

Overview of IPM Center Projects (Steve Toth)

Steve Toth presented the slide set included in the folders.

Savinelli: for the Regulatory Information Network, how is the money distributed? Steve: In the past, we've given a grant to an individual state. For this, we wanted one proposal but we handled the subcontracts.

Individual Updates

National Plant Diagnostic Network: (Carrie Harmon)
NPDN is having their national meeting next year in San Francisco. We will be having our external 5-year review. We will have to compete again. If anyone has interest in diagnostics, let Carrie know if you want to be involved in the review.

She had two projects funded through the Center on viruses and vectors that show up suddenly. That project resulted in a million dollar AFRI grant. A second project involved diagnostics and identification. Three other regions are developing the same idea into regional projects.

McLawhorn: for people in the field, diagnostic tools like you've described are phenomenal.

EPA: (Lora Lee Schroeder)
The EPA has decided to end the Strategic Agricultural Initiative and the money is being redirected to School IPM. There will be an RFA for School IPM in 2011. All staff in SAI are being redirected to School IPM. It will probably be a national competition rather than regional competitions.

Douce: We need to build our information so that it's accessible to everyone.

Delaney: Maybe we need a toolbox for everybody's tools. For instance, efficacy data on lower toxicity products and ornamentals needs to be easier to find. Bob Bellinger: companies won't allow efficacy trials.

Fudd Graham: We need to start putting the term "IPM" on our products.

Tuesday, November 9

Evaluation of IPM (George Norton)

SRIPMC sets aside money for evaluation in RIPM. George Norton is the one PI who has done an evaluation project.

There are very few impact assessments of IPM. There were 3 objectives of the project; one of them was to quantify pesticide use.

Types of Impacts:

- Field and farm
- State, regional and national

Methods:

- There are a series of assessment methods that he used to measure impacts.
- Several indicators are measured.
- He tested budgets or significant differences. He recommends enterprise budgeting over partial budgeting. Enterprise budgets are easier for non-economists to follow.
- Econometric analysis uses regression analysis of survey data.
- With the economic surplus analysis, you're combining budget info, adoption info, data on prices, etc. You can calculate year by year and do discounting to do a benefit cost analysis.
- Environmental assessment: done by Environmental Impact Quotient: changing the mix of chemicals and reducing the ones that are more toxic. The EIQ was developed to assess how dangerous the pesticides are on the environment. They came up with about 8 categories of the environment. You look at the effects of the chemicals. It's an index of different chemicals. You calculate the EIQ before the IPM program and come up with the environmental change after the intervention.
- He also did an experimental approach, which asks farmers what they would pay for a certain benefit. Farmers are given an amount of money and a list of benefits. If they say that they wouldn't pay for the benefit, they can keep the money; if they say they would pay for it, they give the money back.
- Getting data for IPM Impact assessment: surveys, prices, pesticide risks.
    - It's hard to get data analysis because definitions change, etc.

Results:

- IPM as a whole does not reduce pesticide expenditures.
- IPM does not reduce pounds of pesticides on cotton, but it does on corn some years and varies by IPM practice.
- IPM effect on pesticide use depends on crop and practice but overall IPM didn't reduce pesticide use.

Discussion:

Ames: would it be a value to separate the pesticides into the general types? Was there a bigger change of insecticides vs. fungicides vs. herbicides. Would there be a difference if you broke it down?

Yes, you have to break it down by practice and crop. It looks like a lot of programs have been geared toward economic improvement. However, the farmers aren't going to adopt practices if they're not economically beneficial.

Case study 1: Eastern US apple IPM program

- 56% of growers adopted at least half of the IPM practices.
- 65% of growers adopted at least 3 IPM practices
- 75% of growers used at least 3 RR insecticides
- 23% of growers adopted at least 3 biological control practices.
- Profits decrease due to higher costs of IPM
- Results show higher yields.

Bob Bellinger: On the expenditures on IPM, when you look at cotton, how are the expenditures for Bt cotton handled over regular cotton? How do you handle the costs for some of the increased pests? Norton: You have to get some data on pest pressure and control for it.

Herbert: these general statements are very damaging, and the people who are going to read these are not going to read much deeper than that.

Charles Allen: I can look at cotton in Texas. Between the boll weevil eradication and other programs, the insecticide use has plummeted. However, we're using more herbicides than we have in the past. If you don't give the details, you don't give the true picture.

Harold Coble: Your discussion has illustrated the complexity of this issue. My concern is that we talk about the success of IPM in terms of pounds of pesticides. We need to talk about the reduction of risk. If you could get into the types of pesticides that are being used and the systems, that would be better.

Norton: Many of the surveys ask for pesticide use in terms of pounds.

Harold: maybe we need to change the questions on the surveys to ask the right questions.

Bob Bellinger: Very few people have gotten as far as you've gotten.

Douce: Risk aversion is an issue. Some of the apple growers have switched to the reduced risk materials because of the elimination of other products. If there's a way to put the tweak on environmental values, people feel better.

Tom Royer: I would be interested in a breakout of soybeans. We've had two invasive pests since 1996 but we have different technologies for pest management. And there have been tremendous increases in yields.

IPM Elements (Wythe Morris)

Wythe works in 4 different counties with Christmas tree growers. The activity is categorized in 2 areas: low elevation and high elevation. Cone orchard operation was started in 1979.

Mt. Rogers Christmas Tree Growers Association: the Christmas tree is a specialty crop. The Mt. Rogers strain of Frasier fir is one of the purest strains. Some of the things the growers have done have helped to save the species in that area.

Why the developed IPM elements for Christmas trees:

- IPM Elements started to be used because of public perception. Developers started building neighborhoods next to Christmas tree farms. When residents started moving in, they saw people in pesticide suits and assumed that what was being sprayed was bad.
- The Extension agents had to figure out a way to educate both the residents and the growers. They developed best management practices for Christmas trees.
- As a result, growers have adopted the following practices:
    - Instead of burning the weeds down with Roundup, growers are applying a half-application of Roundup. As a result, the clover is still growing, but it adds nitrogen to the soil so growers don't have to use as much fertilizer.
    - Growers are looking at using lower inputs on some of the steeper slopes.
    - Growers are being trained how to scout and use the IPM elements.
    - They are trying to brand Mt Rogers seed.
    - They are trying to develop certification for IPM growers and are working with the association.

Other IPM projects involving IPM elements:

- Broccoli: Growers are trying to develop a year-round production between North Florida to Maine. It's called the East Coast Broccoli Project.
- They are retraining new growers and training other growers to grow broccoli 52 weeks per year.
- Extension agents plan to update the production guides for the east coast.

- They are also starting to do IPM elements with cilantro, pumpkins, brambles, and shiitake mushrooms.
- In apple orchards, IPM practices have reduced pesticides by 30%.

Discussion:

Mike Fitzner: Here's a public private cooperation that is opening up a new market. Could those growers have done that without extension?

Wythe: I doubt it. Until the extension people do one-on-one activities with the growers, you can't get the growers to do the practices.

Duncan: We need to educate our administrators and deans about what the land grant university is about.

Weaver: Growers are very receptive to the elements because they are a set of standards they can use. When the growers had the problem with the residents, they used the elements as a marketing tool because they were able to explain what practices they were using.

IPM Voice

Recently we've had a couple more people who are interested in joining the IPM Voice, one is Jim Cuvie and the other is someone from SARE.

Jim had a conversation with someone with NRDC. They've been talking about the 406 issue.

Friends of IPM Winners

- **Bright Idea:** Okanola Project
- **IPM Educator:** Janet Hurley
- **IPM Implementer:** Patty Lucas
- **Pulling Together:** Mid South entomologists
- **Future Leader:** Hannah Burrack

Elections

Bob nominated Mike Weaver. Caydee Savinelli seconded.

Discussion: Changing how the Center funds projects

Subcontracts need to end May 30, 2012.

What other regions fund:

- North Central region funds working groups. They just had their last competition this year.
- Northeast proposals are due November 22. They do working groups, IPM issues
- The Western Center funds a regulatory information network ($100K), working groups and publications.
- We fund one regulatory information network ($150K), IPM Documents & working groups, and seed and capstone projects.

We don't need to think about changing how we fund things until next year. We have enough funding this year to do one more RFA as we usually do them.

Several months ago, Jim had proposed the idea of a meeting to discuss impacts of our projects, open to the media.

Discussion:

- Get Roger Beachy to come to the meeting (Weaver)
- Invite people a level below Beachy (Toth)
- Tell more stories about people in the trenches (Fitzner)
- We will remind NIFA that the PMSPs and Crop Profiles need to be updated soon (Coble)
- Create a group to work on a logo and marketing (Douce)
- Think about how you can get to the decision-makers; gather information into an understandable packet and present it to them (Delaney)