



PAUL R. LEPAGE
GOVERNOR

STATE OF MAINE
MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY
BOARD OF PESTICIDES CONTROL
28 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0028

WALTER E. WHITCOMB
COMMISSIONER
HENRY S. JENNINGS
DIRECTOR

BOARD OF PESTICIDES CONTROL

January 13, 2016

Augusta Civic Center, 76 Community Drive, Kennebec/Penobscot Room, Augusta, Maine

AGENDA

3:00 – 4:00 PM BOARD MEETING

4:00 – 5:00 PM OPEN FORUM

5:00 – 6:00 PM BOARD MEETING CONTINUED IF NECESSARY

1. Introductions of Board and Staff
2. Minutes of the November 13, 2015 and December, 18, 2015, Board Meetings

Presentation By: Henry Jennings
Director

Action Needed: Amend and/or Approve

3. Request from Maine Migrant Health Program and Eastern Maine Development Corporation to Help Support a Worker Safety Training Program for Summer 2016

Since 1995, the Board has supported a Migrant and Seasonal Farmworker Safety Education program. During 2015, 308 individuals received Worker Protection Standard training, 308 individuals received take-home exposure training, and 310 received heat stress training. The Maine Migrant Health Program and Eastern Maine Development Corporation are proposing to provide training to one health-and-safety outreach worker during the 2016 agricultural season. Funding to support this effort is being requested in the amount of \$3,675, a 5% increase over the amount requested last year. The funding has been accounted for in the Board's FY'16 budget

Presentation By: Chris Huh, Program Manager, Farmworkers Jobs Program,
Eastern Maine Development Corporation
Elizabeth Charles, Enabling Services Coordinator, Maine Migrant Health
Program

Action Needed: Discussion and Determination if the Board Wishes to Fund this Request

4. Discuss List of Actionable Strategies Developed by Board Staff for Promoting Integrated Pest Management with Homeowners

At the November 13, 2015 meeting, the Board discussed public concerns about homeowner pesticide use and explored ideas for promoting Integrated Pest Management (IPM) to this audience. At the December 18, 2015 meeting, the Board heard from invited recipients of pesticide registration revenues as they discussed their current activities related to homeowner IPM and whether there may be opportunities to expand their roles. The Board further directed the staff to develop actionable work items for implementation in 2016 and beyond. The staff has developed a list of ideas for the Board's consideration.

5. Other Old or New Business

- a. Email from Cynthia Ladderbush
- b. Other

6. Schedule of Future Meetings

February 19, March 25, and May 6, 2016 are tentative Board meeting dates. The Board will decide whether to change and/or add dates.

Adjustments and/or Additional Dates?

7. Adjourn

NOTES

- The Board Meeting Agenda and most supporting documents are posted one week before the meeting on the Board website at www.thinkfirstspraylast.org.
- Any person wishing to receive notices and agendas for meetings of the Board, Medical Advisory Committee, or Environmental Risk Advisory Committee must submit a request in writing to the Board's office. Any person with technical expertise who would like to volunteer for service on either committee is invited to submit their resume for future consideration.
- On November 16, 2007, the Board adopted the following policy for submission and distribution of comments and information when conducting routine business (product registration, variances, enforcement actions, etc.):
 - *For regular, non-rulemaking business*, the Board will accept pesticide-related letters, reports, and articles. Reports and articles must be from peer-reviewed journals. E-mail, hard copy, or fax should be sent to the attention of Anne Chamberlain, at the Board's office or anne.chamberlain@maine.gov. In order for the Board to receive this information in time for distribution and consideration at its next meeting, all communications must be received by 8:00 AM, three days prior to the Board meeting date (e.g., if the meeting is on a Friday, the deadline would be Tuesday at 8:00 AM). Any information received after the deadline will be held over for the next meeting.
- During rulemaking, when proposing new or amending old regulations, the Board is subject to the requirements of the APA (Administrative Procedures Act), and comments must be taken according to the rules established by the Legislature.



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BOARD OF PESTICIDES CONTROL

November 13, 2015

AMHI Complex, 90 Blossom Lane, Deering Building, Room 319, Augusta, Maine

MINUTES

8:30 AM

Present: Eckert, Flewelling, Granger, Morrill

1. Introductions of Board and Staff

- The Board, Staff, and AAG Mark Randlett introduced themselves
- Staff Present: Chamberlain, Fish, Jennings, Hicks, Patterson, Tomlinson

2. Minutes of the August 28, 2015, Board Meeting

Presentation By: Henry Jennings
Director

Action Needed: Amend and/or Approve

- **Flewelling/Eckert: Moved and seconded to adopt as amended.**
- **In Favor: Unanimous**

3. Draft Response to the Legislative Committee on Agriculture, Conservation and Forestry Concerning Rules for Public Parks and Playgrounds

On July 16, 2015, the Joint Standing Committee on Agriculture, Conservation and Forestry of the 127th Legislature sent a letter to the Board requesting a review of its rules “in order to determine whether the standards for pesticide application and public notification for public parks and playgrounds should be consistent with the standards that have been established for pesticide application and public notification in school buildings and on school grounds under CMR 01-026, Chapter 27.” The Board discussed the issue at the August 28 meeting and directed the staff to draft a response based on that discussion. The Board will now discuss the draft.

Presentation By: Henry Jennings
Director

Action Needed: Review the draft response to the Joint Standing Committee on Agriculture, Conservation and Forestry and provide guidance to the staff

- Jennings stated that the staff had taken the points made by the Board and organized them in the letter. Plenty of time to modify if the Board wants to make changes.

- Flewelling and Granger noted that they were pleased with the letter.
- Eckert noted that it describes what is already being done; maybe we don't want to get into describing what we might do? Jennings said that the Board provided specific instructions about the content of the letter: the Board did not want to speculate on what could be done, other than to place more emphasis on training; emphasize caution in applicator training that when working in parks and playgrounds where there will be children present and they should be sensitive to that. Bohlen observed that if suggestions are included in the letter, the Committee will just respond by saying "do that." Instead, he suggested opening a dialogue with the committee; if there's more that they think should be done they can let us know. Perhaps members of the Board will want to speak to the committee if there is a hearing.
- Eckert stated that the training we should encourage is IPM. Jennings noted that in its truest sense, IPM is about minimizing risk.
- Morrill queried the audience for comments; none were forthcoming.
 - **Consensus reached to have Morrill sign the letter for the Board and send it to the Committee.**

4. Letters from Various Constituents

Paul Schlein submitted comments and suggestions to the Board as part of the July 10, 2015 meeting packet in reaction to a letter from Justin Nichols recommending changes to the Board's posting requirements. Schlein later submitted a revised version of his letter and asked that the Board review it. Related letters supporting Schlein's views were also received from Maine Organic Farmers and Gardeners Association (MOFGA), Friends of Casco Bay, and Natural Resources Council of Maine (NRCM). The Board will now review and discuss the letters.

Presentation By: Henry Jennings
Director

Action Needed: Discuss the letters received from constituents and determine what, if any, action is required

- Paul Schlein thanked the Board. He noted that he had attended over 100 meetings while working for the Board and that it is interesting to now sit in the audience. He felt his role then was to advocate for public health, and that it still is. He would like to see things prioritized a little differently. The Board should provide education to both the public and the professional community. IPM and BMPs are excellent in theory, but they need to be practiced. There has been an exponential increase in home use of pesticides in Maine; over six million pounds in Maine. If those people had received more information, there wouldn't have been such an increase. The focus should be about health, safety and welfare. If certain pesticides are presenting a risk, then they deserve scrutiny by the Board.
- Katy Green, MOFGA, said that Schlein's letter spoke for itself. She said that it was interesting that the Board joked at the Machias meeting that they must not be doing anything controversial because not many people came to the public hearing. It isn't that there isn't anything, people just don't know that the Board exists and what it does; there is more that the Board could be doing.
- Ryan Parker, NRCM, remarked that there seems to be a disconnect between the principals of IPM and pesticide usage in the state.
- Bob Tardy noted that in the statutes the Board is charged to promote IPM; the money is there but has gone other places. The Board should understand that it's not Jennings' budget, nor the Commissioner's budget, it's the Board's budget. For years he's advised the Board to use it or lose it.

- Jody Spear said that the July minutes indicated a letter about posting would be sent to applicators and asked whether such a letter had been sent (Note: letter was sent, but was not included in the next Board packet). Her letter (which was distributed to the Board at the meeting) focused on negligence and fines which were not addressed at the July meeting. The Board should reopen discussion about the egregious Nichols' complaint. There was discussion about mixing products in that case; four herbicides were used. Is this done all the time? Why would they be together?
- Granger replied that it is common for a lot of crops. As a Christmas tree grower, the spectrum of activity for some of those products is not sufficient; some affect grasses, others affect broadleaves. Mixing in the tank saves time. It's very common to mix products.
- Spears asked whether it is the synergistic effects that are beneficial. Hicks replied that if the active ingredients appear in a single product then there are studies done. She would have to see if those active ingredients are used together in a product. Spears said that she would like an answer. She would also like to know what products were used. The minutes say it was three, elsewhere it says four. The minutes should be correct.
- Tim Hobbs asked whether the labels allow mixing. Morrill replied that the label recommends what you can and can't mix; would be product specific. Hicks noted that the label would include prohibition on mixing if active ingredients were incompatible. Spears asked for each of the products that you know were used, would there be information on mixing? Fish said that there are not prohibitions on mixing those four ingredients together. The first three are commonly found in combination broadleaf control products. The fourth has recently been added as a crabgrass control and is often mixed with broadleaf products.
- Morrill suggested the Board would look into it, noting that at the July meeting they did suggest to enforcement to review it again because they thought it needed more scrutiny. Jennings reiterated that a communique was sent to applicators about phone numbers on signs; they need to have people answering the phones.
- Fish said that in recent training this case was emphasized specifically and that phones need to be answered by someone who knows what's going on and can answer questions.
- Ryan Parker asked whether all applicators participated in these trainings. Fish said no, but they all received the letter.
- Morrill steered the discussion back to Schlein's letter. The focus should be on the trend of increasing use of home pesticides and more education to the public.
- Eckert noted that these issues have been bubbling for 20-25 years or more. We've known that lawn care use is increasing, especially in the southern part of the state. It's not easy to get a handle on it; people aren't licensed; it's not a captive audience. Other than educational outreach, we can't get to them. Education, though not easy, is the easiest way to deal with this. There may be regulatory issues as well. The Board emphasizes IPM and BMPs with the landscaping industry and hopes that things are done right. It promotes notification and transparency. These are not new issues, but these are valuable issues to focus on over the next year. The synergistic issue is a very complex one without an answer. There are a lot of products and a lot of combinations. It's hard to know how anyone would get a handle on testing them all. Currently, it isn't being done and probably won't get done completely except for common combinations. In Eckert's field, it's common to use too many drugs on people as they get older. Even in that setting where there is more testing, there still isn't good information on what the effects will be. Unfortunately that is an issue that's not going to be solved.
- Jody Spear added that some of the inert ingredients, solvents for example, are not going to be listed.
- Hicks noted that they aren't listed, but they are tested.
- Schlein asked, just because these multiple products are used in a commercial product, does that mean there can't be negative synergistic effects? Hicks replied that individual labels include

inerts and inactives. She could compare labels of products with a single active ingredient to labels with multiple active ingredients; that's all she can do.

- Granger commented that most pesticides have a range of dosages. Commonly when you combine products, you use the lower rate because there's some carryover effect so you can get the same amount of control with less total product. So typically you apply less per acre than if the products were applied separately. Eckert asked if that would cause less resistance; Granger replied yes.
- Morrill said he would like to look at the budget. Where are we putting our resources? Where is our money best spent? It has been brought up that there is an increase in lawn care pesticides. Is that because of reporting? How much increase is active ingredient? In recent years there has been a shift from licensed applicators to unlicensed homeowners. For the Board, it's easy to focus on applicators. Somehow we need to shift the focus toward broader public education and homeowners. It's a difficult issue to wrap our heads around—providing more education to the general public. There was a conference this fall on tick borne diseases with a very good speaker. The cost was \$100. The general public probably won't spend that much. Those are the types of conference that the general public might benefit from. Maybe we can facilitate making certain conferences available to the public? The staff could focus a lot more on public education and capturing those people that we've struggled to capture in the past.
- Hicks commented that she has a problem with focusing on strictly on the “minimize reliance” standard. Risk is the key measure, not volume of pesticides.
- Morrill agreed that it is difficult to compare apples to apples. Where is the increase? A decrease in use might not be the best thing as far as risk. Eckert agreed that the goal should be to minimize risk. It's not about amount. Hicks added that it ties in to exposure, use patterns, etc.
- Katy Green said that she concurs with what Hicks said. The statute specifically directs the state to reduce reliance on pesticides, but does not speak to risk. Homeowners are using products they don't need. Hicks added that they don't know what they're doing with them.
- Schlein commented that as far as communicating to homeowners and the general public, Yardscaping was very effective, but it hasn't gotten much attention lately. The staff used to go to a lot of events, worked on the Yardscaping garden and went to conferences and the flower show where something like 60,000 people attend each year. Portland is an area where a lot of pesticides are used. Perhaps there could be a media campaign to reach the public. The ducky ad was considered highly successful; the second ducky ad focused on weed 'n feed products, which is a huge issue. The ad was released and then pulled and shelved. It should be aired as much as possible.
- Flewelling asked why homeowner use of pesticides has increased; do people want better lawns? Jennings replied that the increase can be largely attributed to rise in popularity of weed 'n feed products, which are generally less than 1% active ingredient. Aggressive marketing by a few large lawn product distributors has been effective. They do a good job of convincing the public that a weed free lawn is the desired goal.
- Schlein said that the public isn't aware that there are alternatives that can give them a lawn that's just as good. There is proof that switching to those alternatives is good for business. Schlein has been doing research on doing a stewardship publication using the Yardscaping model to get information to homeowners emphasizing using nitrogen only fertilizer. It's surprising that it's very difficult to find those products; the only nitrogen-only fertilizer is part of a weed 'n feed.
- Eckert said that we need ideas about what's driving this. The Board needs data, this is just ideas. There are a whole lot more people south of Augusta where there are many developments, lots of housing, large stores and malls etc. The growth in homeowner pesticide use may be that it is driven by that. Municipal ordinances may promote more work for professional companies; some companies offer organic landscaping services.

- Schlein said that he spoke to the code enforcement officer in Ogunquit who said that businesses who are embracing the organic model are getting more work. In Toronto, after a phase-in period, there was a 30% increase in landscape and lawn care companies, a definite increase in companies that offer alternatives.
- Ryan Parker said he would like to respond to Flewelling's comments. He has been farming for 10 years. If you're going to have a monoculture, it's impossible to do without chemicals. He also commented about marketing; the point is to sell people things they don't want or need.
- Jennings noted that as residential property values go up, people invest more in landscaping.
- Schlein said that he appreciates that the Board acknowledges that something needs to be done. Suggested they pass a resolve directing the staff to come up with a list of things that need to be done; work with other organizations and agencies. Also come up with better data.
- Morrill said that he would like to move into a discussion of the budget.

5. Review of BPC Budget

Board Chair Deven Morrill suggested that a review of the Board's annual operating budget might be timely since the Board is reviewing suggestions for additional educational efforts and because questions have arisen about the costs of pesticide continuing education programs.

Presentation By: Henry Jennings
Director

Action Needed: Review the BPC budget

- Morrill stated that Schlein's letter spawned the idea of studying the budget and suggested that the Board should have some input. He would like the Board to review the budget on an annual basis. Where is the money going? What should it be spent on? He would like to get a better understanding of where the money is going. Is there money available to spend on education? If we have the opportunity to educate the public, it would reduce reliance on pesticides.
- Jennings explained that the document in front of the Board is the budget that is presented to the Legislature; if it is approved it provides the legal authority to spend money. Dicap is the Department overhead, which pays for IT, computers, cell phones, licensing for software, attorney general, accountants, who process bills and prepare budgets, and human resources. Stacap is the statewide overhead, and is levied by the State Controller's Office. It pays for office space, lights, internet, insurance, etc. The legislative transfer is one of the two grants to Cooperative Extension (\$135K), the other grant to Cooperative Extension (\$65K) is listed below. The two grants together equal about 10% of the BPC's total revenue allocated to Cooperative Extension for IPM related purposes. The total revenue in the BPC budget and total expenses are just about equal. Typically we have vacancies and don't spend all that's allotted. If every position is filled, and we spent all the money projected on things like travel, grants, mailings, etc., then it would be pretty close. The Board is also paying for five other employees in the Department doing pest management related tasks. Professional Services includes laboratory services because the state lab can't do what we need. Sediment samples are \$400 plus around \$75 shipping; around \$400 for water samples; \$200-300 for enforcement samples. It may be more if testing for multiple active ingredients that can't be done with the same test. The part-time office temp is also included in Professional Services. That may go away if the Pega solution does what we want it to do. The General line includes obsolete pesticide collection, Board member costs, rulemaking, postage, shipping, printing and binding. The Technology line was going to be for licensing of Pega software but that should go down or disappear because the state is negotiating an enterprise level license agreement. Grants include the \$65K to Cooperative Extension, \$30K to DHHS for mosquito monitoring and WPS training. In terms of money left, if we are fully staffed and spend all the grants, there

might be 100K left in the near term. Authorization would be required to spend above the allotments in the biennial budget. If the Board believes it's prudent to allocate more time and money on homeowner education, the staff is completely on-board. We have four websites, including GotPests, which is geared toward homeowners. IPM at its best is providing easy access to the best available information to the public. If the Board wants, we could do something like a media campaign or go back to the Flower Show. We tried talking at the Maine Municipal Association conference, but they put us in a break-out session so we don't get many people. We had a booth, and didn't get many visitors.

- Flewelling asked who the target audience would be. Jennings said that is for the Board to decide.
- Morrill said the Board should have this discussion every year. Maybe have a planning session to determine specific priorities. He is interested to see that almost 30% is spent on positions that aren't really under our umbrella, as well as money that goes to Cooperative Extension.
- Flewelling asked if those people were helping to fulfill the Board's goals. Morrill suggested that the Board should ask that question. Maybe could lean on them as a better resource; look at what they're doing and how it works toward fulfilling the Board's mission.
- Granger suggested that the Board look at the whole scope of state activity. He worked for 37 years for the Department. A large part of his job was homeowner education. The same is true today; well trained staff at the Maine Forest Service lab answer questions from the public all the time. Not all homeowner education should be the job of the Board; there is a whole team of people just within the Department. If that isn't enough, adding a person or two here isn't going to change that. Get that team together and determine what we're trying to accomplish.
- Bob Tardy noted that when the Board first started funding additional positions there had just been an increase in the registration fee. The Department was going to cut two positions, and because of the increase, the BPC had extra money so they picked up those two positions. Eventually it went to five positions, something we should fight going forward.
- Fish noted that the team has been together for a long time. We have refrigerator magnets with numbers for BPC, Cooperative Extension and Maine Forest Service lab, all places homeowners can go to get solutions to pest problems. We have relied on others to carry our message, Forest Service, Arborists. We are getting something for our money. And the GotPests website is a collaborative effort as well.
- Dave Struble asked how much bang for the buck are we getting? What are we getting from the website, magnets, etc.?
- Morrill agreed. The staff has been doing this for a long time, but we don't seem to be reaching the audience that we need to reach. Marketing and education is about reaching those we're concerned about and those applications we're concerned about. The Board needs to look at where resources are and refocus.
- Fish replied that they had been working on a program to look at marketing educational programs within the Department, but it was discontinued. It was effective in helping us find better ways of advertising and educating. What we found is that the most effective ways are really very expensive.
- Schlein commented that one of the outcomes of those focus groups was that the ducky ad was one of the most effective ways of reaching people. Clark's suggestion of convening various groups is an excellent idea. He doesn't see how that precludes the Board from funding Yardscaping. Why couldn't the Board do that immediately?
- Morrill noted that a lot of educational outreach is focused on applicators, but maybe we need to take some resources and direct toward homeowners.
 - **Consensus that it would be helpful to ask those receiving BPC funds, including Cooperative Extension, to explain what they are doing.**

- Eckert noted that municipalities don't seem to know what the Board does; not coming to us for assistance. Morrill agreed that the public in general don't realize the resources, rules, umbrella of the Board.
- Schlein noted that his former position of public information officer was created to address concern over the growing number of ordinances, to help the public understand. The public doesn't feel that they're getting the help they need. He is not in favor of local ordinances, and thinks the state should be addressing the concerns. However, if the state wont, then municipalities will. More education would diffuse some of that.
- Morrill said that the Board has to be cognizant of staff time. Every inquiry takes time. Let's make sure we're not asking for something we don't really want. What do we have for available funds? What can be best done for education? Morrill would like to know where \$625K is going; direct those programs to help spread BPC messaging. He thinks it makes sense to put more emphasis on general public outreach. The Board should do Flower shows and venues like that to reach people other than applicators. Why was the recent tick conference \$100?, If that had been open to the public for free, that would have been good.
- Jennings suggested that staff come back with some major points from this discussion. Maybe plan a planning session. He noted that is difficult to reach homeowners without a lot of money. It's easy to identify that this is a priority; it's harder to put together a plan that will accomplish what we're trying to do. Everyone should be invited to the table to see if there's a way better coordinate and put together a program that can be effective. Morrill added that the goal should be to put some educational pieces into effect before next spring.

6. Consideration of a Consent Agreement with JBI Helicopters, Inc. of Exeter, New Hampshire

On June 3, 1998, the Board amended its Enforcement Protocol to authorize staff to work with the Attorney General and negotiate consent agreements in advance on matters not involving substantial threats to the environment or public health. This procedure was designed for cases where there is no dispute of material facts or law, and the violator admits to the violation and acknowledges a willingness to pay a fine to resolve the matter. This case involves drift from an agricultural pesticide application that impacted a neighboring residential property.

Presentation By: Raymond Connors
Manager of Compliance

Action Needed: Approve/Disapprove the Consent Agreement Negotiated by Staff

- Connors explained that this was an application of fungicide to forage corn in which pesticide drift occurred. Samples were taken at the home across the road from the target field and in the untreated buffer which came back positive for both active ingredients. Violations included the lack of required aerial application checklist and off-target drift. People were present at home at time of application. Samples taken at house and at mailbox had relatively high levels of both active ingredients. This was the first time Connors had heard of aerial spraying of forage corn. The company was trying to see if there was a market for applying this way. The wind was from the treated area toward the house. The pilot record and Bangor airport all agree.

- **Flewelling/Granger: Moved and seconded to accept consent agreement negotiated by staff**
- **In Favor: Unanimous**

7. Other Old or New Business

a. Summary of Obsolete Pesticide Collection

- Patterson gave a brief overview. There were about 85 participants, up a little from last year. There was a lot of media outreach to do coverage, which really helped.

b. Update on transition plan to three year license/certification cycle

- Fish explained that the BPC recently passed rules to change the license cycle for dealers and align license and certification periods. With the new licensing system we're working on, we're going to delay implementation for about a year because we want to make sure it's up and running. Would incur more costs to implement changes with the old system. Will have to make sure we are being fair with recertification credits. Proportionally what they have and keep going into new certification.

c. Staff Update

- Jennings explained that Schlein's position had been vacant for two years because a strategic decision was made to reclassify the job. He was a public relations representative, which was always a target for cuts. The position is really about education, so we changed to an Environmental Specialist III. Anne Chamberlain moved into that job; and we hired Megan Patterson into Chamberlain's old job. The BPC is now fully staffed except for a seasonal inspector position.

d. Variance Permit for control of Japanese knotweed in Minot

e. Variance Permit for control of invasive plants in ROWs in Falmouth

e. Other

- Hicks said that the Environmental Risk Assessment Committee is down by two members and they will be looking for replacements.
- Eckert said that she had been asked when chlorpyrifos was going to be cancelled. She thought it was gone. Hicks replied that it was no longer available to homeowners and that EPA is trying to get rid of it for some food products. Granger commented that it is a critical pesticide in the Christmas tree industry. There is not enough research done on Christmas tree pests and only two insecticides currently available for the gall midge and the twig aphid. The industry will be in trouble if it is taken away.

8. Schedule of Future Meetings

December 18, 2015, and January 13, 2016 are tentative Board meeting dates. The Board will decide whether to change and/or add dates.

Adjustments and/or Additional Dates?

- **February 19 and March 25, 2016 were added as meeting dates**

9. Adjourn

- **Granger/Eckert: Moved and seconded to adjourn at 10:55 am**
- **In Favor: Unanimous**



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BOARD OF PESTICIDES CONTROL

December 18, 2015

AMHI Complex, 90 Blossom Lane, Deering Building, Room 319, Augusta, Maine

MINUTES

8:30 AM

Present: Bohlen, Eckert, Flewelling, Granger, Morrill, Stevenson

1. Introductions of Board and Staff

- The Board and Staff introduced themselves
- Staff Present: Connors, Fish, Hicks, Jennings, Patterson, Tomlinson, Couture
- Other DACF Staff Present: Ann Gibbs, State Horticulturist, Kathy Murray, IPM Specialist

2. Minutes of the November 13, 2015, Board Meeting

Presentation By: Henry Jennings
Director

Action Needed: Amend and/or Approve

- Morrill stated that the November minutes were not available for review.

3. Public Work session to Discuss Strategies for Promoting Integrated Pest Management with Homeowner

At the November 13, 2015 meeting, the Board discussed public concerns about homeowner pesticide use and explored ideas for promoting Integrated Pest Management (IPM) to this audience. The Board directed the staff to invite recipients of pesticide registration revenues to the next Board meeting to discuss their current activities related to homeowner IPM and whether there may be opportunities to expand their roles. The Board further directed the staff continue the public discussion around enhancing homeowner IPM education at a future Board meeting with an eye toward developing a work-plan for 2016 and beyond.

- Morrill: Staff from groups receiving funding from the BPC were asked to explain any activities relating to educating homeowners about IPM.
- Ann Gibbs, State Horticulturist: Described the work the state horticulturist's office is currently doing to educate homeowners about IPM. Staff consists of one state horticulturist and two assistant horticulturists funded through the BPC. The main function of the two assistant horticulturists is to inspect businesses and make sure they are free of plant pests. This program also licenses arborists within the state. The horticulture program functions mainly in a

regulatory manner, but also relays educational information to the public. The office of the state horticulturist contacts the public through the following methods:

- Presentations for the Maine Landscape and Nursery Association
 - An update letter mailed to members of the Maine Landscape and Nursery Association every year.
 - Working with the Maine State Florist and Growers Association.
 - Classes at specific businesses, some of which are related to pests.
 - Working with staff at related businesses.
 - Teaching classes at many other settings, including Southern Maine Community College
 - Presentations for garden clubs
 - Participate in annual January Tri-State Greenhouse IPM workshop
 - Participate in the annual Agricultural Trade Show in Augusta
 - Participate in the FFA Ag teacher meeting
 - Field/answer calls from the public. Giant hogweed is a current topic of interest.
 - Provide pest control info to the public on a regular basis. Although these calls are typically sent to University of Maine Extension, staff will answer questions as needed.
 - Create several documents for public use including a poster, as requested from horticulture businesses, with pest id photos to help staff and customers identify common pests.
 - License and inspect everyone who sells plant material, which results in contact with nurseries and greenhouses. Send out a licensing packet with informational material to all licensees on an annual basis.
 - The horticulturist's office approach to public outreach is to channel information through the industry who then shares that information with their customers—the public.
 - Publish a holiday greenery press release about regulations governing greenery, wreaths, etc. that are shipped/received from out of state.
 - Forest Pest Outreach Project- increase awareness of forest pests.
 - In general, staff members are very involved with invasive species issues and, specifically, have developed criteria for invasive terrestrial plants.
 - The State of Maine Apiary Program is overseen by the State Horticulturists Office.- The Apiary program includes the bee licensing program, which licenses migratory and residential bee hives and makes sure they meet tolerances for disease, parasites, pesticides, etc.. The program's focus is regulatory. The state apiarist works with migratory and Maine's many hobby beekeepers. Tony Jadcak, the state apiarist, does about 30 presentations a year, instructs/attends bee school, deals with swarms, and fields homeowner calls related to bee issues, wasps, etc. Recently, Jadcak has had many calls regarding bees/wasps infesting historical buildings. Jadcak also works with the wild blueberry schools offered by Maine Cooperative Extension.
- Morrill asked what is meant by “industry”. Gibbs replied that it refers to businesses that sell rooted plants such as garden centers, nurseries, greenhouses, etc.
 - Kathy Murray, IPM Specialist explained that the IPM program's main function is education and includes the following:
 - A lot of work with home and community IPM
 - Many presentations at schools, garden clubs, food cooperatives, Common Ground Fair, etc.
 - Fields phone calls from public, responds to questions from media.
 - Develops workshops on dealing with invasive plants
 - Teaches IPM youth education to a group of students in Farmington who are studying to be teachers
 - Participates in BugMania at the State Library each year

- Presents at Knox Lincoln Agricultural Fair each year
 - Works with the Maine Indoor Air Quality Council
 - Worked this year educating about horse pests
 - Annually conducts five workshops with school staff about IPM. Additionally, the responsibility for training schools now takes up about 40% of her time. All public and private schools in Maine are required to have an IPM coordinator and all IPM coordinators need to attend training. Murray is holding a comprehensive training on December 29 in Oakland.
 - Bedbugs are now a critical issue, which provides the opportunity to reach out to landlords/public that do not have many resources
 - Participated in E-extension, which is a membership based program for land grant universities. Murray serves as an expert and receives emails/questions from the public through that platform. It allows her to participate and collaborate with people throughout the country and develop online training.
- Gibbs: If anyone has additional ideas how to educate the public to please let them know.
 - Granger: What about reaching the homeowners through the employees working at hardware stores, garden centers and other places where pesticides are being sold. How can the Board reach the people who are not looking for the info?
 - Gibbs: There was a specific program done to educate garden center staff about pesticide use.
 - Fish: University of California Davis has a great program about educating people who sell pesticides. He has recommended this in the past, but there is no requirement for employees in Maine to do training. Eckert discusses training difficulty considering the high turnover of employees at the large box stores.
 - Bohlen: Most people are too busy to get educated. How can the Board reach these people? Teaching school kids is a good way to do this. There is a difference between people coming for info vs. bringing info to the people.
 - Hicks: People are busy and do not pay attention until they are forced to.
 - Flewelling: Include a tagline on pesticide products and their advertisements that states the importance of appropriate use.

Response to request for how funding is used

- Jennings: Presented a handout that Jim Dill provided explaining the various resources that the Pest Management Office has developed over the years. As an example, Cooperative Extension put information cards at retail locations near pesticide products intending for people to pick them up when purchasing pesticides. (Board members received examples of these cards in their folders.) The handout also described their pest identification services, websites and media efforts related to homeowner education.
- Eckert: These cards are informative and would be great for DHHS employees to hand out.
- Bohlen: Discussed the value of making cards available at kiosks and similar locations. It requires constant maintenance and replenishing.
- Murray: Has heard from other states who have tried similar initiatives that it requires staff to check and restock the kiosks on a regular basis.
- Schlein: The New England Cooperative Extension Services collaborated on a similar series of informational IPM cards approximately 10 years ago.
- Eckert: Other possible distribution points for these cards include public gardens, garden centers and at the beginning of nature trails.
- Murray: One state has a computerized kiosk, and San Francisco has a point-of-sale effort with shelf talkers. A cell phone can be held up to the shelf talker and info is relayed.
- Eckert: What data exists to say what products/active ingredients are being sold, to whom, and why?

- Schlein: There is an increase of 700% in pesticide sales, based on statistics.
- Fish: The 700% increase in pesticide sales originates from a graph on www.yardscaping.org. Those numbers may be inexact because the data collected is distribution data so it does not report the quantity that is actually sold. The data from pesticide application companies should be fairly accurate. The upward trend is reliable. The Board now receives a larger percentage of these reports than in the past. There are more lawn and landscape companies out there and more people hiring them.
- BPC Staff Memo with ideas on how to educate homeowners was distributed to Board members.
- Jennings: Likes the idea of doing timely articles and submitting them to newspapers and other media outlets. Many newspapers can no longer afford to pay for reporters and are in need of free quality content. Ticks are a hot topic currently. Suggests having someone who approves media-related information attend a Board Meeting.
- Hicks: Suggests getting “The Source” (Portland Press Herald) to put in a pesticides column.
- A discussion ensued about getting information in hard copy vs getting info digitally. Ways that information can be distributed in hard copy: brochures, magnets, bookmarks, pamphlets, etc.
- Schlein: Continued pursuing the idea of changing how the Department is funding certain positions to free up funds for homeowner education.
- Granger: It is appropriate to include the Forestry Department in this discussion about how to disseminate information to a reluctant audience?
- The discussion then shifted to the signs required in retail areas.
- Schlein: The sign was redone four years ago, so there is a digital copy on the network that can easily be reworked.
- Katy Green: ‘Got Pests?’ message on the self-service sign may not be getting the attention of a person buying a product like Weed-N-Feed. The word pest does not suggest weeds to some people.
- Fish: There is a lot of info on weed control on the Board’s websites, but it is written more for technicians/practitioners instead of homeowners.
- Mary Cerullo, Friends of Casco Bay: Numerous groups might be interested in working with the Board. These include town conservation commissions, home owner associations, the Back Cove Neighborhood Association, libraries.
- Schlein: It could be useful to enlist Department staff to write articles about IPM on a scheduled basis. Look for a successful article outlet that is well received. Employ town websites as a way to get IPM info to citizens. This is also a free option for information distribution to homeowners.
 - The Conservation Commissions would usually be happy to do workshops and presentations could also be at homeowner associations and libraries.
- Jodi Spear: The problem of resistance is not understood by the public and any education needs to include this. Opposes the depiction of the dandelion as a weed on the mandatory self-service sign.
- Schlein: What resources are available to implement an education strategy? The positions the Board is funding should be funded by the Department of Agriculture, Conservation and Forestry and that money should be put into funding an IPM Department run by Murray. Reaching future homeowners at an early age is the most important aspect and this cannot be implemented fully without several hundred thousand dollars. Public education needs to be the primary job for an employee, not a side project. The websites are also not getting the attention they should. It might be useful to collaborate with Chewonki/L.C. Bates to support implementation of IPM curricula in schools.
- Jesse O’Brian: People want to protect their families and their real estate investments. The real issue is at the point of purchase. Garden centers hear homeowner problems all day long. A lot

more focus should go into training sales clerks about safe pesticide use and IPM. It is important to be able to reach experts when needed.

- Bohlen: Would like a strategic overview that pulls all of these separate ideas together. What kind of resources are there and are they being used as efficiently as possible? Are we reaching who we need to reach?
- Ryan Parker, Natural Resources Council of Maine: Why is the discussion today focusing on IPM instead of education? Parker read the Maine statutory definition of IPM; he has been farming for ten years and has never used a pesticide. The idea of having homeowners reach the level of understanding of IPM necessary to make informed choices is misguided. IPM is a perfect focus for garden centers and people in the business, but not the public who only want to know what to do for the pest they have.
- Fish: The gotpests.org website does tell homeowners how to get rid of a problem and teaches them to understand the situation.
- Jennings: Disagrees that homeowners cannot be coached to minimize cumulative risk to themselves and the environment. Homeowners can be taught to understand IPM as it relates to the specific pest they are dealing with. The Board has many bulleted messages that homeowners can be directed to for concise IPM centered guidance.
- Tomlinson: IPM is the overarching principal under which the Board operate. The homeowner can be taught to understand how to take care of the issue they are currently dealing with and how to prevent it from happening again.
- Bohlen: The BPC is regulatory and being asked to educate at the same time. The BPC needs to focus on working within a network. Many ideas, like a dedicated Twitter feed, require constant attention to provide regular quality content. Working within a network would allow the Board to obtain greater reach.
- Morrill: The Board already maintains seven or eight websites. BPC already have a strong web presence.
- Katy Green: How do the Board's pesticide registration fees align with those in other states?
- Jennings: Maine's fees are middle of the road compared to other states. Maine's registration fee is \$160.
- Tomlinson: The number of products Maine is registering every year is increasing. Large companies will sometimes register a product that has not yet been produced. Some chains with branches in Maine select and distribute pesticides on a regional basis.
- Granger: Many of our constituents are interested in having pesticides available and are also interested in having new chemistries available.
- Fish: There was a dedicated effort to look at social marketing but that is not being done at this time.
- Schlein: There was an ad, the duck ad, developed by several State agencies that addressed the issues at the heart of this discussion. He suggests releasing this ad again.
- Morrill mentioned the "Bug of the Week/Month" posting; Put the producer on the hook educationally.
- Eckert: What about more outreach to towns/municipalities and having staff be more available?
- O'Brian: Wants it on record that he thinks it unconscionable that cities and towns can write ordinances about pesticides without receiving input from state experts. Focus more of staff energy on homeowner education rather than just applicators.
- Morrill: An example of a short term goal is providing soil test kits to retail stores and a long term goal might include developing BMPs for homeowners.
- Bohlen: Home owner education will take a concerted long-term focus and there needs to be a well-developed strategy. Requests that staff put together and submit two to three actions that can be implemented within the next six months. Staff should develop a work plan around the

ideas that includes information of what will be done, how it will be done, and how impact will be measured.

- **Consensus was reached that the staff be directed to create a list of actionable ideas for homeowner education. Staff will explore ways to implement each idea and determine if they are practical to execute. The focus should be on ideas to advertise and promote in a way that uses resources already available to the Board.**

4. Other Old or New Business

- a. Email sent to applicators re posting and phone numbers
- b. Other

- Eckert: Maine had a human EEE case in September. This may or may not be an issue going into next year.

5. Schedule of Future Meetings

January 13, 2016, February 19, 2016 and March 25, 2016 are tentative Board meeting dates. The Board will decide whether to change and/or add dates.

Adjustments and/or Additional Dates?

- **Next meeting scheduled for May 6, 2016**

6. Adjourn

- **Granger/Flewelling: Moved and seconded to adjourn at 11:30 am**
- **In Favor: Unanimous**

Lisa M. Tapert, MPH
Executive Director

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December 3, 2015

Mr. Henry Jennings
Maine Board of Pesticides Control
28 State House Station
Augusta, ME 04333-0028

Dear Mr. Jennings,

The Maine Migrant Health Program (MMHP) and Eastern Maine Development Corporation (EMDC) would like to provide an update to the Maine Board of Pesticides Control of a continued collaborative effort to deliver EPA Worker Protection Standard (WPS) education to Maine's farmworkers during the 2016 harvest season.

The outcome of this collaborative outreach effort has been possible through language proficiency, notably in Spanish and Creole, in serving the migrant population in Maine. Staff are flexible in accommodating the timing and locations requested by growers to ensure that migrant farmworkers across the entire state have access to this education about pesticide safety in the fields and risks of take home exposure in addition to heat stress concerns.

In 2015, through support of the Maine Board of Pesticides Control, MMHP and EMDC collaborated to hire a staff person to deliver WPS trainings in the southern/central region of the state during June, Aroostook county in July, and midcoast Maine and Washington county in August. During 2015, this individual offered WPS education to a total of 308 farmworkers across the state. The table below breaks down, by service category, important outcomes in 2015 completed by this staff person.

Worker Protection Standard Trainings	308
Take Home Exposure Trainings	308
Heat Stress Trainings	310
Total	926

MMHP and EMDC are aware that EPA rules are moving toward requiring growers to provide annual WPS trainings to their farmworkers instead of every 5 years. This will hopefully incentivize growers to engage this staff person for all workers on an annual basis instead of only those who need to renew their training. Additionally, the staff member will also be trained in providing Tractor Safety education which is hoped to be a means of engaging additional growers in participating in this educational programming for themselves and their farmworkers.

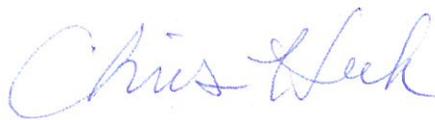
For 2016, the Association of Farmworker Opportunity Programs (AFOP) has committed \$3,048 to EMDC and MMHP in support of WPS training. EMDC and MMHP plan to use these funds to recruit one summer Pesticide Safety Training staff member who will provide direct services to farmworkers in Aroostook County, Midcoast, and DownEast areas of the state. To help support this position, we request from the Maine Board of Pesticides Control a contribution of \$3,675 (a 5% increase over previous years) which we would leverage with the funds from AFOP. Total funds would be used to directly support hourly wage of the staff person, as well as travel required to reach farmworkers, growers and partners. We request that the funding be made directly to MMHP.

We thank the Board for its past support and for considering this current proposal. To contact the Maine Migrant Health Program, you are welcome to email Elizabeth (echarles@mainemigrant.org) or call at 207-441-1633. For more information regarding Eastern Maine Development Corporation or the AFOP Health and Safety program, please feel free to contact Chris by email (chuh@emdc.org) or phone (207-610-1521). We look forward to meeting with the Board to discuss this opportunity.

Best Regards,



Elizabeth Charles McGough
Director of Outreach
Maine Migrant Health Program



Christopher Huh, MPA
Program Manager
Farmworker Jobs Program
Eastern Maine Development Corporation



PAUL R. LEPAGE
GOVERNOR

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WALTER E. WHITCOMB
COMMISSIONER

HENRY S. JENNINGS
DIRECTOR

MEMORANDUM

Date: January 13, 2016
To: Board Members
From: Staff
Subject: Staff Proposed Actionable Items for Homeowner IPM and Outreach

At the December 18, 2015 meeting, the Board heard from invited recipients of pesticide registration revenues about their current activities related to homeowner Integrated Pest Management (IPM). The Board determined that homeowner IPM education could be expanded and asked Board staff to develop a list of items for implementation. The following are staff ideas for actionable items intended to enhance homeowner education about IPM.

1. Re-energize and Expand the Network of IPM Cooperators

- Convene a cooperators meeting and catalog existing resources
- Identify organizations to add to the network
- Choose positive, science-based messages best promoted through collaborative efforts
- Develop strategies for message dissemination
- Expand/enhance current resources directed at homeowners

2. Consolidate Lawncare Recommendations

- Register URL for consolidated information
- Write all site content for homeowner audience
- Promote URL through new “Network”
- Create a sign for posting at checkouts at General Use Pesticide sales locations—direct people to URL; include QR code
- Provide training to marketplace sales staff

Metric: Use Google Analytics to monitor site traffic

3. Provide Paid and Free Content for Media

- Develop a series of topics of importance/interest
 - Sustainable lawncare practices
 - Grubs
 - Tick/mosquito management
- Buy ad space in The Source and other gardening publications
- Market IPM resources including newly created lawncare URL/QR code
- Network with representatives from media

Metric: Frequency of publication

4. Reconfigure Self-service Signage

- Reconfigure the required signage so that links to the educational websites are more prominent
- Add some wording to signage pertaining to homeowner education and the importance of safely handling pesticides
- Alter the signage message so it speaks to those consumers who are “protecting their investment”
- Provide sufficient color copies to stores to ensure all signage is in color
- Simplify sign and make it less busy
- Ensure that stores are using new sign with QR code

Metric: Use Google Analytics to monitor site traffic

5. Provide Education to Municipalities

- Develop a standard municipal presentation
- Consolidate municipal resources onto a single webpage
- Develop a factsheet for municipalities

Chamberlain, Anne

From: Cynthia Ladderbush <cynthia04005@icloud.com>
Sent: Thursday, December 24, 2015 6:58 PM
To: Chamberlain, Anne
Subject: Pesticides

Anne,

Is there anyway to move Maine to be more organic? Like a mandatory bill in 10 years, 80% of produce will be grown organically. Making Maine, like Vermont one of the first states to become GMOS free. What are your thoughts? It is alarming to me other countries are banning GMO'S with relative easy, while our country has to fight for our right to know what is in our food. I would love to see Maine as a front runner in protecting our environment, our health and our future generations. Thank you for your time.

Merry Christmas,

Cynthia Ladderbush

Sent from my iPad

Maine Board of Pesticides Control

Miscellaneous Pesticides Articles
January 2016

(identified by Google alerts or submitted by individuals)

Modified mosquitoes could help fight against malaria

by Hayley Dunning
07 December 2015



Malarial mosquitoes have been modified to be infertile and pass on the trait rapidly - raising the possibility of reducing the spread of disease.

The mosquito species *Anopheles gambiae* is a major carrier of dangerous malaria parasites in sub-Saharan Africa, where 90 per cent of annual malaria deaths occur. Malaria infects more than 200 million people each year and causes more than 430,000 deaths.

If successful, this technology has the potential to substantially reduce the transmission of malaria.

– Professor Andrea Crisanti

Now, a team of researchers led by Imperial College London have genetically modified *Anopheles gambiae* so that they carry a modified gene disrupting egg production in female mosquitoes. They used a technology called 'gene drive' to ensure the gene is passed down at an accelerated rate to offspring, spreading the gene through a population over time.

Within a few years, the spread could drastically reduce or eliminate local populations of the malaria-carrying mosquito species. Their findings represent an important step forward in the ability to develop novel methods of vector control.

BIASED INHERITENCE

Normally, each gene variant has a 50 per cent chance of being passed down from parents to their offspring. In the Imperial team's experiments with *Anopheles gambiae*, the gene for infertility was transmitted to more than 90 per cent of both male and female mosquitoes' offspring.

The technique uses recessive genes, so that many mosquitoes will inherit only one copy of the gene. Two copies are needed to cause infertility, meaning that mosquitoes with only one copy are carriers, and can spread the gene through a population.

This is the first time the technique has been demonstrated in *Anopheles gambiae*. The team targeted three different fertility genes and tested each for their suitability for affecting a mosquito population through gene drive, demonstrating the strength and flexibility of the technique to be applied to a range of genes. The results are published today in the journal *Nature Biotechnology*.

"The field has been trying to tackle malaria for more than 100 years. If successful, this technology has the potential to substantially reduce the transmission of malaria," said co-author Professor Andrea Crisanti from the Department of Life Sciences at Imperial.

NEW APPROACHES

"As with any new technology, there are many more steps we will go through to test and ensure the safety of the approach we are pursuing. It will be at least 10 more years before gene drive malaria mosquitoes could be a working intervention," added Professor Austin Burt from Imperial's Department of Life Sciences.



Mosquitoes rely on standing water for their early life stages

Many current measures to control malaria rely on reducing populations of malarial mosquitoes, such as insecticides and bed nets. These have proven very successful in reducing the spread of malaria, however these approaches face important costs and distribution challenges, as well as growing issues of resistance.

A control measure relying on genetic spread through a targeted population of malaria mosquitoes could complement these interventions without adding dramatically to the health budget of resource-constrained countries.

"There are roughly 3,400 different species of mosquitoes worldwide, and while *Anopheles gambiae* is an important carrier of malaria, it is only one of around 800 species of mosquito in Africa, so suppressing it in certain areas should not significantly impact the local ecosystem," said lead author Dr Tony Nolan from the Department of Life Sciences at Imperial.

CUT AND PASTE

To test the gene drive, the team first identified three genes that impacted female fertility by disrupting the activity of suspected target genes. They then modified the genes with the CRISPR/Cas9 endonuclease, a type of DNA cutting tool that can be designed to target very specific parts of the genetic code.

When chromosomes carrying these modified genes come into contact with chromosomes without the gene variant, an enzyme is produced that cuts it, causing a break. The broken chromosome uses the chromosome carrying the desired variant as a template to repair itself, copying in the code with the altered gene variant.

The team aims to improve the expression of their gene drive elements, but also to find more genes to target, which would reduce the possibility of mosquitoes evolving resistance to the modification.

Exploring target genes is also helping the researchers to learn more about basic mosquito biology. "We hope others will use our technique to understand how mosquitoes work, giving us more ammunition in the fight against malaria," said first author Andrew Hammond, also from Imperial's Department of Life Sciences.

'A CRISPR-Cas9 gene drive system targeting female reproduction in the malaria mosquito vector *Anopheles gambiae*' by Andrew Hammond, Roberto Galizi, Kyros Kyrou, Alekos Simoni, Carla Siniscalchi, Dimitris Katsanos, Matthew Gribble, Dean Baker, Eric Marois, Steven Russell, Austin Burt, Nikolai Windbichler, Andrea Crisanti & Tony Nolan, is published in *Nature Biotechnology*.

Reporter



Hayley Dunning
Communications and Public Affairs

TAGS: [Infectious diseases](#), [Global health](#), [Strategy core disciplines](#), [Malaria](#)

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