



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

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

BOARD OF PESTICIDES CONTROL

**November 8, 2019
9:00 AM**

Room 101 Deering Building
32 Blossom Lane, Augusta, Maine

MINUTES

Present: Adams, Bohlen, Curtis, Jemison, Flewelling, Granger, Morrill, Waterman

1. Introductions of Board and Staff

- The Board, Assistant Attorney General Randlett, and Staff introduced themselves
- Staff Present: Brown, Bryer, Connors, Couture, Patterson, Pietroski, Saucier, Tomlinson

2. Minutes of the September 13, 2019 Board Meeting

Presentation By: Megan Patterson, Director

Action Needed: Amend and/or Approve

- Staff will edit the minutes, so they are titled correctly.
 - **Waterman/Flewelling: Moved and seconded to accept minutes**
 - **In Favor: Unanimous**

2. Program Overview for Maine State Apiary Program

The State Apiarist will provide a presentation on the apiary program responsibilities and associated activities. Highlights of program efforts from the last few years include expanded Varroa mite management and education, results from the hive survival and management

MEGAN PATTERSON, DIRECTOR
90 BLOSSOM LANE, DEERING BUILDING



PHONE: (207) 287-2731
WWW.THINKFIRSTSPRAYLAST.ORG

surveys, and an overall effort to provide pesticide literacy to beekeepers and pollinator literacy to pesticide applicators.

Presentation By: Jen Lund, Maine State Apiarist

Action Needed: None, Informational Only

- Patterson introduced the Board to Jen Lund, Maine State Apiarist.
- Lund thanked the Board for inviting her to the meeting. She added that this is her third-year anniversary as State Apiarist, and she is only the second person to hold the position full time since the creation of the position in 1983.
- Lund explained to the Board that her duties include inspecting migratory honey bee colonies, entering Maine for crop pollination and honey production, for the presence of regulated diseases, parasites, and undesirable genetic material. She added that she must also issue permits for all incoming hives, of which there were just over 50,000 in 2019. Lund stated that the number has gone down some in recent years due to the low wild blueberry prices and growers not paying for pollination.
- Out of those 50,000 incoming hives Lund inspected 2,658 hives. She stated there was one problem with virus and varroa mites, but that beekeeper likely will not be returning to Maine.
- Before hives arrive in Maine there needs to be a clean bill of health from the state of origin.
- Lund told the Board she also licenses all Maine beekeepers, and this is largely done for disease prevention so she can contact anyone in the area if a diseased hive is found. She added that there are currently 1,193 resident beekeepers owning 10,058 hives. This year Lund has visited 161 of these beekeepers and inspected 1,440 of the hives. She commented that beekeeping was very popular at this time. Lund stated that out of resident beekeepers almost 97% are hobby beekeepers, meaning they have less than 30 hives.
- Lund explained that much of her time in the winter is spent doing hive autopsies. The results show that about 70% were a result of varroa mites and viruses, 25% queen loss, starvation and/or poor winter, and 5% were everything else.
- Lund also sent 15 samples to the Beltsville Bee Diagnostic Lab and one case of American Foulbrood was discovered as a result of those submissions. There is no fee for submitting samples to this lab.
- Lund explained to the Board that she is the only employee of the Maine Apiary Program and besides her official duties she spends a great deal of time educating beekeepers and the general public about both beekeeping and non-managed bee species.
- Lund explained that she sends an online survey to all licensed beekeepers each year to obtain information on how they are managing their hives throughout the year and what their losses were. During 2018-19, losses were about 45.2% and they were mostly during winter. This was up just slightly from the previous year's average of 43.4%. Lund added that most losses

occur in more remote parts of the state, and there are fewer losses in places where there is a strong bee association near them. She stated that most bee losses are due to varroa mites and viruses, but that queen loss and failure are also relevant factors.

- Lund explained to the Board that varroa mites latch onto the abdomen and undersides and feed on the bees' fat bodies by digesting them and slurping them back out. Lund stated that fat bodies are vital to insects and serve the purpose of supplying extra energy in hard times, serve as an immune system against disease, and help with detoxification. She added that one bee can have four to five mites on them at one time.
- Lund said she finds that, as with most pests and diseases, integrated pest management is a really good approach to solving problems using a diversity of methods. Monitoring how the steps taken made an impact is also very important to know if it was successful. She added that monitoring is so important that she wrote a grant with Massachusetts Department of Agricultural Resources to obtain funds to distribute mite wash jars. To use the jars a half a cup of bees (about 300 bees) is put into the jar with alcohol and shaken. The jar is then dumped into a pan where the mites can be counted. The action threshold is nine mites per half cup of bees. Lund stated they have about 1500 jars for Maine. She presented the idea at a national bee conference this year and other states will be adopting a similar plan.
- Lund told the Board that the number of beekeepers using alcohol washes has increased to about 31%. She also discussed ways in which they are trying to prevent the establishment of varroa mites in hives by using bottom boards and brood disruption. If that is unsuccessful the next step is intervention with oxalic acid, formic acid, or another product labeled for bee hives. Lund stated that using prevention and intervention together is the way to go for better hive success.
- Lund told the Board that Maine also participates in the National Honeybee Health Survey, which is a USDA-APHIS program, that involves testing hives from different parts of the state for pests and disease. Lund told the Board that our pesticide levels in wax are compared to that of other states and look pretty good.
- Lund commented that there was one investigation this year into suspected hive death by pesticides, but it was found to be caused by starvation.
- Lund explained to the Board that she conducts outreach to many groups throughout the year, including for new beekeeper classes, UMaine Cooperative Extension, workshops, beekeeper club meetings, pesticide applicator trainings, conservation groups, land trusts, schools, libraries, Rotary clubs, and at state/national/international beekeeping meetings. She added that she spoke at this year's Region 1 PIRT meeting about basic bee biology and spoke with the Aroostook Band of Micmacs about non-managed bee pollinators. Lund also participated in two BPC and Cooperative Extension organized pesticide applicator trainings this spring.
- Lund is currently working in rural communities such as Greenville, Houlton, and Millinocket to set up beekeeping cooperatives.
- Lund stated that in March 2020 she would like to attend a national certified investigator and inspector training in Raleigh so she would be able to testify in court. She added that another hope was to be able to do more honey, pollen, and wax testing for the state because it is important to know what is really going on in the hives.

- Lund concluded her presentation by letting the Board know that, for the first time since 2003, Maine will be hosting the Eastern Apicultural Society Conference in 2020 in Orono. She explained that this is a large 5-day conference and event that usually receives attendance from 700-900 beekeepers from all over.
- Patterson and the Board thanked Lund for her excellent presentation. Patterson stated that Lund has been a great partner for staff, helping to provide training to enforcement staff on hive inspections.

4. Request to Review Board Notification Requirements

Representative Pluecker has asked the Board to convene a stakeholders meeting to discuss strengths and potential weaknesses of the Board's current notification rules.

Presentation By: Megan Patterson, Director

Action Needed: None, Informational Only

- Patterson told the Board that there was a request from Representative Bill Pluecker regarding notification and that he would like to open the discussion about notification we currently do. She added that Pluecker had since requested delaying this discussion until the January meeting so that he can attend.
- Patterson noted to the Board that Lauchlin Titus had, after noting that Lund would be providing a presentation on the apiary program, submitted information on a voluntary reporting system that he was prepared to talk about if the Board pleased.
- Titus stated that the program began in the Midwest to facilitate communication from farmer to farmer.
- Titus explained that he was at a meeting in Rhode Island a couple of weeks ago and heard a talk about FieldWatch, a program used in about 20 other states, developed by Purdue, and then privatized. He added that it is free to farmers and beekeepers to list locations and free to pesticide applicators to access that information. When planning to spray, pesticide applicators can determine in real time where bees are located. Titus stated that he did not know if we had an issue here or not but that he found the program intriguing. He added that there was an annual fee to administer the program.
- Patterson responded that the initial cost is \$24,500 and then \$5,500 annually. She added that FieldWatch does not do the groundwork to ensure people are reporting correctly and accurately. Patterson added that Hive Watch also exists and is separate from Field Watch. She stated that FieldWatch has numerous distinctions for specific datasets including representation of numerous specialty crops, certified organic and non-organic crops, and registered versus non-registered hives. Patterson commented that she was unsure if this would pertain to the request that was brought forward, but may be worth considering as a part of the conversation.
- Granger asked if owners of hives coming into state ask anyone within 500 feet to notify them if they are going to make an application and is 500 feet distant enough.
- Lund responded that that would depend on several factors.

- Morrill asked if people could contact the state to find out the location of hives that are licensed.
- Lund responded that interested parties can find out hive locations as long as the hives are registered and placed in the locations for which they were registered.
- Morrill suggested delaying the conversation until the Board had a clearer idea of the request because we are not exactly sure what is being asked. He added that he commended the representative for reaching out to us with a specific question in lieu of alternate paths and that he or any other Board member would be happy to speak with him. Morrill commented that he supported Patterson's suggestion to invite Representative Plueker back to speak about his specific concerns.
- Randlett stated that the Board always has a public forum at the Annual Agricultural Trades Show, and this would be a good conversation for that venue.
- Lund had to exit the Board meeting and Morrill commented that we should continue the discussion about FieldWatch and HiveWatch because it might be beneficial to beekeepers as well.
- Lund stated she would be happy to come to another meeting to discuss that. She added she has reached out to other state counterparts and they have had positive experiences with HiveWatch. One of the major benefits experienced has been with mosquito spraying in urban areas. Lund stated she could share information from counterparts in other states as well.
- Morrill asked Patterson to please invite Lund to come to the meeting after the January 15, 2020 meeting.

5. Presentation and Review of the Board of Pesticides Control, DACF, State of Maine Certification Plan

Board staff prepared the State Plan, in response to the EPA revision of 40 CFR 171, Certification of Pesticide Applicators, as outlined in the Federal Register, Vol. 82, No. 2, dated January 4, 2017. The final rule became effective March 6, 2017. This State Plan compares Maine's regulation and policies to the comparable CFR to identify actions that the State of Maine must take to comply with federal standards. These actions include revisions in regulations. The State Plan is due to EPA by March 4, 2020.

Presentation By: John Pietroski, Manager of Pesticide Programs

Action Needed: Approve/Disapprove the State Plan for Submission to EPA

- Pietroski told the Board that the BPC has had a state plan since the mid-1970s. He added that in 2017, the EPA revised FIFRA certification and training requirements which states must incorporate into their state plans. Pietroski said Patterson and EPA Region 1 took the task very seriously and began planning the changes.
- Pietroski stated that the plan is due March 4, 2020 to the EPA and then it will be reviewed and implemented two years after that date if it is found to comply.

- Patterson commented that Pietroski did a great job pulling this together and we should not have to do any additional rulemaking.
- Morrill asked when it would be adopted.
- Patterson responded that EPA will have two years to review this but the rules the BPC adopted will go into effect in January 2020. She added that most folks in Region 1 only needed to make minor changes, but that was not the case with other states.
- Morrill asked if we had training planned for commercial applicators.
- Pietroski responded that we are beginning to send out informational emails to applicators as well as speaking about the changes at two meetings next week. A press release about the changes will also be drafted and sent out.
 - **Adams/Jemison: Moved and seconded to approve state plan for submission to EPA**
 - **In Favor: Unanimous**

6. 2019 Obsolete Pesticides Collection Overview

Each October the BPC, in concert with Department of Environmental Protection (DEP), conducts a program to collect and properly dispose of banned and unusable pesticides from homeowners, farms, and greenhouses. A summary of this year's event, including the number of citizens who participated, and amount of product collected, will be provided.

Presentation By: Amanda Couture, Certification and Licensing Specialist

Action Needed: None, Informational Only

- Couture told the Board that we had 79 people participate in this year's obsolete pesticide collection and collected a total of 7,510 pounds—a considerable increase over the 4,680 pounds collected in 2018.
- Morrill asked about offering the program to commercial applicators, maybe for cost.
- Patterson stated the tricky part would be taking the payment.
- Morrill said what about offering it one time without a fee
- Patterson responded that doing so would likely exceed the program budget.
- Morrill asked if there would be a benefit to adding more money to the budget. He added that the goal of the program was to reduce risk and remove products from the environment and he did not feel there was a downside to offering it to another segment of the community.
- Patterson stated that the understanding was if we extend the program to commercial applicators and retailers there may be less impetus to purchase product responsibly—ordering only what was needed.
- There was discussion about the benefits and downsides of offering to the public and/or commercial entities.

- Morrill stated that his feeling was if this program is a success at this level, we could expand it to the commercial level whether we charge a fee or not.

7. Progress Report on Collaborative Efforts to Reevaluate the List of Pesticide Active Ingredients Allowed for Control of Browntail Moth Near Marine Waters

At its April 19, 2019 meeting, the board received public comment regarding the pesticide active ingredients allowed, by policy, for management of BTM within 250 of marine waters. The board directed staff to reevaluate the list and determine what active ingredients, if any, should be added or removed. Staff will provide an update on their efforts in response to the Board's request.

Presentation By: Pam Bryer, Pesticide Toxicologist

Action Needed: None, Informational Only

- Bryer told the Board she was going to provide a presentation on the methodology used in the risk assessment process and present the list for review in January. She added that DACF staff had a round table with applicators at which they discussed efficacious active ingredients. Bryer said she is currently working on risk assessments for the 42 pesticides labeled for ornamental plants and gypsy moths.
- Morrill asked what this means.
- Bryer responded that since staff do not recommend pesticide products, we worked with the Maine Forest Service and commercial applicators to develop a list. She added that she is only looking at actives and there are currently 44 products that have browntail moth on their label. For the purposes of this assessment, MFS identified gypsy moth as a closely comparable pest.
- Bohlen asked Bryer to bring the list back and requested that it be organized around modes of action.
- Adams stated he thought it also made sense to kick off some of the obvious actives, like mancozeb, which is a fungicide.
- Bohlen commented that it seemed last time they discussed this there were some actives that were not efficacious, and we need to make sure those are removed from the final list.
- Bryer responded that MFS has already removed one of the actives.
- Heather Spaulding, MOFGA, commented that MFS had reported some data on the pathogenic fungus as an alternative to attack this pest.
- Patterson replied that the fungus was a universal pathogen for a lepidopteran species and MFS said they did see that have some impact, but it is also weather dependent. She added the Dr. Ellie Groden is doing some research on the effects of weather on the efficacy of the fungus. Patterson said that because of the weather dependence it is difficult to know if the fungus will continue to impact browntail moth populations in future years.
- Spaulding asked if the fungus could be bottled.

- Patterson responded that it has been reported to be difficult to grow on inoculum. Apparently, infected individual caterpillars were previously utilized to spread the fungus. So yes, you can distribute this inoculum, but it is a laborious process and there's not a good way to grow it for increased distribution. The fungus is a generalist and would also affect lepidopteran species other than browntail moth.
- The Board will review the risk assessment and the proposed list at the January meeting.

8. General Discussion on the Fumigation Practices and Fumigation Regulation in Maine

The use of fumigation, particularly soil fumigation, is increasing in some agricultural sectors in Maine. By coincidence, the Board recently adopted rules on supplemental certification for private applicators using soil and/or non-soil fumigation application methods. These new rules will become effective January 1, 2020. Staff will facilitate a discussion about these new rules and current fumigation practices in Maine.

Presentation By: Megan Patterson, Director

Action Needed: None, Informational Only

- Patterson stated she received a call from Flewelling to put this on the agenda. She reminded the Board that they had created new soil and non-soil fumigation categories with rulemaking, and private applicators who want to make these types of applications will need to have these supplemental categories to be able to do this work.
- Flewelling stated he did not remember discussing the supplemental licensing. He asked if there will be any training since these are a little different from our traditional commodities for private licensing. Flewelling also asked if an exam had been created yet.
- Patterson responded that we do have plans to provide training and will be using the commercial soil fumigation test and the national soil fumigation manual.
- Flewelling asked if he could take the test at the Potato Meeting in January.
- Adams stated that EPA training is required for those in the buffer zone and asked if one license holder having the supplemental category would meet the requirement if others were in the buffer zone.
- Patterson responded that it would, but those individuals would have to be trained as handlers and follow all label directions.

9. Government Evaluation Act Program Evaluation Report

During the first regular session of the 129th Maine legislature Board staff received a request from the chairs of the Agriculture, Conservation and Forestry Committee to submit a GEA Program Evaluation Report by November 1, 2020.

Presentation By: Megan Patterson, Director

Action Needed: None, Informational Only

- Patterson stated that the BPC had not done a Program Evaluation Report for seven years.

10. Funding an Education Campaign Around IPM and Other Pesticide Related Topics

At the April 19, 2019 meeting, the Board discussed regarding education efforts to expand public awareness of the Board and its functions and services. Advertisement and the employ of an advertising firm were determined to be an effective and efficient method of providing education. Staff would like to discuss tentative funding for this proposed campaign.

Presentation By: Megan Patterson, Director

Action Needed: Approve or Disapprove Funding for an Education Campaign

- Patterson stated that we have discussed funding an education campaign around IPM and the reason she is bringing it back this time is to ask how much money the Board wants to approve for staff to begin this process.
- Patterson told the Board that she spoke with DACF staff about the Get Real Get Maine campaign budget for revising this promotion effort. The initial budget for this project was apparently \$300,000 for a three-year contract. She added that since then they have added money to it and are up to \$470,000. Patterson said that if approved, staff will develop a request for proposals (RFP) for obtaining a contractor to develop outreach content. She stated that it may be good to have someone from the Board sitting on the RFP review panel.
- There was discussion amongst Board members about what a good amount to settle on would be.
- Waterman asked how focused the target audience would be and if it would be geared towards the general public.
- Patterson responded that in this case she thought the Board was hoping to reach out to the general public and let them know that the BPC is here as a resource for enforcement, toxicology questions, and aiding people in understanding IPM, the foundation of our program, as a decision process.
- The Board, Patterson, and Randlett discussed the time commitment that would be required of the Board member who chose to sit on the RFP review panel.
 - **Jemison/Adams: Moved and seconded to authorize Board staff to expend up to \$300,000 to pursue an education campaign.**
 - **In Favor: Unanimous**
 - **Morrill/Adams: Moved and seconded for a Board member to to be a part of the RFP review panel**
 - **In Favor: Unanimous**

11. Other Items of Interest

- a. 129th Legislature Second Regular Session, Bill Requests for Screening, DACF Only

12. Schedule of Future Meetings

January 15, 2020 is the next proposed meeting date. The January meeting will be at the Agricultural Trades show and will include a Public Listening Session.

- The Board tentatively set the following dates for meetings in 2020: January 15, February 28, April 17, June 5, and July 24.

13. Adjourn

- **Granger/Flewelling: Moved and seconded to adjourn at 11:15am**
- **In Favor: Unanimous**