



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

December 16, 2016

**Room 118
Marquardt Building
32 Blossom Lane, Augusta, Maine**

**AGENDA
9:00 AM**

1. Introductions of Board and Staff

Department Update on the Status of the Board Director Position

Presentation By: Ann Gibbs
Director, Animal and Plant Health

2. Minutes of the November 4, 2016 Board Meeting

Presentation By: Megan Patterson
Manager of Pesticide Programs

Action Needed: Amend and/or Approve

3. Presentation on Gulf of Maine Coastal Pesticide Study Update for 2015

In February 2014, the Environmental Risk Advisory Committee (ERAC) was convened to “examine whether current pesticide residues have the potential to affect the lobster industry in Maine directly or via impact on other marine organisms.” Concurrent with the formation of the ERAC, the Board initiated sampling of stormwater and sediment. Results from the 2014 sampling season were reviewed by the Board. Monitoring for the 2015 sampling season was completed in October 2015. The Board will now review the data presented.

Presentation By: Mary Tomlinson
Pesticide Registrar and Water Quality Specialist

Action Needed: Determine Next Steps

4. Discussion of the Current Environmental Risk Assessment Committee (ERAC) Membership Update

The ERAC has experienced recent vacancies, the environmental toxicologist and the environmental chemist, and the Maine Department of Marine Resources has hired a new lobster biologist. To compensate for these changes, the addition of two new members is proposed. The Board will now discuss these proposed membership changes.

Presentation By: Lebelle Hicks
Pesticide Toxicologist

Action Needed: Accept/Reject the Proposed Additions to the ERAC

5. Discussion of Board Approved Products for Control of Browntail Moth within 250 feet of Marine Waters

On January 25, 2008, the Board adopted Section 5 of Chapter 29 which regulates the use of insecticides used to control browntail moth within 250 feet of marine waters. Section 5 limits insecticide active ingredients to those approved by the Board. Since that time, a number of newer chemistries have been registered for use and far more data is available on the efficacy of many products. On November 4, 2016 the Board discussed browntail moth, the available products and the definition of “biological” pesticides. Subsequently, the staff was instructed to update the list of approved products for browntail moth control and propose an interpretation of biological. The Board will now consider the list and the definition of biological pesticide.

Presentation By: Megan Patterson
Manager of Pesticide Programs

Action Needed: Amend or Approve the List of Products for Browntail Moth Control

6. Consideration of Consent Agreement with Jasper Wyman & Son, Milbridge, Maine

The Board’s Enforcement Protocol authorizes 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 the unauthorized application of pesticides.

Presentation By: Raymond Connors
Manager of Compliance

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

7. Other Old or New Business

- a. Legislative Report re LD 1678
- b. Update on Homeowner Education Activities

8. Schedule of Future Meetings

January 11, 2017; and February 17, 2017 are tentative Board meeting dates. The Board will decide whether to change and/or add dates.

Adjustments and/or Additional Dates?

9. 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 Board's office or pesticides@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 4, 2016

Room 118 Marquardt Building
32 Blossom Lane, Augusta, Maine

DRAFT MINUTES

Present: Bohlen, Flewelling, Granger, Morrill

1. Introductions of Board and Staff

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

2. Minutes of the September 23, 2016 Board Meeting

Presentation By: Henry Jennings
Director

Action Needed: Amend and/or Approve

- Connors stated on page two, five bullets down, the sentence reads, ‘Thornton made a statement to the BPC inspector on April 23, 2016 that no signs were posted’. It should read ‘Thornton made a statement to the BPC inspector that on April 23, 2016 no signs were posted’. Connors added that the sentence following, which read ‘A photo taken on April 23...’ should read ‘A photo taken on April 26...’
- Granger pointed out that on page seven, three bullets from the bottom, Kathy Murray’s name was incorrectly recorded as Kathy Murphy.

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

3. Update on the Browntail Moth Population Trends in Maine

Based on 2016 Maine Forest Service surveys, in 2017 browntail moth is projected to see a population surge across a broad swath of southern Maine. Staff from the Maine Forest Service Insect and Disease Laboratory will update the Board with the most recent information.

Presentation By: Charlene Donahue
Forest Entomologist

Action Needed: None – Informational Only

- Donahue, an entomologist who has worked at the Maine Forest Service for about 20 years, explained the browntail moth (BTM) is a caterpillar that may negatively impact human health and forests. In humans BTM can cause a rash and respiratory effects; in trees branch dieback and sometimes mortality can occur. Donahue passed around a cocoon she picked off an ornamental tree in front of the Marquardt building before the meeting.
- Donahue summarized the history of BTM in Maine. The moth first came to Maine in 1897 and spread rapidly. In 1920, the BTM population collapsed, possibly due to a fungus, remaining on only a few coastal islands until the 1980s when it returned to the mainland. The population expanded in 2015 and in 2016 exploded to the point where Donahue was receiving multiple requests from towns to come talk with residents. She spoke in Bowdoinham, and with only two days' notice 60 people attended. In Brunswick, 200 people showed up. Donahue stated that in 2017 the footprint of the BTM area will be similar to 2016, but impact will be much more intense.
- Donahue explained there have been extensive efforts in the past made to control BTM and gypsy moth, including spray projects, bio-control projects and a federal quarantine that was in place until the mid-80s. In 2015, an aerial survey project found that about 64,000 acres of trees were defoliated by BTM, primarily in Sagadahoc and Cumberland counties. Donahue added that BTM is having a significant impact on tree health. BTM adults were collected in light traps located as far away as Eliot, Skowhegan, Exeter, and Topsfield.
- Donahue gave the board a quick overview of the BTM life cycle. The larvae overwinter in webs on the tips of branches from September until about April, depending on the temperature and weather. They forage between April and June, and then begin to make cocoons again in July. Traditionally chemical control takes place in the spring as soon as the caterpillars come out of the webs, but there is some consideration of trying treatments in August during 2017. If webs can be reached in winter they can be clipped, and some arborists with bucket trucks have been cutting webs for people. Donahue always advises people that they need to contract with commercial applicators to do any kind of chemical treatment.
- Donahue stated that the hairs that cause rashes and respiratory problems in humans are microscopic and the chemicals in the hairs remain toxic for one to three years. Individuals do not need to come in contact with the caterpillars to be affected, just being in the area is enough. Cold temperatures do not kill BTM, but wet, cool spring weather when they have high population densities allows disease to spread more easily resulting in higher rates of mortality.
- Donahue is involved in a number of upcoming efforts to inform the public about BTM: Along with Kathy Murray, she will be creating a free webinar for schools to teach them how to deal with BTM; She will be meeting with the town of Topsham next Monday; She recently discussed BTM on the news; She will participate in a round-table discussion with commercial applicators and BPC staff to discuss BTM and the fact that many applicators in Sagadahoc County already have all the clients they can take.
- Granger asked if Safari is restricted use, or if it would be an option for a homeowner to buy and use it. Staff will find out.
- Flewelling asked whether BTM affects conifers. Donahue responded that it targets hardwoods primarily, and oaks and apple are favored, but it will go onto other hardwoods. Struble, from the Maine Forest Service, added that they will often attack shorter shrubs as well.
- Granger asked if lawn mowing stirs up the hairs, and if someone with a lot of BTM in the area would benefit from wearing personal protective equipment when mowing. Charlene answered that mowing was definitely an issue and they have info on their website about what precautions to take when doing yard work.

- Granger asked when the hairs are at their most reactive. Morrill responded that fall and spring cleanup and turning up mulch beds stirs up a lot of residual hairs. Donahue agreed and added that there are many hairs in the cocoons.
- Bohlen asked if the BTM population boom is heading south as well as north. Donahue answered yes, and added that it is worse in Sagadahoc and into Cumberland, but it is also in Kittery and Kennebunk and inland in Turner and Monmouth.
- Morrill asked Donahue how she was able to tell in an aerial survey in August that the tree defoliation was caused by BTM and not something else. Donahue replied that the signal is a rusty skeletonized looking tree that can be easily picked out from the air and there are not a lot of other large scale defoliators right now.
- Flewelling asks if the web is easy to recognize. Donahue responded that BTM makes small, tight webs in the fall at the tips of branches, which are different from the large filmy webs of the fall webworm, which are native and do not cause mortality. Morrill added that winter is the easiest time to see them when—if you look at a tree in January and February and it looks like it still has leaves at the top. Donahue stated that the white film is shiny and also easy to spot.

4. Discussion of Board Approved Products for Control of Browntail Moth within 250 feet of Marine Waters

On January 25, 2008, the Board adopted Section 5 of Chapter 29 which regulates the use of insecticides used to control browntail moth within 250 feet of marine waters. Section 5 limits insecticide active ingredients to those approved by the Board. The Board agreed with its Environmental Risk Advisory Committee recommendations on a list of acceptable products. Since that time, a number of newer chemistries are now registered for use and far more data is available on the efficacy of many products. Consequently, the Maine Forest Service has suggested that it is appropriate to review the list of acceptable active ingredients.

Presentation By: Charlene Donahue
Forest Entomologist

Action Needed: Determine Which Products Are Acceptable for Browntail Moth Control

- Hicks stated that the exemptions in Section 5 of Chapter 29 of the regulations do not apply to biological treatments, but there is no definition given for biological. She said that what was available for chemistries when the rule was written are outdated and there are new chemistries now, some of which may work more effectively. Hicks created a list of all new chemistries currently available for trees and moths, and also developed a summary of the methods. She would like to add language around what constitutes a biological. She said that when applicators ask what to use in the spring, we need to have something to tell them.
- Hicks asked if the rule needs to be changed to either allow or not allow some of the newer chemistries.
- Bohlen asked about the process used for collecting data in the efficacy column on the ‘Summary of Products Registered in Maine in 2016 for Use for Moths’ table that Hicks provided. Donahue replied that the basis of the efficacy data was accumulative wisdom gathered from applicators that had used the pesticides.
- Bohlen stated that it is not clear to him whether Section 5 requires a change or just a consensus on interpretation. He asked Randlett to provide guidance on interpreting rather than changing the rule. Randlett responded that standards intended to be enforceable should be incorporated into rule. The same principle would apply to the definition of biological. He stated that policies are suitable for guidance and as short-term solution.

- Hicks asked about establishing an Environmental Risk Advisory Committee. There was a discussion around setting up an advisory committee and whether time and resources are available to do that. Randlett stated an Environmental Risk Advisory Committee is not a legal requirement for rulemaking.
- Donahue noted that the area 0' to 50' from the high water line is a concern because when the rule was created the only biological was *Bt*, but now other materials are available which could be considered biological but the environmental fate and toxicity profiles in reference to crustaceans has not been evaluated by the Board.
- Jennings stated that it may be prudent to conduct rulemaking in the long term, but in the short term the priority is to give the regulated community clear guidance about what they should and should not be doing. The top priority is to make a list of acceptable chemistries to use in the 50' to 250' zone and clarify the definition of biologicals for the 0' to 50' zone that we can publish on the website. This would allow for a more methodical approach to rulemaking if it's deemed appropriate.
- Bohlen requested a copy of the old Environmental Risk Advisory Committee report. Hicks stated she would email it to Board members.
- Morrill proposed the Board move forward with policy discussion at the next meeting, noting that there would be two discussions—one around a definition for biological and the other to develop a list of pesticides acceptable for use in the 50' to 250' zone.
- Patrice McCarron, Executive Director of the Maine Lobstermen's Association, was present and thanked the Board and staff for their diligence. She added that this is a huge issue and we all need to make sure our lobsters are protected. They will continue to monitor progress and really appreciate efforts to keep this resource safe.

5. Discussion of Pesticide Sales and Use Data Submitted to the Board

At the September 23, 2016 meeting, the Board watched two presentations related to Maine pesticide sales and use data reported to the Board. Gary Fish delivered a presentation explaining the methodology used by Board staff to estimate Maine lawn and landscape use trends. Megan Patterson delivered a presentation detailing current pesticide sales/use reports, current sales/use reporting requirements and the nature of the information that is received by the Board.

Presentation By: Henry Jennings
Director

Action Needed: Determine next steps

- Jennings recounted the history of the staff compiling pesticide sales reports for the legislature.. The reports covered only 500 products, had taken an enormous amount of staff time and the legislature had not found the information useful, so they repealed the requirement for the report. At that time there were about 7,000 registered products in Maine and now there are over 12,000. Jennings stated he did not want to reiterate data summarization information and challenges covered at the previous Board meeting. The mandatory legislative functions we already have take up most of the staff's time and the remaining time is spent focusing on the Board's priorities. If the Board would like staff to switch gears they will, but there will need to be a discussion about what will no longer be getting done.
- Jennings commented on the suggestions staff has received about creating an online database for collecting pesticide sales info. He explained that there would need to be money to do this, it would need to be maintained, and there are no laws requiring that pesticide sales be reported in this manner. Most of the larger companies already have an application they use to generate the sales totals.

- Granger stated that trying to figure out what pesticides are being used is very difficult and the data is not easily interpreted. If the Board is going to do this, it needs to be a fairly well thought out system. Even with the best system there's no way to know if the data is accurate and we would be better off spending our energy finding better methods for reducing reliance on pesticides. He concluded that he is skeptical about spending staff time on it at this time.
- Bohlen said it sounds like the entire system needs a fairly significant redesign; the staff would need to start on the back end and redesign the forms that are being used to provide the data. He stated that this information is important and does not want to give up on it, but asked staff if we are collecting this info that is not being used, then why are we collecting it? The information is only useful if it is informing some decision. He asked how the data that is collected informs the staff and Board.
- Jennings stated the historically the data has been used in a qualitative sense for a variety of purposes. The data has been used for estimating agricultural pesticide use in the state which was then used to guide groundwater surveys. When pollinators and neonics became a hot topic, it was relatively easy to look at the applicator summaries, in a qualitative sense, to estimate the amount of neonics used. Jennings added that—when developing public policy—a logical goal is to attempt to maximize the public benefit while minimizing the private burden. He knows many people are interested in this data for their own particular reasons, especially around municipal ordinances, but he is unsure about what policy decisions this information would help guide. Also, we would have to have a change of law regarding how and what businesses are required to report pesticide sales data.
- There was a discussion about using UPC codes on products as a source of pesticide sales data and whether that would be feasible. Tomlinson stated she thought those would not be reliable because they reassign codes to other products.
- Bohlen asked if collecting pesticide sales data is a conversation the Board should continue to pursue. Granger felt there was no interest in pursuing it at this time. Flewelling stated he is not interested in pursuing it if they have to compromise other programs.

6. Consideration of Consent Agreement with Plants Unlimited, Inc., Rockport, Maine

The Board's Enforcement Protocol authorizes 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 a private applicator's failure to maintain sufficient application records, failure to provide Worker Protection Standard (WPS) training for agricultural workers, failure to post pesticide application information at a central location, and use of a pesticide in a manner inconsistent with its label directions.

Presentation By: Raymond Connors
 Manager of Compliance

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

- Connors stated Plants Unlimited, Inc. is a fairly large greenhouse and nursery operation. In August of 2015 an inspector conducted a records check and WPS inspection, and it was determined that the facility had multiple issues. Plants Unlimited, Inc. had not maintained any pesticide application records for 2015 and had insufficient records for 2014. Pertaining to the WPS inspection, the facility did not have a central information display or a safety poster.

Additionally, workers had not received any of the mandatory WPS training. There was also a pesticide used that was labeled for residential use only. This facility had similar issues in 2012, for which they entered into a \$250 consent agreement. This latest infraction resulted in a \$500 consent agreement, which the owner acknowledged and paid.

- **Flewelling/Bohlen: Moved and seconded to approve the consent agreement negotiated by staff**
- **In Favor: Unanimous**

7. Consideration of Consent Agreement with TruGreen Lawncare, Westbrook, Maine

The Board's Enforcement Protocol authorizes 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 the failure of a commercial applicator to notify an individual listed on the registry prior to conducting an outdoor, non-agricultural pesticide application within 250 feet of the property boundary of the listed residence.

Presentation By: Raymond Connors
Manager of Compliance

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

- Connors stated this violation occurred in Cape Elizabeth where a TruGreen Lawncare customer's property abutted the property of an individual on the notification registry. TruGreen failed to notify the individual on the registry. The individual stated she was outside with her friend and her child at the time of the application. She asked the applicator if he was applying a pesticide and he said yes and continued with the application.
- Flewelling asked Connors the reason for the large fine amount on this consent agreement. Connors replied it was because of other violations by the company resulting in consent agreements in the last four years. Specifically there had been two prior registry violations and an unauthorized application. The company had previous consent agreements for \$2,000 and for \$2,500. The current consent agreement was set at \$2,750.

- **Flewelling/Bohlen: Moved and seconded to approve the consent agreement negotiated by staff**
- **In Favor: Bohlen, Flewelling, Morrill**
- **Opposed: Granger**

8. Other Old or New Business

a. BPC Obsolete Collection Overview

- Couture said this year's obsolete collection went smoothly and we collected over 1.5 tons of obsoletes from across the state.

b. Update on Homeowner Education Activities

- Patterson explained that she and Couture had met with Courtney Marchelletta, the Department's website coordinator, and received a tutorial on using GovDelivery, which will help put our information directly into the hands of the public. Patterson told the Board that staff will be including Board information and also homeowner tips and information on

seminars and recertification meetings. The first one to be sent will be a summary of this year's obsolete pesticide program.

- Patterson said that in February Donahue will be leading a discussion at the Audubon Center about browntail moth.
- Patterson has been invited to present at a MELNA meeting and will doing so this month.
- Patterson stated that the staff has been invited to give a number of Master Gardener talks, which is a great opportunity to educate people who have a hand in educating the public.
- Patterson will also be giving a presentation about pollinators at an adult education program.
- Morrill stated the plan sounded great.
- Bohlen added that there is a growing master naturalist program and it would be good to try to partner with them.

c. City of South Portland Pesticide Use Ordinance

- Granger asked about wording regarding what a sign must include on page nine of the Portland Ordinance under Item (D)(iii), that reads, 'the Board of Pesticides Control designated symbol'. Granger asked if this means the Board endorses the ordinance and if there are restrictions on anyone using the Board's symbol. Patterson responded she believed they were referring to the image of the Board-approved sign, and not our logo.

d. Paul Schlein's letter

- Jennings said that Schlein asked that the Board discuss the bullet points in his letter. The first bullet is about the second ducky ad.
- Bohlen told the Board his daughter had seen the ducky ad recently on television, so someone is paying to air it, which he was not aware of. Morrill responded that someone had mentioned to him they had seen it also.
- Jennings stated that even if the Board voted to run the ad, and could pay to run the ad every day, it is not really in the Board's hands. It needs to be decided by the Administration.

e. Board Meeting location

- Jennings asked the Board about the discussion last meeting to move the meetings to Fairfield, and if there is a consensus to do that. If there is a consensus staff needs to check with the department and make sure it is ok. Jennings also asked the Board about the discussion of moving the meeting time from 8:30am to 9:00am.
- Morrill stated the Board should take into consideration that moving would mean all staff would have to travel to the meetings. Morrill added the Board should discuss the pros and cons of moving to Fairfield at the next meeting.
- Flewelling and Granger stated they prefer meeting in Augusta
- Granger noted that now meetings are shorter than they used to be and he favors a meeting time of 9:00 a.m. Bohlen agreed. Morrill stated they will move the meeting time to 9:00 a.m.

9. Schedule of Future Meetings

December 16, 2016; January 11, 2017; and February 17, 2017 are tentative Board meeting dates. The Board will decide whether to change and/or add dates.

Adjustments and/or Additional Dates?

10. Adjourn

- **Granger/Morrill: Moved and seconded to adjourn at 10:40 am**
- **In Favor: Unanimous**



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DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY
BOARD OF PESTICIDES CONTROL
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PAUL R. LePAGE
 GOVERNOR

TO: Board of Pesticides Control Members
 From: Mary Tomlinson, Pesticides Registrar/Water Quality Specialist
 RE: Gulf of Maine Coastal Pesticide Study Update for 2015
 Date: December 16, 2016

In February 2014, the Environmental Risk Advisory Committee (ERAC) was convened to “examine whether current pesticide residues have the potential to affect the lobster industry in Maine directly or via impact on other marine organisms.” Maine’s Joint Standing Committee on Agriculture, Conservation and Forestry, in a letter to the BPC, supported the formation and purpose of the ERAC and requested reports in January 2015 and January 2017. Stormwater and sediment sampling was to take place in 2014 and 2015. Due to laboratory contract issues and lack of significant rain storms, only sediment sampling occurred in 2014. Results from the 2014 sampling season were reported in the 2015 ERAC Report to the Legislature. Monitoring for the 2015 sampling season was completed in October 2015.

Based on the 2014 sediment sampling results, characteristics of juvenile lobster behavior and habitat, and budgetary constraints, the Environmental Risk Advisory Committee limited sediment sampling to the Casco Bay coastlines. Sediments were collected in 2015 from 13 intertidal sites in Casco Bay. One site on the Saco River, below Biddeford, was sampled to follow up a cypermethrin detection at that location in 2014. Stormwater sampling was conducted at 19 sites, from Kittery to Whiting, over one storm event in August 2015. One stormwater sample was collected in Ellsworth in September.

Sediment samples were analyzed for 21 pyrethroids, piperonyl butoxide (PBO), and methoprene. Montana Analytical Laboratory analyzed for 14 pyrethroids and piperonyl butoxide (PBO). Southwest Research Institute (SwRI) analyzed for 19 pyrethroids, piperonyl butoxide (PBO), and methoprene. Samples were also sent to the University of Maine Analytical Laboratory for analysis of total organic carbon and particle size. Results of the 2015 sediment sampling were received late 2015.

Montana Analytical Laboratory reported detections of bifenthrin in sediment at seven sites and esfenvalerate at one site; Southwest Research Institute reported only bifenthrin detections at four sites (Table 1). Four time-series sediment samples were collected at two sites from April through October. Bifenthrin was detected in every sample at each site. Montana results are reported in wet weight and SwRI results are reported in dry weight. Until Montana results are converted to dry weight and all results normalized for organic carbon, results cannot be compared among samples or sites. The values can only be interpreted as detections at a single point in time. There were no detections in sediments collected from sites previously identified as juvenile lobster habitat or adjacent to lobster habitat.

The stormwater sample from Ellsworth was overlooked by the Southwest Research Institute (SwRI) and was not analyzed; therefore, the pyrethroid, methoprene, and fipronil results reflect only 19 sites. The Montana method does not include methoprene or the fipronil degradates in the method and the detection limit for fipronil is parts per billion compared to parts per trillion used by SwRI. The complete analyte lists are attached.

Twenty pesticides and fipronil degradates were detected in stormwater (Table 2). The pesticides and degradates detected and number of sites (in parentheses) with detects are as follows: 2,4-D (5), bentazon (1), bifenthrin (7), carbaryl (1),

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cis/trans-permethrin (1), diuron (1), fipronil (12), fipronil desulfinyl (11), fipronil sulfide (8), fipronil sulfone (12), hexazinone (7), hydroxy atrazine (1), imazapyr (3), imidicloprid (11), MCPA (2), MCPP (4), metolachlor (2), prometon (2), propiconazole (1), terbacyl (2), triclopyr (1). One urban site was selected for a four-hour time series. 2,4-D, bifenthrin, fipronil, fipronil desulfinyl, fipronil sulfone, imidicloprid, and MCPP were detected every hour; fipronil sulfide the first three hours; and imazapyr, triclopyr, and cis/trans-permethrin the first two hours. The number of pesticides detected in each community in descending order are: Portland (14); South Portland and Rockland (9); Biddeford (8); Kittery and Belfast (7); Boothbay Harbor (6); Ogunquit, Freeport, Bath, Camden (5); Yarmouth and Brunswick (4); Blue Hill (2); Ellsworth (1); Cherryfield and Columbia Falls (2); and Jonesboro, Machias, and Whiting (1).

Table 1. Results for sediment collected 2015 in 13 Casco Bay coastal sites and Saco River.

Sample ID	Site	MT Lab Results (wet wt)		SwRI Lab Results (dry wt)	
		Bifenthrin (RL=0.045 ppb)	Fenvalerate / Esfenvalerate (RL=0.13 ppb)	Bifenthrin (ppb)	Fenvalerate / Esfenvalerate (RL=0.13 ppb)
150807MLP01	Biddeford (Saco R)	0.11	ND	ND (RL=0.222)	ND (0.444)
150807MLP02	Kettle Cove*	0.064	ND	ND (0.228)	ND (0.456)
150415MLP01	S. Portland (4/15)	0.31	ND	1.19	ND (0.435)
150612MLP02	S. Portland (6/12)	0.35	ND	2.15	ND (0.520)
150807MLP03	S. Portland (8/7)	0.36	ND	2.19	ND (0.499)
151007MET01	S. Portland (10/7)	0.35	ND	2.06	ND (0.501)
150810MLP01	Falmouth-Foreside	0.19	ND	ND (0.197)	ND (0.395)
150810MLP02	Falmouth-Foreside (duplicate)	0.17	ND	ND (0.197)	ND (0.394)
150415MLP02	Yarmouth (4/15)	0.19	ND	3.23	ND (0.528)
150612MLP01	Yarmouth (6/12)	0.26	ND	2.8	ND (0.594)
150807MLP04	Yarmouth (8/7)	0.21	ND	2.81	ND (0.632)
151007MET02	Yarmouth (10/7)	0.17	ND	2.39	ND (0.587)
150810MLP04	Winslow	0.063	ND	0.272	ND (0.485)
150810MLP05	Little Flying Point	ND	ND	ND (0.221)	ND (0.442)
150810MLP06	Little Flying Point (replicate)	0.058	ND	0.423	ND (0.450)
150806MET03	Lookout Point	ND	0.21	ND (0.211)	ND (0.422)
150806MET01	Lowell's Cove*	ND	ND	ND (0.212)	ND (0.424)
150806MET02	Basin Point*	ND	ND	ND (0.209)	ND (0.418)
150810MLP03	Cousins Island	ND	ND	ND (0.196)	ND (0.392)
150819MET01	Chebeague Island*	ND	ND	ND (0.202)	ND (0.381)
150819MET02	Long Island*	ND	ND	ND (0.197)	ND (0.393)
150819MET03	Peaks Island	ND	ND	ND (0.190)	ND (0.405)

*Juvenile lobster habitat

Results are not normalized for organic carbon and are not comparable among sites.

MT lab reported in wet weight versus dry weight report from SwRI; therefore, results are not comparable.

Table 2. Range of pesticide concentrations detected in stormwater, August 2015, Kittery to Whiting, Maine and comparison with EPA Aquatic Life Benchmarks.

Range of Pesticide Concentrations			EPA Aquatic Life Benchmarks Freshwater (ppb)					
			Fish		Invertebrates		Nonvascular Plants	Vascular Plants
Pesticide	Reporting Limits (ppb)	Conc. Range (ppb)	Acute	Chronic	Acute	Chronic	Acute	Acute
2,4-D	Q-4.6	Q-4.6			12500			
Atrazine			2650		360	60	0.001	
Bentazon	0.037	0.037	>5000		>5000		4500	5350
Bifenthrin	0.0012(J) - 0.016	0.0012(J) - 0.016	0.075	0.04	0.8	0.0013		
Carbaryl	Q	Q	110	6	0.85	0.5	660	1500
Diuron	Q	Q	200	26.4	80	200	2.4	15
Fipronil	0.00061-0.00543	0.00061-0.00543	41.5	6.6	0.11	0.011	140	>100
Fipronil desulfonyl	0.00024(J)-0.00139	0.00024(J)-0.00139	10	0.59	100	10.3	140	>100
Fipronil sulfide	0.00026(J)-0.00046(J)	0.00026(J)-0.00046(J)						
Fipronil sulfone	0.00040 (J)-0.00279	0.00040 (J)-0.00279	12.5	0.67	0.36	0.037	140	>100
Hexazinone	Q-0.22	Q-0.22	137000	17000	75800	20000	7	37.4
Hydroxy atrazine	0.040	Q						
Imazapyr	Q-0.052	Q-0.052	> 50000	43100	> 50000	97100	12200	24
Imidicloprid	Q-0.73	Q-0.73	41500	1200	34.5	1.05	>10000	
MCPA	Q-0.072	Q-0.072				300	170	
MCCP	Q-1.1	Q-1.1			>45500	50800		
Metolachlor ESA	Q-0.15	Q-0.15	24000		>54000		>99450	43000
cis-permethrin	0.014-0.020	0.014-0.020						
trans-permethrin	0.017-0.023	0.017-0.023						
Permethrin	0.031-0.043*	(0.031-0.043)*	0.395	0.0515	0.0106	0.0014	68	
Prometon	Q-0.047	Q-0.047	6000	19700	12850	3450	98	
Propiconazole	Q	Q	425	95	650	260	21	4828
Terbacil	Q-0.052	Q-0.052	23100	1200	32500	640	11	140
Triclopyr	Q	Q	58500		66450		32500	

J=estimated value

*Total permethrin concentrations not analyzed. Concentrations reflect range of totaled of cis/trans-permethrin concentrations in each sample.

2015 Montana Analytical Laboratory Stormwater Analyte List

2,4-D	Fipronil sulfone	Oxamyl
Acetochlor	Flucarbazone	Parathion methyl oxon
Acetochlor ESA	Flucarbazone sulfonamide	Phorate sulfone
Acetochlor OA	Flumetsulam	Phorate sulfoxide
Alachlor	Fluroxypyr	Picloram
Alachlor ESA	Glutaric acid	Picoxystrobin
Alachlor OA	Hydroxy-atrazine (HA)	Prometon
AMBA	Halsulfuron methyl	Propiconazole
Aminocyclopyrachlor	Hexazinone	Prosulfuron
Aminopyralid	Imazamethabenz methyl acid metabolite	Pyrasulfotole
Atrazine	Imazamethabenz methyl ester	Pyroxsulam
Azoxystrobin	Imazamox	Saflufenacil
Bentazon	Imazapic	Simazine
Bromacil	Imazapyr	Sulfentrazone
Bromoxynil	Imazethapyr	Sulfometuron methyl
Carbaryl	Imidicloprid	Sulfosulfuron
Chlorpyrifos	Indaziflam	Tebuconazole
Chlorsulfuron	Isoxaben	Tebuthiuron
Clodinafop acid	Isoxaflutole	Tembotrione
Clopyralid	Malathion	Terbacil
Clothianidin	Malathion oxon	Terbufos sulfone
Deethyl-atrazine	MCPA	Tetraconazole
Deethyl deisopropyl atrazine	MCPP	Thiamethoxam
Deisopropyl-atrazine	Metalaxyl	Thiencarbazone methyl
Dicamba	Methomyl	Thifensulfurone
Difenoconazole	methoxyfenozide	Tralkoxydim
Dimethenamid	Metolachlor	Tralkoxydim acid
Dimethenamid OA	Metolachlor ESA	Triallate
Dimethoate	Metolachlor OA	Triasulfuron
Disulfoton sulfone	Metsulfuron methyl	Triclopyr
Diuron	Nicosulfuron	Trifloxystrobin
FDAT (indazaflam met)	Pinoxaden metabolite (NOA 407854)	
Fipronil	Pinoxaden metabolite (NOA 447204)	
Fipronil desulfanyl (FDS)	Norflurazon	
Fipronil sulfide	Norflurazon desmethyl	

2015 Southwest Research Institute Stormwater Analyte List

Allethrin - Total
Bifenthrin
lambda-cyhalothrin
Cyfluthrin - Total
Cypermethrin - Total
Deltamethrin - Total
Fenvalerate/esfenvalerate
Etofenprox
Fenpropathrin
tau-Flauvalinate - Total
Imiprothrin - Total
Methoprene
cis-Permethrin
trans-Permethrin
PBO
Prallethrin
Pyrethrum
Resmethrin - Total
Phenothrin/Sumithrin
Tefluthrin
Tetramethrin
Fipronil
Fipronil desulfinyl
Fipronil sulfide
Fipronilsulfone



PAUL R. LEPAGE
GOVERNOR

STATE OF 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

MAINE BOARD OF PESTICIDES CONTROL POLICY RELATING TO THE ENVIRONMENTAL RISK ADVISORY COMMITTEE (ERAC)

Adopted June 25, 1999
Amended September 29, 2000
Amended March 28, 2014

Background

The Maine BPC recognizes the potential impact of some pesticides on the environment from their federally approved label uses. Evaluation of risks specific to Maine situations and conditions is critical to reducing potential adverse effects on the environment. The Board needs impartial scientists, knowledgeable in the fields of biology, environmental toxicology, environmental chemistry, and ecology, who can provide expert assessments of environmental risks and provide guidance and recommendations to the Board.

Establishing an Environmental Risk Advisory Committee

The Board will select scientists with the appropriate expertise to serve voluntarily on the Board's Environmental Risk Advisory Committee (ERAC) on an ad hoc basis when the Board deems it is necessary to seek outside scientific expertise. The Board will provide a clear charge to the ERAC regarding the purpose and scope of the committee's work.

Membership

The ERAC will be chaired by a Board member. Additional committee members will be determined by the Board based on the current issue. The Board should appoint persons whose disciplines in aggregate are suitable for evaluating potential adverse environmental effects, and, where appropriate, for recommending courses of action to mitigate potential adverse effects.

Term

The committee will serve until it has issued a final report to the Board.

Meetings

The Committee will meet on an as needed basis at the invitation of the ERAC chair.

Compensation

The ERAC is voluntary and no compensation for services is available. However, all reasonable travel expenses will be reimbursed, subject to the approval of the staff director, in a manner consistent with State Travel Policy.



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

PAUL R. LEPAGE
GOVERNOR

WALTER E. WHITCOMB
COMMISSIONER

MEMORANDUM

Date: December 8, 2016
To: Board Members
From: Staff
Subject: List of Active Ingredients Approved for Control of Browntail Moths

Chapter 29, Section 5 of the Board's rules regulates the use of pesticides to control browntail moths (BTM) within 250 feet of marine waters. Section 5 (B) (II) (a) limits the products that can be used between 50 and 250 feet of marine water to active ingredients approved by the Board. In light of the recent BTM population surge, the availability of newer chemistries, and the anticipated need for effective control options, the Maine Forest Service and licensed professionals are requesting an updated list.

During 2006, the Board's Environmental Risk Advisory Committee (ERAC) reviewed carbaryl, diflubenzuron (Dimilin) and 3 synthetic pyrethroids and recommended approval of the active ingredients diflubenzuron, permethrin, tau-fluvalinate and cyfluthrin. In the current ERAC review and in EPA's recent Ecological Risk assessment, the synthetic pyrethroids are being addressed as a chemical class rather than individually. If the Board determines it's appropriate to remain consistent with the 2006 ERAC assessment, then adding the other currently registered synthetic pyrethroid compounds is logical and defensible. Other synthetic pyrethroid active ingredients include bifenthrin, cyhalothrin-lambda, cypermethrin and deltamethrin.

If the Board determines the public interest is best served by approving additional active ingredients beyond the synthetic pyrethroids, one possibility would be to utilize EPA's most recently published environmental toxicity data along with use rate information (as a surrogate for and exposure assessment) to expand the list. This would require a detailed label review regarding the current use rates for moth control in ornamental trees

Section 5 (A) of Chapter 29 contains certain exemptions to the requirements including the use of "biological pesticides". "Biological pesticides" was never defined by the Board. When Section 5 of Chapter 29 was adopted, it was contemplated that biological pesticides would include organisms and their associated proteins such as commercial formulations of *Bt*. Since that time, questions have arisen about whether products that are derived from organisms, such as neem and spinosad, are also considered biological pesticides. EPA regulates neem as a biological pesticide and spinosad as a conventional chemical. In the short term, the Board could develop an interpretation of the term via Board policy, and then memorialize that definition through rulemaking in the future.

HENRY JENNINGS, DIRECTOR
90 BLOSSOM LANE, DEERING BUILDING



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Excerpt from CMR 01-026, Chapter 29

Section 5. Restrictions on Pesticide Applications to Control Browntail Moths Near Marine Waters

Pesticide applications for control of browntail moths within 250 feet of the mean high tide mark adjacent to coastal waters and extending upriver or upstream to the first bridge are subject to the requirements of this section:

A. Exemptions

The prohibitions and restrictions in Section 5 do not apply to biological pesticides, to the injection of pesticides directly into the soil or shade and ornamental trees or to the application of pesticides by licensed commercial pesticide applicators using non-powered equipment.

B. Prohibitions and Restrictions

- I. A person may not apply a pesticide to control browntail moths on shade or ornamental trees within 50 feet of the mean high water mark.
- II. A person may not apply a pesticide to control browntail moths on shade or ornamental trees in coastal areas located between 50 and 250 feet from the mean high water mark except in accordance with this subsection.
 - a. Only products with active ingredients specifically approved by the Board for this purpose may be applied.
 - b. Applications may be performed only with a hydraulic hand-held spray gun or air-assisted sprayers.
 - c. Applications may be performed only in a manner in which the applicator directs the spray away from marine waters.
 - d. Applications may not be made when the wind is blowing toward marine waters.
 - e. Applications may be performed only when the wind is equal to or greater than 2 miles per hour and blowing away from marine waters.

Proposed Administrative Consent Agreement Background Summary

Subject: Jasper Wyman & Son
7 Wyman Road
Milbridge, Maine 04658

Date of Incident(s): May 21, 2014

Background Narrative: On February 4, 2016, the Board received a call from Greg Bridges, owner of Cole G. Bridges Wild Blueberries LLC. Bridges alleged that Jasper Wyman & Son leased blueberry land from a resident in Charlotte. Jasper Wyman & Son then subleased this same land to Bridges. On May 21, 2014, Terry Bell, the owner of Tide Mill Enterprises, applied Sinbar and Calisto herbicides to Bridge's subleased land as directed by Jasper Wyman & Son's V.P. of operations. Jasper Wyman & Son did not have Bridges permission to do this.

Summary of Violation(s): CMR 01-026 Chapter 20 Section 6D1 *No person may contract with, or otherwise engage, a pesticide applicator to make any pesticide application to property unless that person is the owner, manager, or legal occupant of the property to which the pesticide is to be applied, or that person has the authorization of the owner, manager or legal occupant to enter into an agreement for pesticide applications to be made to that property. The term "legal occupant" includes tenants of rented property.*

Rationale for Settlement: The staff compared the violation to similar cases settled by the Board in formulating a penalty proposal.

Attachments: Proposed Consent Agreement

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY
BOARD OF PESTICIDES CONTROL

In the Matter of:)	ADMINISTRATIVE CONSENT
Jasper Wyman & Son)	AGREEMENT
7 Wyman Road)	AND
Milbridge, Maine 04658)	FINDINGS OF FACT

This Agreement by and between Jasper Wyman and Son (hereinafter called the "Company") and the State of Maine Board of Pesticides Control (hereinafter called the "Board") is entered into pursuant to 22 M.R.S. §1471-M (2)(D) and in accordance with the Enforcement Protocol amended by the Board on June 3,1998.

The Board alleges as follows:

1. That the Company provides blueberry land management services and has the firm license number SCF 45195 issued by the Board pursuant to 22 M.R.S. § 1471-D (1)(B).
2. That on February 4, 2016, Greg Bridges, owner of Cole G. Bridges Wild Blueberries LLC, lodged a complaint with the Board that the Company made an unauthorized herbicide application to blueberry land in Charlotte owned by the Damon family that Bridges subleased from the Company.
3. That in response to the call described in paragraph two, a Board inspector conducted a follow-up inspection with Bridges, on February 29, 2016.
4. That during the inspection described in paragraph three, Bridges completed a written statement indicating that the Company directed Terry Bell, the owner of Tide Mill Enterprises, to mow the Damon fields that Bridges had a sublease on and that "someone has chemical trespassed on my leased land".
5. That during the inspection described in paragraph three the inspector also collected a copy of the Wild Blueberry Fact Sheet from Bridges. This sheet listed the field management practices completed on the Damon fields in Charlotte and was signed by Terry Bell. The record shows Bell mowed about 10 acres on May15, 2014, and applied Sinbar and Calisto herbicides to about 10 acres on May 21, 2014.
6. That on February 5, 2016, Bridges emailed Board staff copies of both the Company's lease with Merna and Lawrence Damon Sr. and the Company's sublease of this same land to Bridges.
7. That the sublease to Bridges described in paragraph two and six stated that the lease commenced on February, 2012 and expired on December, 2018.
8. That on March 1, 2016, a Board inspector met with Homer Woodward, the Company's V.P. of Operations about Bridges' allegation of the Company's unauthorized pesticide application to Bridges' subleased land. Woodward later emailed the inspector on April 1, 2016, and attached a written statement about Bridges' allegation.
9. That in Woodward's written statement described in paragraph eight, Woodward acknowledged that in the spring of 2014 he arranged a meeting with Terry Bell, the owner of Tide Mill Enterprises to establish a field management plan that included pruning and applying herbicide to the Damon blueberry fields Bridges' subleased from the Company and that Bell later completed the pruning and herbicide application as directed by Woodward.
10. That CMR 01-026 Chapter 20 Section 6(D)(1) specifies that "[n]o person may contract with, or otherwise engage, a pesticide applicator to make any pesticide application to property unless that person is the owner, manager, or

legal occupant of the property to which the pesticide is to be applied, or that person has the authorization of the owner, manager or legal occupant to enter into an agreement for pesticide applications to be made to that property. The term "legal occupant" includes tenants of rented property."

- 11. Because the Company had sublet the property containing the Damon fields to Bridges, the Company was not the owner, manager or legal occupant of the property for the purposes of CMR 01-026 Chapter 20 Section 6(D)(1).
- 12. That the Company did not have Bridges' consent to direct Bell to apply pesticides to Bridges' subleased land which Bell later did as described in paragraphs five and nine.

The Board believes the circumstances described in paragraphs one through twelve constitute a violation of CMR 01-026 Chapter 20 Section 6(D)(1). While the Company does not admit the allegations or the violation, and believes there are or may be mitigating factors and/or factual disputes involving the alleged violations, the Company does agree to enter into this Consent Agreement for the purpose of resolving the alleged violations.

WHEREFORE the parties agree as follows:

- 1. That the Board has regulatory authority over the activities described herein.
- 2. That the Company expressly waives:
 - A. Notice of or opportunity for hearing;
 - B. Any and all further procedural steps before the Board; and
 - C. The making of any further findings of fact before the Board.
- 3. That this Agreement shall not become effective unless and until the Board accepts it.
- 4. That in consideration for the release by the Board of the cause of action which the Board has against the Company resulting from the violation referred to in paragraph twelve, the Company agrees to pay a penalty to the State of Maine in the sum of \$500. (Please make checks payable to Treasurer, State of Maine).

IN WITNESS WHEREOF, the parties have executed this Agreement of two pages.

JASPER WYMAN & SON

By: _____ Date: _____

Type or Print Name: _____

BOARD OF PESTICIDES CONTROL

By: _____ Date: _____

Henry Jennings, Director

APPROVED:

By: _____ Date: _____

Mark Randlett, Assistant Attorney General