For discussion purposes only 10/3/2014 DRAFT

## REPORT TO THE OREGON LEGISLATIVE ASSEMBLY

# Task Force on Pollinator Health

October 2014

## **TABLE OF CONTENTS**

Ι.	Exe	ecut	tive Summary1
١١.	Tas	sk F	orce on Pollinator Health2
	Pu	rpos	se2
	Tas	sk F	orce Members2
	Tas	sk F	orce Meetings3
III.	Tas	sk F	orce Recommendations
	•	Ta	sk 1 – Outreach and Education
			Policy Objectives4
			Task Force Recommendations4
	•	Ta	sks 2 – Pesticide Regulation
			Policy Objectives5
			Task Force Recommendations6
	•	Ta	sk 3 – Licensing and Training of Pesticide Applicators
			Policy Objectives
			Task Force Recommendations8
	•	Ta	sk 4 – Best Management Practices
			Policy Objectives9
			Task Force Recommendations10
	•	Ta	sk 5 – Research Needs
			Policy Objectives
			Task Force Recommendations12
	•	Та	sk 6 – Funding
			Policy Objectives14
			Task Force Recommendations14
List	t of	Арр	pendices
	A.	En	rolled HB 4039

- B. Task Force Meeting AgendasC. Summary of Task Force Recommendations

## I. EXECUTIVE SUMMARY

The Task Force on Pollinator Health was established during the 2014 Legislative Session by the enactment of House Bill 4139. This document is the Task Force report.

In June 2013, at least 25,000 bees were found dead in a Target parking lot in Wilsonville, Oregon. The Oregon Department of Agriculture (ODA) concluded that the bee deaths were directly related to the use of the pesticide dinotefuran, which had been applied to nearby linden trees to control aphids. ODA subsequently adopted permanent rules restricting the use of certain pesticide products containing dinotefuran and imidacloprid and now requires an Oregon-specific label statement on these products as a condition of annual registration in 2014. Beginning January 1, 2014, application of these products on linden, basswood, or Tilia tree species is prohibited.

During the 2014 session, House Bill 4139 was introduced partly in response to a number of bee kills associated with the use of these products on Linden trees. As enacted, House Bill 4139 established the Task Force on Pollinator Health to examine issues relevant to pollinator health and report to an interim legislative committee related to agriculture no later than October 1, 2014. The measure also directs Oregon State University, in consultation with ODA, to develop educational materials on best practices to avoid adverse effects from pesticides on pollinators.

The Task Force held seven meetings from June through October 2014. In addition to the sharing of information gathered by Task Force members, testimony was received from individuals with expertise in a variety of areas related to pollinator health. Both testimony and Task Force discussions make it clear that pollinator health is a complex and multi-factorial issue. The Task Force developed many recommended actions to improve pollinator health that are detailed in this report. Five priority recommended actions emerged from Task Force discussions:

- I. Oregon should develop a strong, effective **outreach and education strategy** on pollinator health.
- **II.** The development of **best management practices** to improve pollinator health should continue and be strengthened.
- III. Oregon should fully fund a state-of-the-art bee health diagnostic facility at Oregon State University.
- **IV.** An **integrated pollinator health research plan** should be developed and funded to improve understanding of the myriad of issues affecting pollinator health.
- V. Bee hive registration fees and pesticide registration fees should both be raised to provide **funding** for pollinator health programs.

## II. TASK FORCE ON POLLINATOR HEALTH

#### PURPOSE

House Bill 4139 (2013) directs the Task Force on Pollinator Health (Task Force) to examine issues relevant to pollinator health, including but not limited to;

- 1. Proposed and enacted pesticide regulations from other states and countries that are more protective of pollinator health than the pesticide regulations of the United States Environmental Protection Agency.
- 2. Public education and outreach plans regarding pollinator health that have been successful in other states.
- 3. The effectiveness of applicator licensing, other legal requirements, and incentives in matters affecting pollinator health.
- 4. Possible funding streams for efforts to promote or protect pollinator health.
- 5. How other states gather data on populations of bees or other pollinating insects.
- 6. Existing best management practices for applying neonicotinoids to avoid harming pollinating insects.

The bill directs the Task Force to submit a report, which may include recommendations for legislation, to an interim committee of the Legislative Assembly related to agriculture no later than October 1, 2014.

#### **TASK FORCE MEMBERS**

The 10 member Task Force includes two legislators who serve as non-voting members and eight members appointed by the Governor who represent a variety of interests involved in pollinator health issues. A Task Force membership roster appears below.

Name	Affiliation	Interests Represented
Ramesh Sagili, Chair	Department of Horticulture, Oregon State University	University faculty specializing in science of pollinator health
Senator Chuck Thomsen	State Senator Appointed by the Senate President	Oregon Legislature
Representative Jeff Reardon	State Representative Appointed by the Speaker of the House	Oregon Legislature
Aimee Code	Xerces Society	Advocacy group dedicated to protection of pollinators and invertebrates
Scott Dahlman	Oregonians for Food and Shelter	Advocacy group for farmers
Betsy Earls	Associated Oregon Industries	Advocacy group for retailers
George Hansen	Beekeeper	Public
Rich Little	Master Gardner	Public
Christy Splitt	Oregon League of Conservation Voters	Advocacy group dedicated to
Doug Moore (eff. 9/29/14)		environmental protection
Jeff Stone	Oregon Association of Nurseries	Advocacy group for nurseries and greenhouse producers

#### TASK FORCE MEETINGS

The Task Force held a total of seven meetings at the State Capitol; its first meeting was on June 30, 2014. The table below shows meeting dates and agenda topics; a complete set of meeting agendas appears in Appendix B of this report.

Meeting	Topics Addressed
June 30, 2014	Task Force Organization and Election of Chair
	Overview of HB 4139
	State of Pollinators in Oregon
	Pesticide Certification and Licensing in Oregon
	Task Force Objectives, Timeline and Work Plan
July 31, 2014	Task Force Work Plan
	Outreach and Education Programs
August 6, 2014	Other States' and Countries' Pesticide Labeling Laws and Regulations to Protect
	Pollinators
	Pesticide Applicator Training, Certification and Licensing
August 18, 2014	Overview of Other States and Countries Pesticide Laws and Regulations
	Presidential Memorandum on Pollinator Health
	Pollinator Research Needs
September 16, 2014	Best Management Practices for Neonicotinoids
	Funding Options to Promote and Protect Pollinator Health
	Review and Discuss Draft Recommendations
September 29, 2014	Consideration of Task Force Report
October 27, 2014	Consideration of Task Force Report/Public Comment Opportunity

## III. TASK FORCE RECOMMENDATIONS

The Task Force developed a set of recommendations in each of the following areas: outreach and education, pesticide regulation, licensing and training of pesticide applicators, best management practices, research needs and funding. For each area, policy objectives and identified barriers to achieving those objectives are identified. The recommendations are listed below in three categories based on the level of agreement reached by the Task Force on each recommendation. *"Consensus"* recommendations received strong support from all Task Force members. *"General Agreement"* recommendations received support from at least five members and no significant opposition. *"Split Opinion"* recommendations were supported at some level by most members and opposed by at least two members. A summary table of these recommendations appears in Appendix B.

## TASK 1: OUTREACH AND EDUCATION

#### POLICY OBJECTIVES -

#### • Improve Understanding of Pollinator Health Issues

Pollinator health information should be easily accessible to both the general public and pesticide applicators to better understand how to improve pollinator health, including enhancement of habitat and prevention of pesticide exposures. The goal is to reach a wider audience with the information that is already available.

Identified Barriers to Progress:

- ~ Oregon has not identified an overall strategy for addressing pollinator health issues.
- ~ There is a lack of known, effective communication pathways to reach household pesticide users.
- ~ Federal restrictions on adding information to pesticide product labels.
- A lack of data on who uses pesticides, the pesticides used and the volume of pesticides used in order to effectively reach target audiences with appropriate information.
- ~ Funding

#### • Increase Reporting of Bee Incidents

Currently, bee keepers may be reluctant to report bee die offs due to concerns over slow response from regulatory agencies, potential penalties for related activities (ex., off-label use of products by hive owner to address hive viability issue for which no product has been developed), and landowner reluctance to allow government agency staff onto property.

Identified Barriers to Progress:

- ~ Disincentives to reporting
- ~ Lack of understanding about how to report incidents

#### TASK FORCE RECOMMENDATIONS

#### **Consensus Recommendations**

- 1.1 <u>An Oregon Pollinator Health Outreach and Education Plan should be developed.</u>
  - ODA, in consultation with OSU, should develop an Oregon Pollinator Health Outreach and Education Plan. The plan should:
    - Ensure educational information is appropriate and effective for a broad audience, including licensed pesticide applicators, general pesticide users and consumers.

- Rely on a variety of media sources and existing organizations to disseminate the materials, including state agencies, associations, environmental organizations and others in related fields.
- ODA should consider contracting for services from a private firm specializing in communication strategies to brand and market the Pollinator Health Outreach and Education Plan.
- ODA should examine existing, effective outreach programs, including the state's noxious weed program, during plan development.
- 1.2 <u>The Bee Incident Reporting System should be clarified.</u> The Oregon Department of Agriculture (ODA) should develop a document clearly explaining how bee-related incidents may be reported. The document should be easy to find on the ODA web page and also be widely shared with the public and industry. The posting of this information on other websites should be encouraged.
- 1.3 <u>Funding should be provided to more widely distribute, regularly update and create</u> <u>mobile applications of the OSU publication "How to Reduce Bee Poisonings from</u> <u>Pesticides."</u>

## TASK 2: PESTICIDE REGULATION

## POLICY OBJECTIVES -

• Improve Pesticide Use Labels

Pesticide labels provide directions to users and legal requirements for use of the product, but are often complicated and difficult to read. At times, the addition of information on pollinator health has led to conflicting directions on a label.

Identified Barriers to Progress:

- New label language is currently developed by the US Environmental Protection Agency.
  Oregon may require additional information on products but this has been done infrequently and requires a rulemaking process.
- Label language frequently does not adequately convey risk (i.e., risk = toxicity + exposure).
- Prevent Bee Die-Off Incidents Resulting From Pesticide Applications

There have been seven reported bee die-off incidents in Oregon since June 2013 that resulted from the use of neonicotinoids on Linden trees.

Identified Barriers to Progress:

 $\sim$  Lack of knowledge about the effects of systemic pesticides on certain plant species.

- Pesticide products without the new label restrictions required by ODA in 2013 were still available for purchase in 2014.
- Pesticide applicators do not always read a pesticide product label to see if there have been changes since they last applied a product.
- Native bees cannot be removed from a treatment site in the same manner as managed bees.

#### TASK FORCE RECOMMENDATIONS: \_\_\_\_

#### **Consensus Recommendations**

#### 2.1 <u>Pesticide Labels</u>

- (a) ODA should continue its work with the US Environmental Protection Agency (EPA) to improve pesticide use labels and should advocate for prominent, easy-tounderstand label information on the use of a pesticide product to protect pollinator health.
- (b) ODA should continue to encourage EPA to develop a system to convey risk to pollinators on pesticide labels.
- (c) ODA should help create guidance materials for applicators to better explain label requirements.

#### 2.2 Specific Pesticide Use Restrictions

The 2014 ODA decision requiring that the use of existing stocks of imidacloprid and dinotefuran products with old labels must follow the temporary rule requirements regarding Linden trees should be continued.

2.3 (Who? Move to BMP section?) <u>Develop and make available best management practices</u> on use of pesticides, including neonicotinoids.

#### 2.4 <u>Pesticide Labels</u> EPA labeling should include more symbols to alleviate bilingual language challenges.

- 2.5 Specific Pesticide Use Restrictions
  - (a) Under ORS 634.006 (21) "Restricted-use pesticide'" means any pesticide or device which the department has found and determined to be so injurious or detrimental to persons, pollinating insects, bees, animals, crops, wildlife, land or environment, other than the pests it is intended to prevent, destroy, control or mitigate, that additional restrictions are required." In accordance with this statute, ODA should create and regularly update a list of restricted use pesticides that meet this definition and make this list readily available on its website.
  - (b) The Task Force on Pollinator Health should write a letter to EPA requesting that the agency adopt application rates for neonicotinoids for backyard use that are equivalent to agricultural use rates.

- (c) The State IPM Task Force should review the use of neonicotinoids on state lands.
- 2.6 <u>Pesticide Use Inspections/Penalties</u>
  - (a) ODA should review and revise the schedule of penalties for improper or unlicensed pesticide use.
  - (b) The Oregon Legislature should review and revise the maximum penalties for pesticide use violations set in statute.

#### **General Agreement Recommendations**

 2.7 <u>Pesticide Use Inspections/Penalties</u> ODA should develop a more systematic inspection program to encourage the proper application of pesticides.

#### **Split Opinion Recommendations**

- 2.8 <u>Pesticide Labels</u>
- (a) EPA should conduct all field tests of pesticides as they are formulated for sales (complete with additives) to determine the true level of toxicity to target and nontarget organism.

#### 2.9 Specific Pesticide Use Restrictions

- (a) ODA should investigate a ban on the use of certain neonicotinoids on Linden trees to include two additional neonicotinoids (clothianidin and thiamethoxam).
- (b) ODA's current ban on the use of dinotefuran and imidacloprid on Linden trees should be extended to application on other key non-crop pollinator host and forage plants.
- (c) Neonicotinoid use on state lands should be prohibited.

#### 2.10 <u>Violations: Inspections/Penalties/Enforcement</u>

(a) ODA should conduct random hive inspections for the purpose of pest and pathogen detection. If a pest/pathogen of concern is detected, further inspections of nearby hives and other hives of those owners should be conducted.

#### 2.11 <u>Consumer Information on Pesticides</u>

- (a) To expand upon and standardize the commitment of many retailers including Home Depot, Oregon should enact a law requiring labeling of plants for sale that have been treated with neonicotinoids.
- (b) Similar to Minnesota's new law, Oregon should enact a law to prohibit the labeling of plants and plant materials that are treated with bee-lethal pesticides as "pollinator friendly" if there is still a detectable level of the pesticide in or on the plant.

## TASK 3: LICENSING AND TRAINING OF PESTICIDE APPLICATORS

#### POLICY OBJECTIVES -

#### • Enhance Applicator Training on Pollinator Health

The current applicator certification and re-certification system does not require that applicants earn credits in pollinator health courses. Many people who regularly apply neonicotinoid pesticides as part of their job are not licensed applicators.

Identified Barriers to Progress:

- ~ Difficulty identifying coursework in pollinator health.
- ~ General use pesticides, including almost all neonicotinoid products, can be used by:
  - Nursery employees and farm employees without obtaining a pesticide applicators license since the application occurs at their place of employment, and
  - Most landscapers without obtaining a pesticide applicators license.
- Improve Knowledge of Retail Sales Staff Selling General Use Pesticides

Retails sales staff are the primary point of contact for homeowners purchasing pesticides but may not have training in pesticide use.

Identified Barriers to Progress:

- High staff turn-over at retail establishment can make maintaining a trained sales force challenging.
- Improve Knowledge of Homeowners Applying General Use Pesticides

Homeowners applying pesticide products typically have no training in pesticide use and may believe "more is better."

Identified Barriers to Progress:

- ~ Pesticide labels can be difficult to understand.
- Developing an effective public education program that reaches homeowners is challenging.

#### TASK FORCE RECOMMENDATIONS

#### **Consensus Recommendations**

- 3.1 Applicator Training
  - (a) ODA should amend OAR 603-057-0135 to include a "Pollinator Protection" training module as a core credit requirement for a pesticide applicator license.

(b) ODA should consider beta test training programs, including but not limited to the North American Pesticide Program and collaborate on training with other entities such as BeeInformed Project (through AmericanHort) and the Honeybee Health Coalition (Clinton Global Initiative).

#### **General Agreement Recommendations**

- 3.2 <u>Applicator Training</u>
  - (a) ODA should establish an online training resource that is coded by topic so applicators can search for classes on specific topics, including pollinator health.
  - (b) The Integrated Pest Management (IPM) training required for applicators covering what IPM is and how it is used should be increased.
- 3.3 <u>Pesticide Use Reporting</u>

The Oregon Pesticide Use Reporting System should be reactivated and funded to require all business and commercial pesticide uses be reported to the state.

#### **Split Opinion Recommendations**

- 3.4 <u>Licensing</u>
  - (a) Oregon should require an applicator license for anyone who applies general use pesticides on a regular basis as part of their employment.
  - (b) Oregon should require a license for crop advisors and others who give advice on purchase and use of pesticides.
  - (c) The sale of pesticides in quantities for commercial or business use should be allowed only when a valid applicator's license is produced.

#### 3.5 Point of Purchase Pesticide Use Education

Oregon should require a licensed applicator or trained professional to explain the use of a product prior to providing it to a retail customer (similar to receiving advice from a pharmacist before purchasing a prescription).

## TASK 4: BEST MANAGEMENT PRACTICES

### POLICY OBJECTIVES

• Develop Best Management Practices to Improve Pollinator Habitat

Best Management Practices (BMPs) are those practices determined to be the most efficient, practical, and cost-effective measures identified to guide a particular activity or to address a particular problem.

Identified Barrier to Progress:

 The development of BMPs will require a public process with staff support and adequate funding.

#### TASK FORCE RECOMMENDATIONS

#### **Consensus Recommendations**

- 4.1 <u>Best Management Practices</u> OSU Extension should extend the reach of its existing programs targeted at pollinator health.
- 4.2 <u>State-Owned Lands</u>
  ODOT should incorporate native plants into roadside management areas to support pollinator habitat on public land.

#### **General Agreement Recommendations**

#### 4.3 <u>State Pollinator Plan</u>

- (a) ODA should prepare and implement an Oregon Pollinator Health Strategy. The Strategy should address both native and managed pollinators and should be developed with stakeholders through a public process and include periodic reviews and updates. Plan elements may include but not be limited to:
  - Formal arrangement for communication between growers and bee owners,
  - Method/mechanism to know if there are native or managed bees near a treatment site,
  - Method for growers to contact bee keepers,
  - Notification time frame for pesticides applications, and
  - Recommendation to grower and applicators on how to minimize risks to bees.
- (b) The Oregon Pollinator Health Strategy should also serve as the state plan to implement appropriate portions of the <u>Presidential Memorandum—Creating a</u> <u>Federal Strategy to Promote the Health of Honey Bees and Other Pollinators.</u>
- (c) The Oregon Legislature should adopt a resolution recognizing the value of pollinators in enhancing Oregon's health and that we have an obligation to protect them.

#### 4.4 <u>Best Management Practices</u>

ODA and OSU Extension should continue and expand work with the US Department of Agriculture and stakeholder groups and neighboring states to develop best management practices (BMPs) to improve pollinator health throughout Oregon, including in urban, roadside and agricultural areas and to protect our pollinators of different crops grown in our region.

- 4.5 Locally-Owned and Private Lands
  - (a) The Oregon Legislature should encourage counties, municipalities, and private land owners to make a priority the development and maintenance of pollinator habitat.
  - (b) Legislative action taken by the state legislature relating to pollinator health should be incorporated in the Pesticide Stewardship Partnership Program.

#### **Split Opinion Recommendations**

4.6 <u>Best Management Practices</u>

Scalable, voluntary BMPs for pesticide use should be developed to protect pollinator health and to lead to consistent pollinator health plans among the states.

- 4.7 State and Locally-Owned Lands
  - (a) The Legislature should direct State agencies that manage lands, parks, rights of way and other properties to use existing funding and to make a priority the development and maintenance of pollinator habitat within their jurisdictions, including implementing at the State level the directives in the Presidential Memorandum Section 3 (Increasing and Improving Pollinator Habitat) as appropriate.
  - (b) A review should be conducted of state policies covering the use of or encouraging making right-of-ways friendly to pollinators through pollinator's friendly plantings, restricting some pesticides and/or herbicide applications on state and locally-owned lands, including state, county and local public properties such as roads, rest stops campgrounds, and parks.
- 4.8 <u>Private Lands</u>
  - (a) Private landowners should be encouraged to make right-of-ways friendly to pollinators through pollinator friendly plantings and restricting some pesticides and/or herbicide applications. This includes on private property such as power-line right-of-ways, railroad right-of-ways, and logged sites.
  - (b) State agencies should encourage regional Conservation Implementation Strategies to encourage/incentivize pollinator habitat projects.
  - (c) State agencies should encourage contracting of beneficial insect habitat through the Conservation Stewardship Program.

#### TASK 5: RESEARCH NEEDS

#### POLICY OBJECTIVES -

• Address Pollinator Health Research Needs

Research is needed to identify, manage and mitigate threats to both managed and native pollinators, including research in the following areas:

- 1. Rapid bee pest and disease diagnostics;
- 2. Investigating effects (sub-lethal and chronic) of systemic insecticides (especially neonicotinoids) on honey bee colony health and native bees;
- 3. Studies focused on interactions of multiple stress factors that are negatively impacting bee health (pests and diseases, pesticides, nutrition, genetic diversity etc.);
- 4. Both basic and applied studies on improving bee nutrition; and
- 5. Long term studies/surveys to benchmark and monitor populations of bees and their health.

Identified Barriers to Progress:

- ~ Funding
- ~ The online registration process for commercial beekeepers is not functioning.

## TASK FORCE RECOMMENDATIONS

#### **Consensus Recommendations**

- 5.1 <u>Pollinator Health</u>
  - (a) Fund the Honey Bee Lab at OSU to establish a state of the art bee health diagnostic facility.<sup>1</sup> Develop an integrated pollinator health research plan with state and federal partners with aggregated funding requests and areas of focus identified. OSU focuses on diagnostics (rapid response), nutrition and mites.
  - (b) Complete a research data gap analysis for national approach to resolving pollinator health.
  - (c) Create a competitive grant program for research proposals on pollinator health issues.
  - (d) The Legislature should develop a sustainable funding plan for pollinator research at OSU to address pollinator health issues in bee pollinated cropping systems.
  - (e) (Who?) Ask EPA to expedite review of product to control mites. More overt connection with the IR-4 program). IR-4 project identification and research. Focus on mite problem and the need for product registration for hives.
  - (f) (Who?) Support and possibly seek funds for pollinator habitat field trials at the Corvallis NRCS Plant Materials Center.

<sup>&</sup>lt;sup>1</sup> Estimated budget is \$500,000 for equipment and annual expenses of \$500,000 (salaries of two technicians and supplies and field team of two technicians to travel and sample bee hives).

#### 5.2 <u>Research on Effect of Pesticides on Pollinators</u>

- a. Fund studies on the effects of neonicotinoids on pollinators, the interaction of multiple stressors negatively affecting pollinators, and basic and applied studies on improving bee nutrition and long-term surveys to monitor pollinator populations.
- b. Encourage EPA or Oregon to fund and conduct studies of sub-lethal, cumulative doses of chemicals in our pesticides.
- c. Encourage EPA or Oregon to fund and conduct studies of pesticides of common tank mixtures used in Oregon for toxicity to pollinators.
- d. Evaluate the cost of alternatives to the use of neonicotinoids, including a relative health assessment for both pollinators and humans, and the impact on the cost of production and potential economic loss to agriculture to provide a product to market.

#### Split Opinion Recommendations

1.3 <u>Pollinator Health</u>

Federal research dollars should be aggregated to establish national "expertise centers."

- 1.4 Apiary Counts/Registration
  - (a) Establish a state apiary registration system for baseline of hive locations, numbers, etc. Require registration of bee hives including ownership, origin and where hives have traveled via a re-activated online beekeeper website.
  - (b) Establish a national registration system for hives including diagnostic evaluation of hive health.
  - (c) Fund studies on the number, type, and location of bee colonies in Oregon, both native and managed, to establish a baseline measurement of bee populations in Oregon to determine whether the state is making progress in supporting pollinator health or managing and mitigating threats to them.

#### 5.5 <u>Research on Effect of Pesticides on Pollinators</u>

Encourage EPA to conduct and/or Oregon to fund studies that are required to produce real field exposure data, that is using pesticides in their sales formulations with all the included chemicals, inert ingredients, & carrier chemicals in field trials not lab conducted exposure using just the active ingredient.

#### TASK 6: FUNDING

#### **POLICY OBJECTIVES**

• Fund Recommended Actions to Improve Pollinator Health

Identified Barriers to Progress:

- ~ \$\$
- The uses of pesticide registration and applicator license fee revenues are statutorily restricted.

#### TASK FORCE RECOMMENDATIONS:

#### **Consensus Recommendations**

- 6.1 Revenue Sources and Use of Funds
  - (a) Re-establish Apiary Registration Fee and Increase Pesticide Registration Fee.
    - Set apiary registration fee of \$10 and \$.50 per hive fee. All revenue used to support honey bee research.
    - Increase pesticide registration fee. All additional revenue use to fund ODA or OSU Extension pesticide use outreach and education programs.
  - (b) Support a direct appropriation to the OSU Extension Office for outreach and education on pollinator health to agriculture and landscapers.
  - (c) Support ODA policy option budget package of \$75,000 for Phase 1 of pollinator health education program in 2015 legislative session.
  - (e) (d) State agencies should aggregate information on available funding to assist Oregon researchers Recommendation 1.3: Funding should be provided to more widely distribute, regularly update and create mobile applications of the OSU publication "How to Reduce Bee Poisonings from Pesticides."

#### **Split Opinion Recommendations**

- 6.2 <u>Revenue Sources</u>
  - (a) Increase the applicator license fee.
  - (b) Examine variations of the CA Mill Tax, Unclaimed Gas Tax as additional funding sources for ODA.
  - (c) Establish special Oregon license plates for "Protect Our Pollinators."
  - (d) Establish annual income tax: provide a check box to support OSU Bee Lab.
  - (e) Research whether ODA could earmark Technical Assistance, Local Management Agency Funds, and/or Ag Water Quality Funds to go into pollinator work with the Conservation Districts in the state.

#### **APPENDIX A**

#### 77th OREGON LEGISLATIVE ASSEMBLY--2014 Regular Session

## Enrolled House Bill 4139

Sponsored by Representative REARDON; Representatives BARTON, KENY-GUYER, Senator JOHNSON (Presession filed.)

#### AN ACT

Relating to pollinator health; and declaring an emergency.

Be It Enacted by the People of the State of Oregon:

**SECTION 1.** Oregon State University, in consultation with the State Department of Agriculture, shall develop educational materials regarding the best practices for avoiding adverse effects from pesticides on populations of bees and other pollinating insects. The educational materials must include, but need not be limited to, measures that pesticide applicators and pesticide trainees can take to protect honeybees and bumblebees. The university and the department shall design the requirements to ensure that any pesticide applicator applying or supervising the application of a pesticide is knowledgeable regarding alternatives to, the appropriateness of, and precautions for pesticide use that may be injurious to the health of bees and other pollinating insects. The department shall make the educational materials described in this section a part of the education required for taking the pesticide applicator licensing examination under ORS 634.122.

**SECTION 2**. (1) The Task Force on Pollinator Health is established, consisting of 10 members appointed as follows:

(a) The President of the Senate, after consultation with the Speaker of the House of Representatives, shall appoint one nonvoting member from among members of the Senate.(b) The Speaker of the House of Representatives, after consultation with the President of the Senate, shall appoint one nonvoting member from among members of the House of Representatives who are from a different political party than the member appointed by the President of the Senate.

(c) The Governor shall appoint eight voting members as follows:

(A) One member who is a university faculty member specializing in the science of pollinator health.

(B) One member representing an advocacy group for nurseries and greenhouse producers.

(C) One member representing an advocacy group for farmers.

(D) One member representing an advocacy group dedicated to the protection of pollinators and invertebrates.

(E) One member representing an advocacy group dedicated to environmental protection.

(F) One member representing an advocacy group for retailers.

(G) One member, who is certified as a master gardener under the Oregon State University Master Gardener program, representing the public.

(H) One member, who is a beekeeper, representing the public.

(2) The task force shall undertake activities to examine issues relevant to pollinator health, including but not limited to:

(a) Studying proposed and enacted pesticide regulations from other states and countries that are more protective of pollinator health than the pesticide regulations of the United States Environmental Protection Agency.

(b) Studying public education and outreach plans regarding pollinator health that have been successful in other states.

(c) Evaluating the effectiveness of applicator licensing and other legal requirements, and of incentives, in matters affecting pollinator health.

(d) Identifying possible funding streams for efforts to promote or protect pollinator health. (e) Investigating the means used by other states to gather data on populations of bees or other pollinating insects.

(f) Evaluating existing best management practices for applying neonicotinoids in a manner that avoids harming pollinating insects.

(3) The task force may take actions necessary and proper to carry out the work of the task force, including but not limited to scheduling hearings and taking testimony on matters related to pollinator health.

(4) A majority of the voting members of the task force constitutes a quorum for the transaction of business.

(5) Official action by the task force requires the approval of five or more voting members of the task force.

(6) The task force shall elect one of its voting members to serve as chairperson.

(7) If there is a vacancy for any cause, the appointing authority shall make an appointment to become immediately effective.

(8) The task force shall meet at times and places specified by the call of the chairperson or of a majority of the voting members of the task force.

(9) The task force may adopt rules necessary for the operation of the task force.

(10) The task force shall submit a report in the manner provided by ORS 192.245, and may include recommendations for legislation, to an interim committee of the Legislative Assembly related to agriculture no later than October 1, 2014. The task force may provide

progress reports to an interim committee related to agriculture prior to October 1, 2014.

(11) The Legislative Administration Committee shall provide staff support to the task force. (12) Members of the task force who are not members of the Legislative Assembly are not entitled to compensation, but may be reimbursed for actual and necessary travel and other expenses incurred by them in the performance of their official duties in the manner and amounts provided for in ORS 292.495. Claims for expenses incurred in performing functions of the task force shall be paid out of funds appropriated to the committee for purposes of the task force.

(13) All agencies of state government, as defined in ORS 174.111, are directed to assist the task force in the performance of its duties and, to the extent permitted by laws relating to confidentiality, to furnish such information and advice as the members of the task force consider necessary to perform their duties.

**SECTION 3**. Section 2 of this 2014 Act is repealed on the date of the convening of the 2015 regular session of the Legislative Assembly as specified in ORS 171.010.

**SECTION 4**. This 2014 Act being necessary for the immediate preservation of the public peace, health and safety, an emergency is declared to exist, and this 2014 Act takes effect on its passage.

#### <u>Appendix B</u>

#### SUMMARY OF TASK FORCE RECOMMENDATIONS

1. 0	JTREACH AND EDUCATION	
1.1	Develop Oregon Pollinator Health Outreach and Education Plan	consensus
1.2	Clarify the bee incident reporting system	consensus
1.3	Provide funding to widely distribute OSU publication "How to Reduce Bee	consensus
	Poisonings from Pesticides"	
2. PE	STICIDE REGULATION	
2.1	ODA should continue its work with the US Environmental Protection	consensus
(a)	Agency (EPA) to improve pesticide use labels and should advocate for	
	prominent, easy-to-understand label information on the use of a pesticide	
	products to protect pollinator health.	
2.1	ODA should continue to encourage EPA to develop a system to convey risk	consensus
(b)	to pollinators on pesticide labels.	
2.1	ODA should help create guidance materials for applicators to better	consensus
(c)	explain label requirements.	
2.2	The 2014 ODA decision requiring that the use of existing stocks of	consensus
	imidacloprid and dinotefuran products with old labels must follow the	
	temporary rule requirements regarding Linden trees should be continued.	
2.3	Develop and make available best management practices on the use of	consensus
	pesticides, including neonicotinoids.	
2.4	EPA labeling should include more symbols to alleviate bilingual language	consensus
	challenges.	
2.5	ODA should create and regularly update a list of pesticides classified as	consensus
(a)	"Restricted Use" in accordance with current statute: ORS 634.006 (21) This	
	list should be readily available on the ODA website.	
2.5	The Task Force should write a letter to EPA requesting that the agency	consensus
(b)	adopt application rates for neonicotinoids for backyard use that are	
	equivalent to agricultural use rates.	
2.5	The State IPM Task Force should review use of neonicotinoids on state	consensus
(c)	lands.	
2.6	ODA should review and revise the schedule of penalties for improper or	consensus
(a)	unlicensed pesticide use.	
2.6	Legislature should review and revise the maximum penalties for pesticide	consensus
(b)	use violations set in statute.	
2.7	ODA should develop a more systematic inspection program to encourage	general agreement
2.0(2)	the proper application of pesticides.	colit opinion
2.8(a)	EPA should conduct all field tests of pesticides as they are formulated for	split opinion
	sales (complete with additives) to determine true level of toxicity to target	
2.0	and non-target organism.	colit opinion
2.9	ODA should investigate a ban on the use of certain neonicotinoids on	split opinion
(a)	Linden trees to include two additional neonicotinoids (clothianidin and thiamethoxam).	
2.9	Extend ODA's current ban on the use of dinotefuran and imidacloprid on	split opinion
2.3	Extend ODA's current ban on the use of unoteruran and initiadiophid on	split opinion

(b)	Linden trees to application on other key non-crop pollinator host and forage plants.	
2.9 (c)	Neonicotinoid use on state lands should be prohibited.	split opinion
2.10	ODA should conduct random hive inspections for the purpose of pest and pathogen detection. If a pest/pathogen of concern is detected, further inspections of nearby hives and other hives of those owners should be conducted.	split opinion
2.11 (a)	To expand upon and standardize the commitment of many retailers including Home Depot, Oregon should enact a law requiring labeling of plants for sale that have been treated with neonicotinoids.	split opinion
2.11 (b)	Similar to Minnesota's new law, Oregon should enact a law to prohibit the labeling of plants and plant materials that are treated with bee-lethal pesticides as "pollinator friendly" if there is still a detectable level of the pesticide in or on the plant.	split opinion
3. LIO	CENSING AND TRAINING OF PESTICIDE APPLICATORS	
3.1 (a)	ODA should amend OAR 603-057-0135 to include a "Pollinator Protection" training module as a core credit requirement for a pesticide applicator license.	consensus
3.1 (b)	ODA should consider beta testing of training programs, including but not limited to the North American Pesticide Program and collaborate on training with other entities such as BeeInformed Project (through AmericanHort) and the Honeybee Health Coalition (Clinton Global Initiative).	consensus
3.2 (a)	ODA should establish an online training resource that is coded by topic so applicators can search for classes on specific topics, including pollinator health.	general agreement
3.2 (b)	The Integrated Pest Management (IPM) training required for applicators covering what IPM is and how it is used should be increased.	general agreement
3.3	The Oregon Pesticide Use Reporting System should be reactivate and funded to require all businesses and commercial pesticide use be reported to the state.	general agreement
3.4 (a)	Oregon should require an applicator license for anyone who applies general use pesticides on a regular basis as part of their employment.	split opinion
3.4 (b)	Oregon should require a license for crop advisors and others who give advice on purchase and use of pesticides.	split opinion
3.4 (c)	The sale of pesticides in quantities for commercial or business use should be allowed only when a valid applicator's license is produced.	split opinion
3.5	Oregon should require a licensed applicator or trained professional to explain the use of a product prior to providing it to a retail customer (similar to receiving advice from a pharmacist before purchasing a prescription).	split opinion

4.	4. BEST MANAGEMENT PRACTICES		
4.1	OSU Extension should extend the reach of its existing programs targeted at	consensus	
	pollinator health.		
4.2	ODOT should incorporate native plants into roadside management areas to	consensus	
	support pollinator habitat on public land.		
4.3	ODA should prepare and implement an Oregon Pollinator Health Strategy.	general	
(a)		agreement	
4.3	The Oregon Pollinator Health Strategy should also serve as the state's plan to	general	
(b)	implement appropriate portions of the Presidential Memorandum on honey bee	agreement	
	and other pollinator health.		
4.3	The Oregon Legislature should adopt a resolution recognizing the value of	general	
(c)	pollinators in enhancing Oregon's health and that we have an obligation to protect	agreement	
	them.		
4.4	ODA and OSU Extension should continue and expand their work with the US	general	
	Department of Agriculture and stakeholder groups and neighboring states to	agreement	
	develop best management practices (BMPs) to improve pollinator health		
	throughout Oregon.		
4.5	The Oregon Legislature should encourage counties, municipalities, and private land	general	
(a)	owners to make a priority the development and maintenance of pollinator habitat.	agreement	
4.5	Legislative action taken by the state legislature relating to pollinator health should	general	
(b)	be incorporated in the Pesticide Stewardship Partnership Program.	agreement	
4.6	Develop scalable, voluntary BMPs for pesticide use to protect pollinator health and	split	
	to lead to consistent pollinator health plans among the states.	opinion	
4.7	The Legislature should direct State agencies that manage lands, parks, rights of	split	
(a)	way and other properties to use existing funding and to make a priority the	opinion	
	development and maintenance of pollinator habitat within their jurisdictions,		
	including implementing at the state level the directives in the Presidential		
	Memorandum Section 3 (Increasing and Improving Pollinator Habitat) as		
	appropriate.		
4.7	Review state policies covering the use of or encouraging making right-of-ways	split	
(b)	friendly to pollinators through pollinator's friendly plantings, restricting some	opinion	
	pesticides and/or herbicide applications on state and locally-owned lands,		
	including state, county and local public properties such as roads, rest stops		
	campgrounds, and parks.		
4.8	Private landowners should be encouraged to make right-of-ways friendly to	split	
(a)	pollinators through pollinator friendly plantings and restricting some pesticides	opinion	
	and/or herbicide applications. This includes on private property such as power line		
	right-of-ways, railroad right-of-ways and logged sites.		
4.8	State agencies should encourage regional Conservation Implementation Strategies	split	
(b)	to encourage/incentivize pollinator habitat projects.	opinion	
4.8	State agencies should encourage contracting of beneficial insect habitat through	split	
(c)	the Conservation Stewardship Program.	opinion	

5. RESEARCH NEEDS			
5.1 (a)	Fund the Honey Bee Lab at OSU to establish a state of the art bee health	consensus	
	diagnostic facility.		
5.1 (b)	Integrate pollinator health research plan with state and federal partners	consensus	
	with aggregated funding requests and areas of focus identified. OSU focus		
	on diagnostics (rapid response), nutrition and mites.		
5.1 (c)	Complete a research data gap analysis for national approach to resolving	consensus	
	pollinator health issues.		
5.1 (d)	Create a competitive grant program for research proposals on pollinator	consensus	
	health issues.		
5.1 (e)	The Legislature should develop a sustainable funding plan for pollinator	consensus	
	research at OSU to address pollinator health issues in bee pollinated		
	cropping systems.		
5.1 (f)	Ask EPA to expedite review of product to control mites. More overt	consensus	
	connection with the IR-4 program). IR-4 project identification and research.		
	Focus on mite problem and the need for product registration for hives.		
5.1 (g)	Support and possibly seek funds for pollinator habitat field trials at the	consensus	
	Corvallis NRCS Plant Materials Center.		
5.2 (a)	Fund studies on the effects of neonicotinoids on pollinators, the interaction	consensus	
	of multiple stressors negatively affecting pollinators, and basic and applied		
	studies on improving bee nutrition and long-term surveys to monitor		
	pollinator populations.		
5.2 (b)	Encourage EPA or Oregon to fund and conduct studies of sub-lethal,	consensus	
	cumulative doses of chemicals in our pesticides.		
5.2 (c)	Encourage EPA or Oregon to fund and conduct studies of pesticides of	consensus	
	common tank mixtures used in Oregon for toxicity to pollinators.		
5.2 (d)	Evaluate the cost of alternatives to the use of neonicotinoids, including a	consensus	
	relative health assessment for both pollinators and humans, and the impact		
	on the cost of production and potential economic loss to agriculture to		
= 2	provide a product to market.		
5.3	Aggregate federal research dollars and establish national "expertise	split opinion	
<b>5 1</b> ( <b>1</b> )	centers."		
5.4 (a)	Establish apiary registration for baseline of hive locations, numbers, etc.	split opinion	
	Require registration of bee hives including ownership, origin and where		
	hives have traveled via a re-activated online beekeeper website.		
5.4 (b)	Establish a national registration system for hives including diagnostic	split opinion	
<b>Г</b> 4 (a)	evaluation of hive health.		
5.4 (c)	Fund studies on the number, type, and location of bee colonies in Oregon,	split opinion	
	both native and managed to establish a baseline measurement of bee		
	populations in Oregon to determine whether the state is making progress in supporting pollipator health or managing and mitigating threats to them		
5.5	supporting pollinator health or managing and mitigating threats to them.	colit opinion	
5.5	Encourage EPA to conduct and/or Oregon to fund studies that are required	split opinion	
	to produce real field exposure data, that is using pesticides in their sales formulations with all the included chemicals, inert ingredients, & carrier		
	chemicals in field trials not lab conducted exposure using just the active		
	ingredient.		
1	ingreatent.		

6. FUI	6. FUNDING		
6.1 (a)	Re-establish apiary registration fee and increase pesticide registration fee.	consensus	
	Use apiary fee revenue to support honey bee research. Use pesticide		
	registration fee to support ODA or OSU Extension pesticide use outreach		
	and education programs.		
6.1 (b)	Support a direct appropriation to the OSU Extension Office for outreach and	consensus	
	education on pollinator health to agriculture and landscapers.		
6.1 (c)	Support ODA policy package of \$75,000 for phase 1 of pollinator health	consensus	
	education program in the 2015 Oregon Legislative Session.		
6.2 (b)	Increase the applicator license fee.	split decision	
6.2 (e)	Examine variations of the CA Mill Tax, Unclaimed Gas Tax as additional	split decision	
	funding sources for ODA.		
6.2 (f)	Establish special Oregon license plates for "Protect Our Pollinators."	split decision	
6.2 (g)	Establish annual income tax: provide a check box to support OSU Bee Lab.	split decision	
6.2 (h)	Research whether ODA could earmark Technical Assistance, Local	split decision	
	Management Agency Funds, and/or Ag Water Quality Funds to go into		
	pollinator work with the Conservation Districts in the state.		

## Appendix C

(Task Force Meeting Agendas)