

From: [Gail S Atkins](#)
To: [Rockett, Derek \(ECY\)](#)
Subject: Control of Burrowing Shrimp on Shellfish Bed in Willapa Bay
Date: Monday, February 10, 2014 12:19:17 PM

Dear Mr. Rockett,

I attended the public meeting on the Proposal to Control Burrowing Shrimp on Shellfish Beds in Willapa Bay and Grays Harbor held February 1, 2014 at the Willapa Harbor Community Center. I live in Raymond and am a hobby beekeeper. I am very concerned about the effect of Imidicloprid on my bees and our local environment in general.

This email has my comments and some questions I would like you to consider while preparing the environmental impact statement during the scoping phase.

1. **Question:** What is the potential for harm to non-target aquatic life, shore birds, native pollinators, honeybees and other insects?

Please review these resources:

- a. Hazard Identification of Imidacloprid to Aquatic Environment, Tišler, Tatjana; Jemec, Anita; Mozetič, Branka; Trebše, Polonca., Chemosphere vol. 76 issue 7 August, 2009. p. 907-914
<http://www.ncbi.nlm.nih.gov/pubmed/19505710>
 - b. Detections of the neonicotinoid insecticide imidacloprid in surface waters of three agricultural regions of California, USA, 2010-2011
<http://www.ncbi.nlm.nih.gov/pubmed/22228315>
 - c. A study published in PLoSOne Journal on May 1, 2013 indicating macro-invertebrate decline in surface water polluted with Imidacloprid
<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0062374>
 - d. A report published in the American Bird Conservancy on March 19, 2013 states birds, bees, and aquatic life are threatened by the gross under estimation of neonicotinoid toxicity
<http://www.abcbirds.org/newsandreports/releases/130319.html>
2. **Question:** What is potential of drift beyond application area?
 3. **Question:** What is the biodegradability and persistence of Imidicloprid in the environment?

Please consider these studies specific to bees:

1. Published by the Xerxes Society, 2012
<http://www.xerxes.org/neonicotinoids-and-bees>
2. Purdue University Study on Honeybee Deaths Linked to Seed Insecticide Exposure, January 11, 2012
<http://www.purdue.edu/newsroom/research/2012/120111KrupkeBees.html>
3. Two studies published in Science Magazine, March 29, 2012
 - a. A Common Pesticide Decreases Foraging Success and Survival in Honey Bees
<http://www.sciencemag.org/content/336/6079/348.abstract>
 - b. Neonicotinoid Pesticide Reduces Bumble Bee Colony Growth and Queen Production
<http://www.sciencemag.org/content/336/6079/351.abstract>

4. Press Release from the European Food Safety Authority identifying risks to bees from neonicotinoids
<http://www.efsa.europa.eu/en/press/news/130116.htm>
5. A study by Italian researchers, published by the Proceedings of the National Academy of Sciences of the United States of America on October 21, 2013, demonstrated that neonicotinoids disrupt the innate immune systems of bees, making them susceptible to viral infections to which the bees are normally resistant
<http://www.pnas.org/content/110/46/18466>

Also, The Journal of Applied Ecology published an overview of the environmental risks posed by neonicotinoid insecticides, June 13, 2013
<http://onlinelibrary.wiley.com/doi/10.1111/1365-2664.12111/abstract>.

When evaluating the wisdom of using neonicotinoids on oyster beds, a human food resource, please consider that the European Food Safety Authority identified a potential link between two neonicotinoids and developmental neurotoxicity
<http://www.efsa.europa.eu/en/press/news/131217.htm>.

Finally, I would like to refer you to this statement by John Jordan-Cascade, Communications Manager, of Beyond Toxics <http://www.beyondtoxics.org/>

While some have questioned the data quality of the EU studies, "Using economics alone, we see that there is enough data to cause concern for the public and policy-makers alike. The evidence available should lead us to rely on the Precautionary Principle to let common sense prevail. The United States would do well to follow the European Union's lead and ban all neonicotinoids until more is known about their impact on the dangerous—and costly—decline of bees."

Thank you,

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