GloryBee
FAMILY OWNED
· SINCE 1975 ·

Home of Aunt Patty's & GloryBee Products

120 N. Seneca Road
PO Box 2744
Eugene, OR 97402

office: (541) 689-0913
fax: (541) 607-2156
GloryBee.com

March 26, 2019

House Committee On Agriculture and Land Use
Oregon Legislature
900 Court Street NE
Salem, OR 97301

RE: Support for HB 3058

Dear Chair Clem and Representatives McLain, Post, Boshart Davis, Helm, Smith and Williams:

GloryBee is a family owned and operated business in Eugene that has been supplying honey, sweeteners and other quality ingredients to natural food manufacturers, bakeries and supermarkets in the Pacific Northwest for over forty years. Started in 1975, in the garage of beekeepers and founders Dick and Pat Turanski, today the next generation of the Turanski family is very intentionally giving back to address the plight of honeybees.

Honey bees are critical to a healthy and abundant food supply. GloryBee's SAVE the BEE Program is fostering public awareness, educating beekeepers and partnering with food and beverage manufacturers in raising funds to support scientific research on honey bee health (specifically research labs at Oregon State University and Washington State University).

I am speaking today on behalf of GloryBee, a company that makes about one third of its livelihood selling honey and beekeeping equipment, but also I believe I am speaking on behalf of honey bees, beekeepers, fruit and vegetable farmers and our food supply.

What do we know?

- **One in three bites of food we currently eat is pollinated (by bees or others)** Think apples, cranberries, blueberries, melons, squash, almonds and avocados to name a few! Without pollinators these crops will die off. (pollinator.org), Honey bees provide $20 billion worth of pollination services annually in the US. (modernag.org/biodiversity/beeconomy-economic-value-pollination/)
- **Honey bees are a multimillion dollar business in Oregon.** Oregon is in the top 6 states with the highest number of managed honey bee hives (95,000 colonies according to the USDA), with approximately 20 commercial (500+ hives) and semi-commercial (50 to 500) outfits and 220-300 backyard beekeepers (5 to 50 hives). (pnwhoneybeesurvey.org, beeinformed.org)

GloryBee
FAMILY OWNED
· SINCE 1975 ·

Home of Aunt Patty's & GloryBee Products

120 N. Seneca Road
PO Box 2744
Eugene, OR 97402

office: (541) 689-0913
fax: (541) 607-2156
GloryBee.com

- **Most of Oregon's commercial beekeepers generate additional revenue by leasing their hives to California almond growers.**
  So what may seem like a small economic driver in Oregon, is tightly linked to keeping the enormity of the California almond industry viable ($21.5 billion)
- **Honey bee colony loss is well documented in Oregon**, as elsewhere across the country, and has ranged from 15 to 45% in the last decade. In 2017-2018, Oregon backyard beekeepers experienced 35% colony loss and commercial beekeepers 15%. (pnwhoneybeesurvey.org, beeinformed.org)
- **Varroa mites, queen failure, and general hive weakness** in the fall have been the perceived reasons for colony loss in Oregon. Why are queens failing? Why are hives weak at the end of a summer season when they have plenty of food stores (pollen and honey)?
- **Neonicotinoids are the most widely used class of insecticides in the world.**
  Their persistent presence in soil and plants makes it possible for these chemicals to contaminate pollinators even when the initial application is made outside of the flowering season. When bees drop dead after spraying, it's easy to see cause and effect. Our concerns are also for the sublethal effects.

Recent science that is shedding light on the complexities of pesticides and the health of bees:

1. ***Neonicotinoid adversely affects insect immunity from viral pathogens in honey bees*** (DiPrisco et. Al., 2013) Honey bees are exposed to a wealth of synergistically interacting stress factors, which may induce colony losses often associated with high infection levels of pathogens. Here we show that the neonicotinoid insecticide clothianidin adversely affects honey bee antiviral defenses.

2. ***Neonicotinoid insecticides can serve as inadvertent insect contraceptives*** (Straub et. al., 2016) When exposed to chronic field-realistic, non-lethal concentrations of two forms of neonicotinoids, the reproductive capacity of male honey bees was significantly reduced. Their sperm quantity and viability declined by 39%.

3. ***Impaired associative learning after chronic exposure to pesticides in young adult honey bees.*** (Goñalons and Farina, 2018) The neonicotinoid imidaclopridhad had adverse effects on different aspects of young honey bee appetite and eating behaviors, which could have repercussions for food distribution, propagation of olfactory information and task coordination within the hive.

GloryBee
FAMILY OWNED
· SINCE 1975 ·

Home of Aunt Patty's & GloryBee Products

120 N. Seneca Road
PO Box 2744
Eugene, OR 97402

office: (541) 689-0913
fax: (541) 607-2156
GloryBee.com

The case for caution – restrict Neonicotinoids!
Oregon currently requires certification and training in order to buy, sell, or disseminate over 500 restricted use pesticides, yet no neonicotinoids are included on the list.

With full-cost accounting, we can compare the trade-offs between pollinator conservation and other reasonable objectives. For example, we know that neonicotinoid pesticides were developed to aid farmers, and Oregon's wheat industry in particular is benefiting from their use. The availability and cost effectiveness of non-chemical alternatives may not be ideal for wheat farmers at this time, but non-chemical alternatives certainly exist for the backyard gardener.

This is precisely why we believe it is prudent to restrict use of neonicotinoids to licensed and trained professionals who are educated about pollinator habits and habitats, and to get neonics off the retail shelves and out of backyards.

Please support HB 3058. Without honey bees and other native pollinators we all lose.

Sincerely,

Lynne Fessenden

Lynne Fessenden
SAVE the BEE Program Coordinator

Di Prisco, G., Cavaliere, V., Annoscia, D., et al., 2013. Neonicotinoid clothianidin adversely affects insect immunity and promotes replication of a viral pathogen in honey bees. Proc. Natl. Acad. Sci. U. S. A. 110, 18466–18471.

Straub, L. et. al,. 2016. Neonicotinoid insecticides can serve as inadvertent insect contraceptives. Proc. R. Soc. B 283: 20160506. http://dx.doi.org/10.1098/rspb.2016.0506

Mengoni Goñalons C, Farina WM, 2018. Impaired associative learning after chronic exposure to pesticides in young adult honey bees. J Exp Biol. Apr 11; 221.

Sponsler, D.B., et.al., 2019, Pesticides and pollinators: A socioecological synthesis Science of the Total Environment 662, 1012–1027.