RE:SB 929 Oregon Pollinator Protection Act DATE: March 31, 2017 POSITION: SUPPORT COMMITTEE: Senate Environment and Natural Resources FROM: Krystal R. Abrams, B.S. Environmental Science, Social Media & Pollinator Project Manager, Beyond Toxics, Eugene OR.

Honorable Senate Environment and Natural Resources Committee,

In the last few decades, many wild bees have suffered steep declines, and some, such as the Franklin's bumblebee (*Bombus franklini*), have disappeared altogether (Xerxes 2014). Wild pollinators provide a wide range of benefits to society in terms of contributions to food security, farmer and beekeeper livelihoods, social and cultural values, as well as supporting biodiversity and ecosystem stability (Potts et al. 2016).

There is no shortage of recent peer-reviewed research concluding that the destruction of native pollinator habitat has driven much of this loss. Newer research suggests that pesticide use does play a big role in native bumblebee declines around the world. It has been discovered that <u>bumblebees are at a significantly higher risk of being harmed by neonicotinoid exposure than honeybees are</u>. Specifically, imidacloprid, thiamethoxam and clothianidin pose a greater threat to wild bees than to honeybees. (Goulson 2013; Sanchez-Bayo 2014; Godfray et al. 2015; Moffat et al. 2016, Botias et al. 2017).

Additionally, bumblebees are not parasitized by the varroa mite, but do have several mite species which can parasitize them. Recent research indicates that wild bumblebees immune function is affected by neonicotinoid exposure, making them more susceptible to Deformed Wing Virus (DWV) and other diseases that significantly shorten their lifespan. (Simmons et al. 2017) Not only are these bumblebees facing DWV and habitat destruction, they are also being poisoned with highly toxic pesticides in what limited habitat they have to forage.

Please consider the well-documented harmful impacts of neonicotinoids on Oregon's native pollinators. It's no secret that neonicotinoids are a major contributing factor to rapid declines of wild bees. Now is the time to take action and make a decision to protect our imperiled pollinators that keep Oregon green and beautiful.

Sincerely,

Krystal Abrams

## References

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Simmons, William R., and David R. Angelini. (2017) "*Chronic exposure to a neonicotinoid increases expression of antimicrobial peptide genes in the bumblebee Bombus impatiens*." Scientific Reports 7 (2017): 44773. *PMC*. Web. 31 Mar. 2017. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5359568/

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Xerces, Project Bumble Bee: <u>http://www.xerces.org/bumblebees/.</u>