**SB0375-FAV-DTMG-2-10-21.pdf** Uploaded by: Bartlett, Olivia Position: FAV



#### Olivia Bartlett, Co-Lead, DoTheMostGood Maryland Team

Committee: Education, Health, and Environmental Affairs

Testimony on: SB0375 - Agriculture - Neonicotinoid Pesticides - Sale and Storage

**Position: Favorable** 

Hearing Date: February 10, 2021

Bill Contacts: Senator Cheryl Kagan

DoTheMostGood (DTMG) is a progressive grass-roots organization with more than 2500 members who live in a wide range of communities in Montgomery and Frederick Counties, from Bethesda near the DC line north to Frederick and from Poolesville east to Silver Spring and Olney. DTMG supports legislation and activities that keep all the members of our communities healthy and safe in a clean environment. DTMG strongly supports SB0375 because it will help reduce use of neonicotinoid pesticides that harm the bees that pollinate our food crops.

Since their introduction in the 1990s, neonicotinoids have become the world's most widely used class of insecticides, sold in at least 120 countries to help control damaging insects and protect agricultural production. Neonic pesticides are effective in reducing infestations of sucking insects, such as aphids, on many types of crops, including rice, cotton, corn, potatoes and soybeans. The pesticides are both sprayed on plants and coated on seeds.

However, a growing body of scientific evidence indicates that neonicotinoids as they are typically used harm bees, which are essential pollinators in food production, and are a key factor in the widespread colony collapse disorder of bees. Neonicotinoids have been shown to disrupt bees' immune systems, making them susceptible to viral infections to which the bees are normally resistant, decrease survival and egg-laying by queen bees, and to have other harmful effects on honey bees and bumble bees. Neonicotinoids are also seen by scientists as at least partly to blame for a broader "insect apocalypse" in which over 40% of the 1 million known species of insects are facing extinction due to over use of pesticides and other factors. The insecticides have also been tied to serious defects in white-tailed deer, deepening concerns over the chemical's potential to harm large mammals, including people. A global survey covering every continent with honeybees found neonicotinoids in three-fourths of honey samples, indicating the widespread nature of these pesticides and raising concerns about the presence of neonicotinoid pesticides in our food.

SB0375 will take a small step in the right direction toward addressing this problem by making sure that these potentially dangerous neonic pesticides are sold only to a certified applicator or a farmer and that they are stored "behind the counter" in businesses that sell them, so they are inaccessible to ordinary customers who are not adequately trained in their proper application. This is the bare minimum that must be done to protect our pollinators and our food supply.

Therefore, DTMG strongly supports SB0375 and urges a **FAVORABLE** report on this bill.

Respectfully submitted,

Olivia Bartlett Co-lead, DoTheMostGood Maryland Team <u>oliviabartlett@verizon.net</u> 240-751-5599

### SB 375 Doebel- Favorable testimony MGA-1.pdf Uploaded by: Doebel, Dr. Harmut

Position: FAV

Hartmut Doebel, PhD

#### Testimony in Support of: SB375: Agriculture -Neonicotinoid Pesticides – Sales and Storage

#### Before the Senate Education, Health & Environment Committee February 10, 2021

Dear members of the committee,

My name is Hartmut Doebel, PhD, a research scientist at the biology department of George Washington University. For the last 8 years I have studied how very low doses of pesticides (sublethal and orders of magnitude below the known LD-50) affect the cognitive behavior of honeybees. What follows is a brief excerpt of mostly recent research, documenting the harmful effects of neonicotinoids on pollinators, especially honeybees.

Since the Maryland General Assembly passed the 2016 Pollinator Protection Act based on the then strong body of science underscoring the adverse impacts of neonicotinoids on bees and other pollinators, additional research has further highlighted the threat neonicotinoids pose to pollinators and the need to protect pollinators from exposure to this class of pesticides.

The longstanding, persistent and widespread use of systemic, water-soluble neonicotinoids to control pest species in agro-ecosystems has had many unintended and severe consequences. Studies in 2020 and 2021 further note that numerous non-target species, ranging from highly sensitive aquatic invertebrate keystone species (1,2) to beneficial and economically important pollinators, including honeybees have been impacted (3,4,5). Even protected nature reserves do not appear to be protected from such pesticides (6).

As countless scientific research studies have consistently and repeatedly documented the negative effects of neonicotinoids on pollinators, three neonicotinoids (imidacloprid, clothianidin, thiamethoxam) have been subsequently banned by the European Union in 2018 (7). Similarly, in 2018 legislation has been moved forward by the Canadian government to severely restrict the use of and phase out these neonicotinoids in 2021 in order to protect honeybees (8).

While acute toxicity of neonicotinoids (causing death) has been documented, most worrisome are their sublethal effects, invisible to the casual observer but potent in severely altering the behavior of honeybees. Research on bees documented that sublethal doses of neonicotinoids

- disrupt their sleep and circadian rhythm (9)
- > negatively impacts the cognitive and memory functions (10)
- hinder bees from flying back to their hives (11)

These findings, among many others, combined with the fact that more and more long-lasting residues of neonicotinoids are found in soils and are eventually taken up by bees far removed from agricultural fields (12), are not only documenting the negative impact of neonicotinoids on honeybees, but are strongly suggestive of playing a major role in colony collapse disorder.

Last but not least, several recent studies found either no economic benefit to farmers when applying neonicotinoids (13), or even an economic loss due to the harm of important biological control agents (14).

Our food supply depends on our pollinators. No bees, no pollination, less food, more expensive. I urge a favorable report on HB208 to ensure the law is implemented as this body intended.

- Michelle L.Hladik, Steven R.Corsib, Dana W.Kolpin, Austin K.Baldwind, Brett R.Blackwell, Jenna E.Cavallin. 2018. Year-round presence of neonicotinoid insecticides in tributaries to the Great Lakes, USA. <u>https://doi.org/10.1016/j.envpol.2018.01.013</u>
- (2) Tessa C. Van Dijk, Marja A. Van Staalduinen, Jeroen P. Van der Sluijs. 2013. Macro-Invertebrate Decline in Surface Water Polluted with Imidacloprid. <u>https://doi.org/10.1371/journal.pone.0062374</u>
- (3) Akanksha Singla, Heena Barmota, Sanjay Kumar Sahoo & Balpreet Kaur Kang. 2021. Influence of neonicotinoids on pollinators: A review, Journal of Apicultural Research, 60:1, 19-32. <u>https://doi.org/10.1080/00218839.2020.1825044</u>
- (4) Kayla Rachel Schwartz, Hannah Minor, Caitlin Magro, James McConnell, Jeton Capani, Jordan Griffin & Hartmut Doebel. 2021. The neonicotinoid imidacloprid alone alters the cognitive behavior in *Apis mellifera L*. and the combined exposure of imidacloprid and *Varroa destructor* mites synergistically contributes to trial attrition. Journal of Apicultural Research. <u>https://doi.org/10.1080/00218839.2020.1866233</u>
- (5) Scott D. Longing, Eric M. Peterson, Christopher T. Jewett, Bianca M. Rendon, Samuel A. Discua, Kimberly J. Wooten, Seenivasan Subbiah, Philip N. Smith, Nancy E. 2020. McIntyreExposure of Foraging Bees (Hymenoptera) to Neonicotinoids in the U.S. Southern High Plains. <u>https://bioone-org.proxygw.wrlc.org/journals/environmental-entomology/volume-49/issue-2/nvaa003/Exposure-of-Foraging-Bees-Hymenoptera-to-Neonicotinoids-in-the-US/10.1093/ee/nvaa003.short</u>
- (6) Caspar A. Hallmann, Martin Sorg, Eelke Jongejans, Henk Siepel, Nick Hofland, Heinz Schwan, Werner Stenmans, Andreas Müller, Hubert Sumser, Thomas Hörren, Dave Goulson, Hans de Kroon. 2017. More than 75 percent decline over 27 years in total flying insect biomass in protected areas. <u>https://doi.org/10.1371/journal.pone.0185809</u>
- (7) European Commission. 2018. Neonicotinoids. <u>https://ec.europa.eu/food/plant/pesticides/approval\_active\_substances/approval\_renewal/neonicotinoids\_en</u>

#### THE GEORGE WASHINGTON UNIVERSITY WASHINGTON, DC

- (8) Oana. 2018. Canada joins the list of countries to ban the use of neonicotinoid-based pesticides. <u>https://agronomag.com/canada-joins-the-list-of-countries-to-ban-the-use-of-neonicotinoid-based-pesticides/</u>
- (9) Michael C.Tackenberg, Manuel A. Giannoni-Guzmán, Erik Sanchez-Perez, Caleb A. Doll, José L. Agosto-Rivera, Kendal Broadie, Darrell Moore, Douglas G. McMahon. 2020. Neonicotinoids disrupt circadian rhythms and sleep in honey bees. <u>https://doi.org/10.1038/s41598-020-72041-3</u>
- (10) Zhu, Ricky, Alexis Carmine, Mehreen Arif, Michael P. Stover, Ryan Gunnison, Kaleabe Abebe, Carly Sherman. Hartmut Doebel. In Prep. Sub-lethal Administrations of Imidacloprid Impact the Cognitive Memory And Associative Learning in Apis mellifera.
- (11) Simone Tosi, Giovanni Burgio, James C Nieh. 2017. A common neonicotinoid pesticide, thiamethoxam, impairs honey bee flight ability. <u>https://doi.org/10.1038/s41598-017-01361-8.</u>
- (12) Gary Codling, Yahya Al Naggar, John P Giesy, Albert J Robertson. 2015. Concentrations of neonicotinoid insecticides in honey, pollen and honey bees (Apis mellifera L.) in central Saskatchewan, Canada.
  https://doi.org/10.1016/j.abergarcherg.2015.10.125

https://doi.org/10.1016/j.chemosphere.2015.10.135

- (13) C. H. Krupke J. D. Holland E. Y. Long B. D. Eitzer. 2017. Planting of neonicotinoidtreated maize poses risks for honey bees and other non-target organisms over a wide area without consistent crop yield benefit. <u>https://doi.org/10.1111/1365-2664.12924</u>
- (14) Margaret R. Douglas, Jason R. Rohr, John F. Tooker. 2014. Neonicotinoid insecticide travels through a soil food chain, disrupting biological control of non-target pests and decreasing soya bean yield. <u>https://doi.org/10.1111/1365-2664.12372</u>

## **SB 375 -- Eric Gally Testimony in Support on behal** Uploaded by: Gally, Eric

Position: FAV



### Testimony of Eric Gally on behalf of the Maryland Pesticide Education Network in SUPPORT of Senate Bill 375

The Maryland Pesticide Education Network respectfully requests a favorable report on SB 375, a bill that corrects an unintended loophole in the original Pollinator Protection Act of 2016.

When we all worked on this in 2016, the intent was to reduce public use and consumption of neonicitinoid pesticides.

The first thought was to classify neonicitinoids as restricted-use pesticides – which means they could only be purchased and used by certified applicators or their authorized representatives – who undergo training, take a closed-book examination and have to show their ID to purchase these pesticides. A dealer may not sell or distribute a restricted use pesticide to any person other than a permitted dealer, a certified applicator or that person's authorized representative.

Rather than go that route we decided to try something a little less restrictive. The formal certification and permit were not required. But the intent of the bill was that typical retail stores like Target, Walmart, local hardware stores, and others would not have these products on the shelves. Homeowners would choose from the many other products that were available and use would decline. Typical farm and feed stores where the staff had more expertise would continue selling but keep the products out of reach and not sell to people who were not eligible to use the products.

As you will hear from Bonnie Raindrop, that hasn't turned out to be the case. Stores went and got their dealer permits and the products are everywhere, next to all the other products, without any marking or warning to the public that they are not supposed to use the product.

So we are asking for your help to close this loophole and take us back to the spirit and intent of the original law.

We are flexible and look forward to working with everyone along the way – as long as we can find a way to end up with true restricted public access to these products as was originally intended. Thank you very much and we urge a favorable report.

### SB375 Neonicotinoids Testimony Sen. Cheryl Kagan-m Uploaded by: Kagan, Senator Cheryl

Position: FAV

**CHERYL C. KAGAN** *Legislative District 17* Montgomery County

*Vice Chair* Education, Health, and Environmental Affairs Committee

Joint Audit Committee Joint Committee on Federal Relations



Miller Senate Office Building 11 Bladen Street, Suite 2 West Annapolis, Maryland 21401 301-858-3134 · 410-841-3134 800-492-7122 Ext. 3134 Fax 301-858-3665 · 410-841-3665 Cheryl.Kagan@senate.state.md.us

### THE SENATE OF MARYLAND Annapolis, Maryland 21401

#### SB375: Agriculture – Neonicotinoid Pesticides – Sale and Storage Education, Health, and Environmental Affairs Hearing February 10, 2021 | 1:00 p.m.

The use of neonicotinoid pesticides <u>significantly harms bee populations</u> worldwide. In 2015 alone, Maryland beekeepers lost 61 percent of their colonies to the use of this pesticide.

In 2016, the General Assembly enacted the Pollinator Protection Act (<u>SB198/HB211</u>), prohibiting the use of neonicotinoid pesticides by unauthorized persons, such as home gardeners. It was later discovered that this legislation did not **prohibit the sale** of neonicotinoids within retail stores. Consumers are able to purchase the harmful pesticide without knowing that they had done so illegally.

<u>SB375</u> would require retail stores to relocate neonicotinoids so that they will only be available upon request. Certified applicators will know to ask staff to retrieve the pesticide. The at-home gardner will not know the difference.

The Maryland Retailers Association brought to our attention that there aren't many retail store "counters" anymore. We agreed to a modest amendment, removing "behind the counter," which does not alter the intention of the bill.

The inadvertent use of neonicotinoids is slowly erasing the pollinator population-- a significant component of our ecosystem. Simply relocating these products will reduce the detrimental effects on our bees and therefore our environment.

I urge a favorable report of SB375 as amended.



SB0375/933621/1

AMENDMENTS PREPARED BY THE DEPT. OF LEGISLATIVE SERVICES

> 03 FEB 21 12:07:10

BY: Senator Kagan

(To be offered in the Education, Health, and Environmental Affairs Committee)

#### AMENDMENT TO SENATE BILL 375 (First Reading File Bill)

On page 3, in lines 10 and 11, strike "BEHIND THE COUNTER AND".

## **SB375\_Beekeepers\_FAV\_McDaniel 2-8-21.pdf** Uploaded by: McDaniel, Steve

Position: FAV

### Letter from Maryland Bee Clubs and Beekeepers re: SB375 Senate Education, Health and Environmental Affairs Committee

February 10, 2021

#### IN SUPPORT SB375 Agriculture - Neonicotinoid Pesticides - Sales & Storage

Dear Chair, Vice Chair, Members of the Committee,

We, the undersigned, are beekeepers and beekeeping clubs in Maryland. We are writing to ask for your support in passing SB375, which will amend the Pollinator Protection Act to correct a loophole that is being used to allow some stores to sell consumer garden products containing bee-killing neonicotinoid pesticides to unsuspecting consumers. The Pollinator Protection Act makes it illegal for consumers to use these products, so they are unknowingly breaking the law when they buy and use them.

- In 2016, with wide bipartisan support, the Maryland General Assembly passed the Pollinator Protection Act to protect bees, wildlife and our food supply by prohibiting unnecessary consumer use of the most toxic pesticide for bees, neonicotinoids. At the time, Maryland had some of the highest bee losses in the nation.
- The latest Bee Informed Partnership survey of bee colony losses, 2019-2020, found nationally that we had the second highest losses in history at 44%. Summer losses, when bees should thrive, are the highest losses to summer populations ever recorded at 32%.
- While this is happening, over 100 Restricted Use Pesticide retailers, including forty Target stores, are using unclear bill language as a loophole to sell these products to consumers.
- Dennis Howard, former pesticide regulation manager at Md. Dept. of Agriculture was clear about the law in a 2018 *Bay Journal* article saying "...the law's language can be a little confusing, but it does prohibit sales to the general public of neonicotinoid pesticides for outdoor use... They [neonics] should be behind the counter for the folks [certified applicators] who can actually apply it under the legislation."

Clearly, this is not a time for weakening laws that protect honeybees and wild pollinators.

Education, Health & Environment Committee Vice Chair Kagan, along with Delegate Healey the original sponsor of the Pollinator Protection Act sponsor, are sponsoring SB375/HB208 to correct this loophole.

We ask you to pass SB375 to amend the Pollinator Protection Act and close the loophole so the bill will be protective of bees and implemented as it was intended. These chemicals are deadly to bees and should be restricted to certified pesticide applicators only. Please save our bees by passing SB375.

Respectfully submitted, Steve McDaniel, McDaniel Honey Farm mail@mcdanielhoneyfarm, 443-507-6367

On behalf of 304 Maryland Beekeepers, Businesses/Apiaries and 8 Beekeeping Clubs (listed next pages) SB375 testimony signed by 304 Maryland beekeepers and 8 beekeeping clubs:

| Name                         | Bee Clubs  | Title                              | Email Address *                   | Phone<br>Number     |
|------------------------------|--|------------------------------------|-----------------------------------|---------------------|
| Steve McDaniel               | Carroll County<br>Beekeepers<br>Association      | Past President                     | mail@mcdanielhoneyfarm.com        | (443) 507-6367      |
| Ryan Smith                   | Anne Arundel<br>Beekeepers<br>Association        | President                          | ryansmith@honeysmithbees.com      | (443) 274-7496      |
| Beth Sherring                | Baltimore Backyard<br>Beekeepers<br>Network      | Past President                     | bethsherring@gmail.com            | 410-215-5490        |
| Christopher Hart             | Central Maryland<br>Beekeepers<br>Association    | President                          | president@centralmarylandbees.org | 443-253-7510        |
| Pam Hepp                     | Montgomery County<br>Beekeepers<br>Association   | President                          | pphepp@aol.com                    | (202) 494-7934      |
| Carla M Guarraia             | Park School<br>Beekeeping Club                   | Science Teacher and Club<br>Mentor | cguarraia@parkschool.net          | (1443) 413-<br>5115 |
| Michael Dashiell             | South Cove Bee<br>Club                           | Organizer                          | mikedash59@yahoo.com              | (410) 812-5520      |
| Mary Laura<br>Fitzgerald     | Upper Eastern<br>Shore Beekeeping<br>Association | President                          | themarylaura58@gmail.com          | (301) 345-8171      |
| Name                         | Apairies,<br>Businesses                          | Title                              | Email Address *                   | Phone<br>Number     |
| James Boicourt               | Charm City<br>Meadworks                          | Owner, Managing Partner            | james@charmcitymeadworks.com      | (410) 336-0459      |
| Chris White                  | Bee-America                                      | CEO                                | chris@3zs.us                      | (301) 229-2780      |
| Bonnie Raindrop              | Raindrop Apiary                                  | Owner                              | legislate@centralMarylandbees.org | (410) 404-3808      |
| Christina Glorioso<br>Mullan | Monarchs Glen<br>Apiary                          | Owner                              | monarchsglen@gmail.com            | (301) 758-3400      |
| Gerald Lutskus               | Gerald's Bees                                    | Owner                              | gjlcecrt@icloud.com               | (301) 529-8262      |
| Kathryn Koenig               | Koenig Apiary                                    | Owner                              | kaykoenig1@gmail.com              | (1301) 641-<br>4189 |
| Eric Malcolm                 | Backyard Apiaries                                | Owner                              | backyardapiaries@gmail.com        | (240) 602-7835      |
| Richard Schwinger            | Schwinger Apiary                                 | Operator                           | schwingerr@yahoo.com              | (410) 489-5216      |
| Gina Rosso                   | Home Apiary                                      | Beekeeper                          | ginarosso@me.com                  | (443) 695-2673      |
| John H. Mountcastle          | Mountcastle Apiary                               | Beekeeper                          | Mtcstle@yahoo.com                 | 443-794-7805        |
| Mark Burchick                | Burchick's Bees                                  | Owner                              | MJBurchick@gmail.com              |                     |
| Tim Phillips                 | Phillips Apiary                                  | Homeowner                          | tphil13@gmail.com                 | (410) 493-6901      |
| Hope Underwood               | Underwood Apiary                                 | Beekeeper                          | HopeUnderwood@hotmail.com         | 832-368-3395        |
| Dianne E. Dunlap             | Dianne's Apiary                                  | Homeowner                          | diannedunlap2@gmail.com           | (443) 742-9121      |
| Kim Malinowski               | Kim's Bees                                       | Owner                              | Kimbastores@gmail.com             |                     |
| Katherine Kight              | Kight Apiary                                     | Owner                              | kekight@gmail.com                 | 410-5966244         |
| Kent Phillips                | Phillips Apiary                                  | Apiary Owner                       | Kent.a.phillips@gmail.com         | 410-993-2804        |
| Rene lannuzzi                | Rene's Bees                                      | Beekeeper                          | Rianutz@gmail.com                 |                     |
| Stephen L<br>Christianson    | Christianson Apiary                              | Beekeeper                          | slcsr48@gmail.com                 | 443 970 5316        |

| Michael Patton       | Home<br>Apiary/Baltimore<br>Co. | Beekeeper/Homeowner/Taxpay<br>er/ Voter | Mdp1948@icloud.com              | 443-794-6553                                   |
|----------------------|---------------------------------|---|---------------------------------|--|
| Kenneth Lehman       | Bee To The Apiary               | Beekeeper                               | ibekenok@gmail.com              | (410) 310-5948                                 |
| Thomas Gargano       | Thomas's Bees                   | Owner                                   | Tomgargano1@gmail.com           | 646-773-1449                                   |
| Sarah Rohbin         | Rohbin Apiary                   | Owner                                   | Sarah.Rohbin@gmail.com          |  |
| Victor Levi          | Howard County Bee<br>Club       | Club Member                             | beekeeperlevi@gmail.com         |  |
| Merlowe Henry        | Stone's Throw<br>Apiary         | Apiary Owner                            | merlowedee@gmail.com            | (410) 365-2168                                 |
| Michael Aaby         | Michael's Bees                  | Owner                                   | mcaaby@gmail.com                | (240) 731-9352                                 |
| Patricia Murphy      | Murphy Apiary                   | Owner                                   | dilirian@gmail.com              | (1443) 248-<br>4914                            |
| Mary Goff            | Goff Apiary                     | Owner                                   | mfrancesgoff61@gmail.com        | (443) 812-0965                                 |
| Kathryn Carr         | Kathryn's Bees                  | Owner                                   | carrkb3704@gmail.com            | (410) 507-1402                                 |
| Eric Thornton        | Thornton Apiary                 | Operator                                | eric@thethorntons.com           |  |
| Nicholas Koutrelakos | Nick's Bees                     | Owner                                   | Nicholas.koutrelakos @gmail.com | 443-691-2575                                   |
| Daneen Hatcher       | Home Apiary                     | Beekeeper                               | dhatche2424@gmail.com           | 443-890-3042                                   |
| Joan Orcutt          | Orcutt Apiary                   | Owner                                   | Joanorcutt@aol.com              | (301)854-2447                                  |
| Frank Berry          | Berry Apiary                    | Owner                                   | berrype@hotmail.com             | 410-461-2752                                   |
| Ewa Turner           | Turner Apiary                   | Owner                                   | turnere@nih.gov                 | (410) 730-6185                                 |
| Diane Dunn           | Home Apiary - Bee<br>Happy      | Owner                                   | diane.dunn3@verizon.net         | 410 730 9286                                   |
| Lynn Hepak           | Hepak Apiary                    | Owner                                   | lynnhepak@hotmail.com           |  |
| Gary Pohlner         | Chestnut Garth<br>Apiary        | Owner                                   | g7pohlner@gmail.com             | 410-239-8844                                   |
| Larry Fritz          | DonLar Apiary                   | Owner, Operator                         | Lfritz45@gmail.com              | 410-804-7652                                   |
| Larry A. Olmo        | Olmo Bros Nursery<br>& Farm     | Farm Manager                            | larry@olmobros.com              | (410) 703-5440                                 |
| Russell Sprangel     | Windsock Honey                  | Owner                                   | Windsockhoney@gmail.com         | (410) 241-8303                                 |
| Frederick Smith      | F&D Apiaries                    | Owner                                   | F.smith@myactv.net              | (301) 992-7197                                 |
| Mary Gamper          | Towson Run<br>Apiaries          | Beekeeper                               | Gamper.Mary@gmail.com           | 410 812 2676                                   |
| Steven Roys          | Lakeland Gardens                | Owner                                   | srroys58@gmail.com              | 443-996-6994                                   |
| Emily Gannon         | Gannon's Garden<br>Apiary       | Owner                                   | emiliegannon@yahoo.com          | (443) 760-8329                                 |
| Karly Hansen         | Chesapeake Queen<br>Company     | Operator                                | Karly.hansen@gmail.com          | (6.(0), (00, 00, 00, 00, 00, 00, 00, 00, 00, 0 |
| Robin Stafford       | Robin's Bees                    | Beekeeper                               | Robinnstafford@msn.com          | (240) 423-9228                                 |
| Matt Aust            | Hidden Castles<br>Apiary        | Owner                                   | Mattmanba99@hotmail.com         | (443) 487-7886                                 |
| Cory Heiges          | Heiges Honey Bees               | Owner                                   | coryheiges503@gmail.com         | (410) 596-2859                                 |
| Jen McQueen          | Rooted Bees                     | Owner                                   | jenmcqueen8881@yahoo.com        |  |
| Dina Mundy           | DM Bees                         | Owner                                   | Dinamundy@gmail.com             | 240-405-4822                                   |
| Douglas Hubbard      | Hubbard<br>Homestead Apiary     | CEO                                     | The3hubbards@gmail.com          | 301-943-6670                                   |
| Lauren Lowe          | Hickory Hill Apiary             | Owner                                   | Lalowe40@gmail.com              |  |
| Mikalena Lawrence    | Mika's Apiary                   | Owner                                   | mikalawrence@hotmail.com        | 919.604.1160                                   |
| Amy Boldt            | Barefoot Medicine<br>Farm       | Owner                                   | Barefootboholife@gmail.com      |  |

| Richard Hill                  | Hill Apiary                                    | Owner                 | richardhill2011@gmail.com      | 443-538-8898   |
|-------------------------------|--|-----------------------|--------------------------------|----------------|
| Elizabeth Adkins              | Pond View Apiary                               | Owner                 | Lisamadkins@yahoo.com          | (410) 382-8814 |
|                               | Jarrettsville                                  | Owner                 | Andrea@bannerbees.com          | (240) 793-0363 |
| Andrea Langworthy             | Banner Bee Co                                  |                       | Kadow0420@AOL.com              | 410-292-7178   |
| Kathy Kadow                   | Kadow's Bees                                   | Beekeeper             |                                |                |
| Bernie Kadow                  | Bernie's Bees                                  | Beekeeper             | kms214@aol.com                 | 410-790-9270   |
| Jp Boldt                      | Barefoot Medicine<br>Farm                      | Co-Owner              | jp.boldt@gmail.com             | (202) 360-8642 |
| Joanna Reed                   | Joanna's Bees                                  | Beekeeper             | jsreed99@gmail.com             | 443-487-1282   |
| S. Weston Wolfe               | Wolfe Apiary                                   | Owner                 | s9wolfe@gmail.com              | (443) 939-5545 |
| Don Aker                      | Bizzy's Bees Apiary                            | Owner                 | Daker76259@verizon.net         | (410) 371-5313 |
| Ryan Smith                    | HoneySmith Bees                                | Owner                 | Ryansmith@honeysmithbees.com   | (443) 274-7496 |
| Kate Fisher                   | Bumbling Bee<br>Apiary                         | Beekeeper             | Katefisher13@gmail.com         |                |
| Joshua Cole                   | Cole Bee Company                               | Owner                 | Jcole57@live.com               | (443) 974-8383 |
| Mindy Dunnigan                | M&M Apiary                                     | Queen Beekeeper       | mmdunni1281@gmail.com          | (410) 876-2011 |
| Kelly Brauning                | Carroll Co<br>Beekeepers<br>Association        | Beekeeper             | Kelican89@gmail.com            | 443-289-1393   |
| Olivia Canfield               | Stoneberry Apiary                              | Owner                 | ocanfield@comcast.net          | 410-374-2375   |
| Joanne Broccolino             | Spring Lake Nature<br>Bee Apiary               | Owner                 | joannebroccolino@gmail.com     | (443) 791-3363 |
| Paul Alberti                  | Futurebeehobbiest                              | Hobbyist              | Plalberti@comcast.net          |                |
| Pam Hepp                      | Kenwood Park<br>Apiary                         | Owner                 | pphepp@aol.com                 | (202) 494-7934 |
| Rick Wallace                  | Wallace Apiary                                 | Owner                 | Rickcapsfan@yahoo.com          | (443) 617-0182 |
| Craig Teer                    | Teer Bees                                      | Manager               | craigbteer@aol.com             | (240) 462-9008 |
| Maureen Jais-Mick             | Exfair Bees                                    | Owner                 | jaismick1@verizon.net          |                |
| Sara Servin                   | Sara's Bees                                    | Beekeeper in Training | sarafservin@gmail.com          |                |
| William Hahn                  | Bill with a B                                  | Owner                 | wjh22@georgetown.edu           | (646) 835-9100 |
| Harris Elizabeth              | Montgomery County<br>Beekeepers<br>Association | Member                | ekmharris@gmail.com            | (301) 529-9319 |
| Elizabeth Harris              | Studios Bees                                   | Owner                 | EHarrisResearch@gmail.com      | (301) 652-1872 |
| Frank Mccowan                 | Honey Bunnys<br>Honey                          | Owner                 | Mrfikser@verizon.net           | (240) 994-4573 |
| John Crissey &<br>Susan Vogel | Lily Bee Honey<br>Apiary                       | Owners                | svj3enovo@gmail.com            | (301) 408-8546 |
| Carla Dinowitz                | Beemish Bee<br>Apiary                          | Ms.                   | carladinowitz@gmail.com        | (301) 802-7364 |
| Harold Keiner                 | Keiner's Apiary                                | Owner                 | hkeiner@pa.metrocast.net       |                |
| Leon Vandenberg               | Farmer Lee Honey<br>Co. LLC                    | President             | farmerleesbees@verizon.net     | 240-595-7957   |
| Gail Ifshin                   | Gail's Bees                                    | Owner                 | gailifshin@gmail.com           | (240) 338-4274 |
| Richard Taylor<br>Schulze     | PappyRick'sHoney                               | Owner                 | rickschulze76@gmail.com        | (301) 515-1034 |
| Martin Posse                  | New Horizons<br>Apiaries                       | Owner                 | mposse@newhorizonsapiaries.com |                |
| Karen Kavanagh                | Kavanagh's Bees                                | Owner & Manager       | kckavanagh@yahoo.com           | 240-489-3219   |
| Thomas Leo Soileau            | Thomas Bees                                    | Beekeeper             | toso1234@yahoo.com             | (301) 520-6150 |

| John Casper      | JC's Bees  | Principal                      | johncasper33@gmail.com            | (1419) 509-<br>7452 |
|------------------|--|--------------------------------|-----------------------------------|---------------------|
| Mark Whitnall    | Wake Drive Apiary                                      | Owner                          | markhwhitnall@gmail.com           | (301) 580-1862      |
| Alice L Gambino  | Alice's Garden &<br>Apiary                             | Owner                          | alicelgambino@gmail.com           | (1240) 519-<br>7746 |
| Barry Thompson   | Estate and Orchard<br>Beekeeping/<br>Thompson Apiaries | Owner/Operator                 | BHT1113@aol.com                   | 301-922-1810        |
| Charlee Hardy    | Brook Hollow Apiary                                    | Beekeeper                      | chiadogs@gmail.com                |                     |
| Steve Devore     | Steve's Bees   | Manager                        | Steven.m.devore@gmail.com         |                     |
| Guy Semmes       | Cinnamon Hill<br>Apiaries                              | Owner                          | guy@hopkinsandporter.com          | (301) 252-1868      |
| Kim Malinowski   | Howard County<br>Beekeeper's<br>Association            | Member                         | Kimbastores@gmail.com             |                     |
| Emily Johnson    | Emily's Bay-Bees                                       | Owner                          | emjohnson11.14@gmail.com          | 443-939-9296        |
| Bradford S Luff  | Luff Family Farms                                      | Chief Beekeeper                | Bradfordluff@verizon.net          | (1443) 350-<br>4732 |
| William M Castro | Bee Friendly Apiary                                    | Owner                          | billiam1969@beefriendlyapiary.com | (303) 877-4617      |
| Erik Wallace     | Goshen Farm<br>Apiary                                  | Head Beekeeper                 | erik.wallace@gmail.com            | 443-223-6230        |
| Erik Darm        | Darm's Bee Farm  | Owner                          | erik.darm@gmail.com               | (703) 946-0937      |
| Sandra Taub      | Kay's Bees   | Beekeeper                      | lkhataub@gmail.com                | (301) 439-0365      |
| Jim Long         | Bird Hill Farm   | Farmer                         | jlong7774@gmail.com               | (443) 745-3558      |
| Dara Ritter      | Kitty Corner Apiary                                    | Owner                          | dararitter1111@gmail.com          | (1301) 834-<br>6447 |
| Lacy Thomas      | CMBA member  | Beekeeper                      | Lacyleespencer@gmail.com          | (410) 350-9265      |
| Hilary Goulet    | Anne Arundel<br>Beekeeping Assoc                       | Beekeeper                      | hjgoulet@gmail.com                | (443) 758-7258      |
| Suzanne Berger   | Central Maryland<br>Beekeepers<br>Association          | Beekeeper                      | Berger_suzanne@yahoo.com          | 443-220-9165        |
| Anne W. Brown    | Association of<br>Southern Maryland<br>Beekeepers      | Little Brown Bees              | awb@chesapeake.net                | 410-586-1321        |
| Eric Mann        | Howard County<br>Beekeeper<br>Association              | Member                         | Eric.Ashton.mann@gmail.com        | 443-285-9745        |
| Harry A Dalton   | Dalton Farm  | Owner                          | bee2charmer@gmail.com             |                     |
| Lynne A. Ellis   | Waverly Farms<br>Bees                                  | Owner                          | photofun4u2@gmail.com             | 410-337-0536        |
| Karen Kavanagh   | Kavanagh's Bees  | Owner & Manager                | kckavanagh@yahoo.com              | 240-489-3219        |
| Emilia Waters    | Waters Apiary  | Owner                          | emilia620@yahoo.com               | (410) 446-4172      |
| Pat Ambrose      | Ambrose Ranch<br>and CMBA Member                       | Owner and Manager              | patambrose99@gmail.com            | (443) 255-0155      |
| Selwin Gray      | Hampton Honey  | Apiary Owner                   | selwingray@gmail.com              | (443) 794-8892      |
| Vicki Rummel     | Golden Girls Apiary                                    | Owner                          | Goldengirlsapiary@gmail.com       | 410-925-9265        |
| Edward Celarier  | Dr. C's Bees   | Owner                          | edward.celarier@gmail.com         | (240) 620-3748      |
| Dennis Wilson    | Sparks Apiary  | Owner                          | wilsondennisj@aol.com             |                     |
| Lisa Reichenbach | Central Maryland<br>Beekeepers<br>Association and      | Beekeeper, Psychologist, Voter | Lisacreichenbach@yahoo.com        | 410-240-1180        |

|                       | owner of Hector's<br>Hopyard Apiary               |                 |                                      |                     |
|-----------------------|---|-----------------|--------------------------------------|---------------------|
| Stephen Vaughn        | Flying Pig Farm                                   | Owner           | Kiwini1@yahoo.com                    | 410-829-9905        |
| John Hebert           | Woodsong<br>Technologies                          | Owner           | john.hebert@woodsongtechnologies.com | (1301) 578-<br>6633 |
| Carl Miller           | Susquehanna<br>Beekeepers                         | Beekeeper       | carlmiller386@gmail.com              | 443-966-1539        |
| Cynthia Friedel       | CMBA  | Member          | cfriedel66@gmail.com                 | (410) 542-9628      |
| Jennifer Beth Steeley | Beehaven 2  | Owner           | jenniferbeth60@gmail.com             | (410) 253-3473      |
| Erik Darm             | Darm's Bee Farm                                   | Owner           | erik.darm@gmail.com                  | (703) 946-0937      |
| Molly Moore           | Association of<br>Southern Maryland<br>Beekeepers | Beekeeper       | molly.moore@yahoo.com                | (240) 393-0686      |
| Tim Kaufman           | Kaufman & Sons<br>Apiary                          | Beekeeper       | tsk680@yahoo.com                     |                     |
| Diane Wellons         | Deezltownbeez.com                                 | Owner           | Deezltownbeez@gmail.com              | (240) 925-1944      |
| Ann Morrill           | CMBA  | Dr. / Beekeeper | Anncmorrill@gmail.com                | (410) 963-8853      |
| Diane Clark           | Up on the Housetop<br>Bees                        | Bee Encourager  | fellowsdiane@gmail.com               | (610) 334-5075      |
| Michael Hurst         | Lee Dee Bee Honey                                 | Owner           | mdhurst@gmail.com                    | 301-980-4183        |
| Ashliegh Knox         | Hexed   | Beekeeper       | Hexedhoneyfarm@gmail.com             | 410-236-7419        |
| Aron Megyeri          | Central Maryland<br>Bees                          | Beekeeper       | amegyeri@gmail.com                   |                     |
| Erik Nachbahr         | Erik's Apiary                                     | Beekeeper       | enachbahr@heliontechnologies.com     | (44) 360-7640       |
| Jennifer Hecner       | Hecner Farms                                      | Owner/Operator  | jhecner@gmail.com                    | (410) 245-6893      |
| Luke Seeger           | Seeg's Bees                                       | President       | Lseeger1@gmail.com                   | (443) 604-4032      |
| Jill Matthew          | Willowbee Bee<br>Farm                             | Owner           | Jill.p.matthew@gmail.com             | (518) 859-4776      |
| Maureen Connors       | Central Maryland<br>Beekeeper<br>Association      | Beekeeper       | maureen.connors@hotmail.com          | (443) 472-7834      |
| Marci Lefevre         | Montgomery County<br>Beekeeping<br>Association    | Beekeeper       | marcikay@icloud.com                  | (301) 277-4152      |
| Julie Lokula          | Southeast Apiary                                  | Beekeeper       | Julie.lokuta@gmail.com               | 646-642-7161        |
| Brenda Klaunberg      | Phunny Farm<br>Apiary                             | Owner           | bkshopsonline@icloud.com             | (410) 507-2730      |
| Christie Hash         | Laughing Rabbit<br>Apiary                         | Owner           | chrishash13@gmail.com                | (410) 692-5074      |
| Therese Forbes        | Honey Glow<br>(Business)                          | President       | therese@honey-glow.com               | 240-605-3189        |
| Beth Wehrle           | Beth's Bees                                       | Owner           | bethwehrle@gmail.com                 | 202-262-0523        |
| Stephanie Gold        | Golds Bees  | Beekeeper       | rubysmom10@verizon.net               |                     |
| Grady Banister        | Anne Arundel                                      | Beekeeper       | molonlabe.gb@gmail.com               | (443) 775-9309      |
| Lucy Gooldy           | Goshen Farm<br>Apiary member                      | Member          | Tgooldy@comcast.net                  | (1443) 994-<br>6552 |
| Elizabeth Lamb        | Butterbee Farm                                    | Field Manager   | e.lamb92@gmail.com                   | (571) 274-1507      |
| Larry Mcglinchey      | CMBA  | Beekeeper       | larryapiper@gmail.com                | (410) 560-2590      |
| Brittany Llewellyn    | MBK Apiary  | Owner           | bllewellyn88@hotmail.com             | (301) 697-0054      |
| Lillian Dote          | Indigo Bees                                       | Co-Owner        | IndigoBees@yahoo.com                 | (215) 356-6777      |
| Anthony Nerino        | Indigo Bees                                       | Co-Owner        | toan953@gmail.com                    | (215) 356-2969      |

| Jefferson Knapp          | Knappcraft, LLC  | President                   | jefferson@knappworks.com       | (1410) 303-<br>2253 |
|--------------------------|--|-----------------------------|--------------------------------|---------------------|
| Erik Darm                | Darm's Bee Farm  | Owner                       | erik.darm@gmail.com            | (703) 946-0937      |
| Steve Wilson             | Central Maryland<br>Beekeepers<br>Association                        | Master Naturalist           | swilson95713@gmail.com         | (443) 864-2950      |
| Amanda Griffin           | JG Bees  | Manager                     | abright.day8@gmail.com         |                     |
| Peggy January            | Central Maryland<br>Beekeepers Assn.                                 | Beekeeper                   | pjanuary2002@yahoo.com         | 410-374-2466        |
| Monica Mooney            | Bees on the Bay  | Owner                       | Monica Mooney                  | (301) 456-5490      |
| Judith Treible           | City Line Apiary   | Beekeeper                   | Jatreible@gmail.com            | 240-355-6914        |
| Charles Green            | Green Meadows<br>Apiaries  | Owner                       | cgreen326@gmail.com            | 301-748-5677        |
| Stefan Holtz             | MSBA   | Beekeeper, Registered Voter | martiantimeslip@gmail.com      |                     |
| Joshua Griffin           | JG Bees  | Owner                       | Joshuawgriffin@gmail.com       |                     |
| Jill Matthew             | Willowbee Bee<br>Farm  | Owner                       | Jill.p.matthew@gmail.com       | (518) 859-4776      |
| Gigi Shaffer             | Gigi Shaffer apiary<br>owner   | Owner                       | gmshaff@gmail.com              | 301-539-1129        |
| Gertrud Mergner          | Montgomery County<br>Beekeepers/Gertrud<br>'s Bees in Takoma<br>Park | Beekeeper                   | gertrud.mergner@gmail.com      | (1301) 202-<br>7654 |
| Richard Nuss             | Backyard Bounty  | Beekeeper                   | blue2max@aol.com               | 410 866 1893        |
| Jonathan Hamaker         | Central Maryland   | Beekeeper                   | hamakerbeegle@gmail.com        |                     |
| Janice Colvin            | Colvin Farm Apiary   | Owner and Beekeeper         | janicecolvin123@yahoo.com      | (410) 490-3389      |
| Emily Anderson<br>Brown  | MD Queen Bee   | Owner of MD Queen Bee       | Emilyandersonbrown@gmail.com   | (410) 591-6178      |
| Ginger Chavis            | Chavis Apiary  | Chavis Apiary Owner         | gingerchavis@gmail.com         | (443) 883-0681      |
| Cynthia Mackie           | TarMac Bees  | Independent Plant Ecologist | cmackie1223@gmail.com          | (301) 588-1158      |
| Bob Caffrey              | Blenheim Fields<br>Farm, Phoenix MD<br>(CMBA bee club<br>member)     | Farm Owner                  | robert.t.caffrey@gmail.com     | (240) 606-4652      |
| Robert Justice           | Bob's Bees   | Owner                       | Bobjustice@aol.com             | 443 929 2180        |
| John Turpin              | Thorfin Apiaries IIc   | Owner                       | John@kvasirsfolly.com          | (443) 848-6089      |
| Bruce Perrygo            | Bolton Apiary  | Owner                       | bperrygo@md.metrocast.net      | (301) 475-5894      |
| Elizabeth Brown          | Windy Hill Farm  | Owner                       | davidandbethbrown@hotmail.com  | (443) 244-5989      |
| Kathleen Ross            | Mayfield Apiary  | Owner                       | brdgrrl@gmail.com              | (443) 844-4256      |
| Kay Dambach              | Beth's Bees  | Owner                       | kaydambach@gmail.com           | 410-703-8651        |
| Benjamin Batten          | Fiddlers Green<br>Farm LLC   | Operating Manager           | bjamin.batten@gmail.com        | (410) 259-3868      |
| Joy Goode                | Goode's Apiary   | Owner                       | joyegoode@verizon.net          | 410-218-9949        |
| Mary Laura<br>Fitzgerald | Turner's Creek<br>Bees   | Owner                       | Marylaura@turnerscreekbees.com | (301) 345-8171      |
| Warren Klug              | Goshen Farms<br>Historic Society<br>Apiary                           | Assistant Beekeeper         | warrenklug21@yahoo.com         | (781) 552-8759      |
| Elizabeth Brown          | Windy Hill Farm  | Owner                       | davidandbethbrown@hotmail.com  | (443) 244-5989      |
| Shannon Snow             | Snow's Baltimore<br>Bees   | Owner                       | shannon.e.snow@gmail.com       |                     |

| Abigail Meckes      | Home apiary                                    | Beekeeper                           | abigail296@yahoo.com             |                     |
|---------------------|--|-------------------------------------|----------------------------------|---------------------|
| Kassie Shetler      | Goshen Farm                                    | Beekeeper                           | shetler098@yahoo.com             | (240) 577-1670      |
| Chris Gunther       | Carroll County<br>Beekeepers<br>Association    | Beekeeper                           | cgunther1@comcast.net            | (1443) 340-<br>8159 |
| Jason Rubin         | Susquehanna<br>Beekeepers<br>Association       | Member, Former President            | kabula46@verizon.net             | 410-978-1175        |
| Lloyd Snyder        | Snyder's Apiaries                              | Owner                               | SnydersApiaries@zoominternet.net | 410-329-6671        |
| Christopher L White | Backyard<br>Beekeeper                          | Beekeeper                           | christopherwhitefin@gmail.com    |                     |
| Jill Matthew        | Willowbee Bee<br>Farm                          | Owner                               | Jill.p.matthew@gmail.com         | (518) 859-4776      |
| Dillon Hale         | Dillon's Raw Honey                             | Owner                               | h3dillon@yahoo.com               | (443) 618-3818      |
| Nicole Doenges      | Howard County<br>Beekeeping<br>Association     | Beekeeper                           | nikia226@gmail.com               | (570) 575-7035      |
| Sara Shaeffer       | Let it Bee Apiary                              | Beekeeper                           | Saralshaeffer@yahoo.com          | (410) 218-7477      |
| Brian Richmond      | Stonesong<br>Awareness &<br>Nature Center      | Maryland Beekeeper                  | Brbizmail4@gmail.com             |                     |
| Karen Bassarab      | Baltimore County                               | Beekeeper                           | Karenobanks@gmail.com            |                     |
| Jim Miller          | Jim's Best Bees                                | Owner                               | j.j.m1ll3r67@gmail               |                     |
| Mark Kubik          | Bearded Bee Boys                               | Managing Partner                    | Mark@beardedbeeboys.com          | (719) 351-6992      |
| Susan Bitter        | Stony Ups & Downs<br>Apiary                    | Manager                             | dbitter228@gmail.com             | (410) 952-1743      |
| Matthew Poulos      | Federal Hill Honey                             | Co-owner                            | Mpoulos38@gmail.com              | (301) 717-2024      |
| Jack Wilson         | Sassafras<br>Environmental<br>Education Center | Volunteer<br>Coordinator/Beekeeper  | jackkennedywilson@gmail.com      | (443) 480-8608      |
| Mimi Bennett        | Really Raw Honey<br>Company                    | Founder                             |                                  | (913) 702-5323      |
| Frantz Walker       | Really Raw Honey<br>Company                    | Owner                               | frantz@reallyrawhoney.com        | (410) 675-7233      |
| Hartmut Doebel      | George Washington<br>University                | Professor of Biology                | hdoebel@gwu.edu                  | (202) 994-1045      |
| Jean Hessenauer     | СМВА   | Beekeeper                           | greendog24@comcast.net           | (410) 343-3647      |
| Robert Stanhope     | Central Maryland<br>Beekeepers<br>Association  | Beekeeper, former Vice<br>President | stanhopes@verizon.net            | (410) 472-9269      |
| Charles Smith       | Smith's Apiaries                               | Owner                               | dan.smith.07.23.1998@gmail.com   | (301) 491-1089      |
| Patricia Wong       | The Back Corner<br>Apiary                      | Beekeeper                           | PattiWong12@gmail.com            | (240) 543-6224      |
| David J Dunaway     | Grady's Walk<br>Apiary                         | Manager                             | davejutta@aol.com                | (301) 928-6504      |
| Beth Sherring       | Bee-Squared<br>Apiaries                        | Owner                               | Bethsherring@gmail.com           | (410) 444-6635      |
| Henry Lingenfelder  | Bee-Squared<br>Apiaries                        | Owner                               | Bethsherring@gmail.com           | (410) 444-6635      |

| Beeneeper Letter           | in Support of SDS7  | 5                 |                                     | 9              |
|----------------------------|---|-------------------|-------------------------------------|----------------|
| Jutta Dunaway              | BUMBA   | Beekeeper         | kasseljutta@aol.com                 | (301) 464-1093 |
| VK Holtzendorf             | Red Top Farm  | Beekeeper         | vkay@comcast.net                    | (240) 463-1510 |
| Edwin Berkinshaw           |   | Beekeeper         | berkinshaw@gmail.com                | 443-994-8884   |
| Martin Porter              | Puddlebee bees  | Manager           | martin@clarksalesllc.com            | 443-463-5502   |
| Ennan Guan                 | Biologics & BoNT<br>Consulting                                      | Founder           | ennanguan54@gmail.com               | 240-780-8104   |
| Ellen M<br>Breidenbaugh    | 5 Bees Honey LLC  | Owner             | ellen@acsindustrial.com             | 410-472-4620   |
| Megan W Carlson            | Central MD Bee<br>Association                                       | Beekeeper         | mwcarlson4@verizon.net              | 410-382-1191   |
| Harry N Dutcher            | Paradise Honey  | Beekeeper         | bspaboy@comcast.net                 | 410-734-9236   |
| Steven Dannenfelser        |   | Beekeeper         | swdjoppa@gmail.com                  | 410-688-9127   |
| Janine Bennett-<br>Mohamed | BUMBA   | Beekeeper         | kjdmoe@aol.com                      | 301-661-7771   |
| Douglas Howard             | Susquehanna<br>Beekeepers<br>Association                            | Co-owner          | suzukizone@yahoo.com                | 443-652-7595   |
| Amy Rembold                | Personal apiary   | Beekeeper         | Mcrembold@icloud.com                |                |
| Susan Beckius              | Susquehanna<br>Beekeepers   | Member            | S.beckius@yahoo.com                 | 610-613-3906   |
| Michael Stinnett           | Susquehana Bee<br>Kepers  | Bee Keeper        | mstinnett@zoominternet.net          | 443-206-2078   |
| John M Kovac               | John's Bee Yard   | CEO               | johnkovac@verizon.net               | 443-243-0519   |
| Ann Breitenbach            | Beekeepers  | Co owner apiary   | zoyalb@hotmail.com                  |                |
| Carol M Hatem              | Susquehanna<br>Beekeepers   | Beekeeper         | plinsky12@yahoo.com                 |                |
| Robert L<br>Crickenberger  | Crickenberger<br>Apiary   | Beekeeper         | cricks24@comcast.net                | 443-243-5136   |
| Paul Harry Hoey            |   | Beekeeper         | hoey.paul@aol.com                   | 410-687-8535   |
| Rita M Kryglik             | Kryglik Apiary  | Owner             | rkryglik@gmail.com                  | 410-967-4094   |
| Jane Kuhl                  | Lumina Honey &<br>Hive Products                                     | Owner             | dentons@verizon.net                 | 410=588-5686   |
| Malcolm Denton             | Lumina Honey &<br>Hive  | Beekeeper         | dentons@bverizon.net                | 410-588-5686   |
| Michael Schulz             | Schulz Farm Apiary  | Owner             | mfschulz26@gmail.com                | 301-442-2753   |
| Cheryl Evry                | BUMBA and MSBA  | Beekeeper         | caevry@gmail.com                    |                |
| Robert Crouse              | Maryland State<br>Beekeepers &<br>Susquehanna<br>Beekeepers         | Beekeeper         | rlcrouse@qis.net                    | 410-638-0105   |
| Alan Watts                 | Greenspring Bees  | Beekeeper         | fleetliner14@comcast.net            | 443-610-3208   |
| Amanda Tejada              | Member<br>Susquehanna<br>Beekeepers                                 | Beekeeper         | mandee.tejada@gmail.com             | 443-616-4247   |
| Sarah Wheelan              | SJB Apiary  | Owner             | swheelan@gmail.com                  |                |
| Jan Mooney                 | Upper Fells Point<br>Improvement<br>Association<br>Community Garden | Committee Chair   | communitygarden@upperfellspoint.org | 410-493-0158   |
| Carey Marzicola            | Susquehanna Bee<br>Keepers  | Concerned citizen | littlebalue@gmail.com               | 443-243-8243   |

| Deckeeper Letter i     | in Support of SBS   |                                |   | 10           |
|------------------------|---|--------------------------------|---|--------------|
| Renee Howard           | Susquehanna Bee<br>Association                                  | Beekeeper                      | reneeh947@yahoo.com                                 | 443-677-3019 |
| Pam & Jack<br>Geraghty | Geraghty Apiary   | Owner                          | p.g.geraghty@comcast.net                            | 410-652-5607 |
| Laura Kabernagel       | Susquehanna Bee<br>Association                                  | Beekeeper                      | laurakabernagel@aol.com                             | 410-459-2206 |
| Helen French           | Laurel Apiary   | Beekeeper                      | hfrench@gmail.com                                   | 202-421-6924 |
| John Toscani           | Susquehanna<br>Beekeepers                                       | John's Bees                    | Johntoscani425@verizon.net                          | 410-322-4647 |
| Elizabeth Bratkowski   | Hippie Chick & Bee<br>Farm                                      | Beekeeper                      | outdoorfreak@verizon.net                            | 410-960-1385 |
| Yvonne Wagner          | Wagner Farm   | Beekeeper                      | Wagneryvonne29@gmAil.com                            | 443-417-0993 |
| Blake de Kozlowski     | High Flyin' Hives   | Owner                          | bdekoz27@gmail.com                                  | 410-982-3568 |
| Laura Peregoy          | Susquehanna Bee<br>club   | Beekeeper                      | nuhorizon58@yahoo.com                               | 410-877-5393 |
| John Flanagan          | Flanagan's Bees   | Owner                          | jjflan.flanagan@gmail.com                           | 410-920-1445 |
| William Lee Hall       | Susquehanna<br>Beekeepers                                       | owner                          | bhall42@verizon.net                                 | 410-734-6467 |
| Bill Morgan            | Willy's Apiary  | Beekeeper                      | Rwwilly62@verizon.net                               |              |
| Andrew Hammond         | Hammonds Apiary   | Beekeeper/Owner Operators      | Chickwich@yahoo.com                                 | 443-504-4683 |
| Renee Hammond          | Hammonds Apiary   | Manager                        | Steelerfans3@yahoo.com                              | 443-876-3642 |
| Michael Hader          | Holly's Honey<br>Apiary   | Manager                        | Hollyshoneyapiary@yahoo.com                         | 540-538-8823 |
| Thomas Pearson         | Howard County Bee<br>Keepers                                    | Member                         | Tspearson@yahoo.com                                 | 410-207-6502 |
| Pamela Mauk            | Susquehanna<br>Beekeepers                                       | Member                         | pamela.mauk@yahoo.com                               | 410-456-7088 |
| Daniel P Mauk          | Susquehanna<br>Beekeepers                                       | Member                         | crabber9167@yahoo.com                               | 410-452-9133 |
| Gary Appel             | Ree's Bees Apiary   | Owner                          | garyappel33@gmail.com                               | 410-937-1977 |
| Lynn Breiner           | Beesweet Apiary   | Beekeeper                      | lynnbreiner@gmail.com                               |              |
| Amanda Arbour          | Mother of<br>Pollinators  | Owner/manager                  | aarbour.ic@gmail.com                                | 401-996-9270 |
| Brenda Kinzinger       | Susquehanna Bee<br>Keepers                                      | Beekeeper                      | bkinzing@gmail.com                                  | 443-415-6517 |
| Janet Steinbach        | Deep Run  | Beekeeper                      | Janetsteinbach51@gmail.com                          | 443 340-1426 |
| Kevin Daly             | Kevin Daly  | Chair                          | kdaly@ctabaltimore.org                              |              |
| Suzanne Toomey         | Carroll Cty Bees  | Beekeeper                      | setoomey@gmail.com                                  | 410-549-2643 |
| Brad Moore             | Moore's Bees  | Owner                          | please pss HB208 to amend the Pollinator Protection |              |
| Kirsty Carrihill-Knoll | Baltimore City Bees   | Beekeeper                      | Act<br>kcarrihill@yahoo.com                         |              |
| Louise Wright          | BeemoreKind<br>Apiary   | Beekeeper                      | Louiserw@gmail.com,                                 | 410-254-3174 |
| Bonny Wright           | Keeper's Craft<br>Apiary  | owner                          | bw55@me.com   |              |
| Chris Smith            | Mt. Washington<br>Farmhouse Apiary                              | Beekeeper                      | Christopherksmith87@gmail.com                       |              |
| Anne Bailliere         | Amateur Gardeners'<br>Club                                      | Beekeeper                      | abailliere@comcast.net                              |              |
| Susan Warner           | Central Maryland<br>Beekeepers and<br>Susquehanna<br>Beekeepers | Associate Professor of Biology | scwarner@hotmail.com                                | 443-5199-527 |

| Nancy Berger        | Baltimore bee club                            | Volunteer                     | Trail4miles@gmail.com             | 410-785-7581   |
|---------------------|---|-------------------------------|-----------------------------------|----------------|
| Melissa Crumpton    | Melissa's Bee                                 | Owner                         | robinsonjmelissa@gmail.com        | 410-913-2847   |
| Hilles Whedbee      | Central Maryland<br>Beekeepers<br>Association | Nurse Midwife, Beekeeper      | hwhedbee@gmail.com                |                |
| Barry Miller        | Barry's Bees                                  | Owner                         | bmiller@barrymiller.us            | 410-266-6959   |
| Luke Goembel        | Central Maryland<br>Beekeepers<br>Association | Vice President                | idylukewild@yahoo.com             |                |
| Hannah Byron        | St. George's<br>Garden Club                   | Chair, Conservation Committee | Hannahbyron@comcast.net           | 410-736-1185   |
| Jean Hessenauer     | Central Maryland<br>Beekeepers<br>Association | Beekeeper                     | Greendog24@comcast.net            | 410-343-3647   |
| Sondra Novo         | Central Maryland<br>Beekeepers<br>Association | Hospitality Coordinator       | sondra1205@gmail.com              | 410 218 0673   |
| Mary Batten         | Fiddlers Green LLC                            | Owner                         | battenml@yahoo.com                | 907-350-0451   |
| Nicole Yakas        | Working Girls<br>Apiary                       | Owner                         | Nikinic@gmail.com                 | 443-562-0821   |
| Andrew J McWilliams | Andys Dandies IIc                             | CEO                           | Andysdandiesllc@gmail.com         | 301-884-0937   |
| S. Weston Wolfe     | Stellurian Apiary                             | CDR, USN (Ret)                | s9wolfe@gmail.com                 | 443-939-5545   |
| Yangyi Chen         | Fernhouse Apiary                              | Owner                         | Yangyic@gmail.com                 |                |
| Wendy Albert        | St. George's<br>Garden Club                   | Horticulture Chair            | ratlines@comcast.net              |                |
| Richard Ochs        | Central Maryland<br>Beekeepers<br>Association | Beekeeper                     | rjochs@comcast.net                | (443) 846-6638 |
| Brenda Jackson      | Central Maryland<br>Beekeepers<br>Association | Beekeeper                     | brendajack@gmail.com              | 410-667-1505   |
| Harry Jackson       | Central Maryland<br>Beekeepers<br>Association | Beekeeper                     | jackson.harry@gmail.com           | 410-302-1210   |
| John Lowe           | Hickory Hill                                  | Assistant Beekeeper           | Jvlowe@carrollk12.org             | 410 751 5341   |
| Bill Castro         | Bee Friendly Apiary                           | Owner/apiarist                | Billiam1969@beefriendlyapiary.com | 303-877-4617   |

### **SB375 \_SmartOnPesticides\_FAV\_Raindrop.pdf** Uploaded by: Raindrop, Bonnie

Position: FAV





February 10, 2021

#### Testimony in Support of: SB375: Agriculture – Neonicotinoid Pesticides – Sales and Storage Senate Education, Health & Environment Committee

Dear Chairman Pinsky, Vice Chairman Kagan and members of the committee,

The Smart on Pesticide Coalition comprised of 108 organizations and businesses urges the committee's favorable report for SB375. The coalition is spearheaded by the Maryland Pesticide Education Network.

The Maryland General Assembly passed the nationally ground-breaking 2016 Pollinator Protection Act . This law, which went into effect in 2018, was intended to end <u>all</u> consumer use of garden products that contain *neonicotinoid* (or *neonic*) pesticides, known to kill and harm bees and other pollinators – not only posing a serious threat to our food supply, but also to our public health, and the environment. Unfortunately, a number of stores are using a loophole in the law to allow them to continue to sell these products to consumers.

In 2016, there was significant scientific evidence that the neonicotinoid class of pesticides endangers the survival of pollinators, which are critical for 1/3 of our food supply, and causing the alarming rates of pollinator injury and deaths in our state. Over the years this evidence has only grown stronger.

**SB375** clarifies the bill language so it does what the legislature intended – keep these harmful products away from consumers. SB375 addresses the language that states "a person may not sell at retail in the State a neonicotinoid pesticide unless the person also sells a restricted use pesticide"; this has created a loophole that some retailers are exploiting. The law intended for certified applicators to be able to purchase these products. Due to the loophole, certain retailers are selling neonic-containing products unbeknownst to consumers who purchase them, and for whom it's illegal to use.

Maryland Dept. of Agriculture (MDA) is interpreting this loophole to allow more than 100 Restricted Use Pesticide retailers in Maryland to sell consumers neonic-containing products. This includes 39 Target stores, where the products are clearly for consumer use (e.g. they sell BioAdvanced, which is a small aerosol can that cannot be construed for use by restricted use certified applicators in agriculture or for lawn care and landscape companies).

After the 2016 bill went into effect, Dennis Howard, MDA's previous manager of pesticide regulation, noted that the law was meant to prohibit sales to the general public for outdoor use. According to a 2018 *Bay Journal* <u>article</u>, <u>Howard stated</u>: "'...the law's language can be a little confusing, but it does prohibit sales to the general public of neonicotinoid pesticides for outdoor use. ...They [neonics] should be behind the counter for the folks [certified applicators] who can actually apply it under the legislation.'"

The bill states that beginning January 1, 2018, a person may not use a neonicotinoid pesticide unless the person is (1) a certified applicator or a person working under the supervision of a certified applicator; (2) a farmer, or a person working under the supervision of a farmer, who uses the pesticide for agricultural purposes, including crop production, livestock, poultry, equine, and non-crop agricultural fields; or (3) a veterinarian.

The Smart on Pesticides Coalition's volunteer Pollinator Protection Squad spot-checked "big box" and independent hardware and garden stores in 2018 and 2019 to monitor whether *neonics* were still being sold. In 2018, out of the 50 stores checked, 25% carried illegal products; in 2019, out of the 41 stores checked, 27% carried illegal products. Store checks were suspended in 2020, due to COVID-19.

The Bee Informed Partnership housed in the University of Maryland tracks national and state bee losses. Their annual bee loss survey for 2019-20 nationally found the second highest losses in history at a 44% loss. The 2019-2020 survey also found summer losses, a time when bees should thrive. The survey showed the highest summer losses ever recorded at a 32% loss in population.

Honeybees and other pollinators are responsible for one out of every three bites of food we eat. Bees pollinate 71 of the 100 crops that make up 90 percent of the world's food supply. Alarmingly, *neonics* have been shown to be responsible for the vast majority of the 48-fold increase in the toxicity of the U.S. environment to bees in the last 25 years.

Since the Pollinator Protection Act was passed in 2016 a notable number of peer reviewed studies have continued to underscore that even when used at labeled doses, neonics have been shown to weaken and eventually kill honeybee colonies. Recent studies, as noted in Dr. Hartmut Doebel's written testimony in support of SB375, add to an already considerable body of research in their findings that neonics prevent bees from foraging and protecting their hives by damaging their brains. They kill sperm, even inside queens after they have mated, preventing the replacement of old, dying bees. By making hives weak and sickly, allowing mites and viruses to reproduce to damaging levels, these toxic chemicals prevent honey bees from doing the job of pollinating crops here in the U. S. and around the world.

In fact, the European Union in 2018 took the momentous step of banning all outdoor use of all neonics. The lack of pollination is now decreasing crop yields, and the Worldwide Integrated Assessment on systemic insecticides concluded with alarm that current use of neonics "threatens global... food security" and "can destabilize ecosystems that form our life support system." These chemicals pose dangers to us on many levels, and we must limit their use.

The Pollinator Protection Act was passed by a strong bi-partisan majority with the understanding that consumers would no longer be able to purchase or use neonic-containing outdoor garden products as of January 2018.

### SB375 provides a simple fix to close this loophole and end all consumer sales of *neonicotinoids* ensuring that consumers will not have access to *neonicotinoids*, as the law intended.

This amendment will enable the law to be enacted as it was originally intended.by stipulating that retailers may only sell neonicotinoid pesticides to a certified applicator or farmer "and must keep the products behind the counter and out of reach of customers without assistance from a staff member."

Farmers remain exempt from this law, as it only applies to consumers.

By passing SB375, Maryland will continue to demonstrate its leadership and dedication to protecting our food supply, public health, and pollinators by reducing the widespread use of neonicotinoid pesticides that are toxic to our pollinators.

Bonnie Raindrop, Program Director Maryland Pesticide Education Network Smart on Pesticides Coalition <u>raindrop@mdpestnet.org</u> 410.404.3808

# **MDA - SB 375 - Letter of Info.docx.pdf** Uploaded by: Shirk, Cassie

Position: INFO



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#### Maryland Department of Agriculture

#### **Legislative Comment**

Date: February 10, 2021

BILL NUMBER:Senate Bill 375SHORT TITLE:Agriculture – Neonicotinoid Pesticides – Sale and StorageMDA POSITION:Information

Senate Bill 375 establishes that a neonicotinoid pesticide may only be sold at retail to a "certified applicator," as currently defined, or a farmer. The bill also requires a retailer to store neonicotinoid pesticides behind the counter and in a manner that is inaccessible to customers without assistance.

Currently, the Maryland Department of Agriculture's Pesticide Regulation Section's inspectors monitor marketplaces and dealers for compliance. Outreach and education is done by both the Pesticide Regulation's inspectors and University of Maryland Extension via recertification/training meetings. Inspectors have also been distributing the fact sheet that is available on MDA's website at

mda.maryland.gov/plants-pests/Documents/PollinatorProtectionActFactSheet.pdf.

SB 375 will not have a major impact on current activities or practices. However, it will initially require additional outreach and training of both staff and the regulated community, and will require additional inspections and/or require additional time to complete our inspections for compliance. It will put an extra onus on the permitted retailers - who have already struggled through the COVID-19 pandemic - to make certain the regulated products can be kept off the sales floor and are not available to the general public.

If you have additional questions, please contact Cassie Shirk, Director of Legislation and Governmental Affairs, at <u>cassie.shirk@maryland.gov</u> or 410-841-5886.