

FISCAL NOTE
Requested by Legislative Council
01/12/2015

Revised
 Bill/Resolution No.: SB 2186

- 1 A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

	2013-2015 Biennium		2015-2017 Biennium		2017-2019 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
Revenues	\$0	\$100,000	\$0	\$50,000	\$0	\$50,000
Expenditures	\$0	\$100,000	\$0	\$50,000	\$0	\$50,000
Appropriations	\$0	\$0	\$0	\$0	\$0	\$0

- 1 B. **County, city, school district and township fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

	2013-2015 Biennium	2015-2017 Biennium	2017-2019 Biennium
Counties	\$0	\$0	\$0
Cities	\$0	\$0	\$0
School Districts	\$0	\$0	\$0
Townships	\$0	\$0	\$0

- 2 A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

HB 2186 will remove the effective date of June 30, 2015 that will reduce the honey assessment from \$.10 per colony to \$.05.

- B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

Section 1 of the bill removes the effective date for the per colony assessment charge.

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*

- A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

The revenue is based on the annual assessment fee remaining at \$.10 per colony. All assessments fees are deposited in the honey fund.

- B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

Section 3 of the bill appears to authorize expenditures up to one hundred percent of the revenue deposited in the honey fund.

- C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and appropriations. Indicate whether the appropriation or a part of the appropriation is included in the executive budget or relates to a continuing appropriation.*

All assessments are deposited in the honey fund. The honey fund has continuing appropriation authority.

Name: Junkert/Baumiller

Agency: Agriculture

Telephone: 328-4756/328-1960

Date Prepared: 01/13/2015

FISCAL NOTE
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2015 SENATE AGRICULTURE

SB 2186

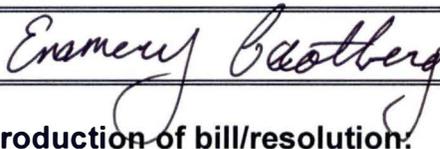
2015 SENATE STANDING COMMITTEE MINUTES

Agriculture Committee
Roosevelt Park Room, State Capitol

SB 2186
1/22/2015
Job # 22404

- Subcommittee
 Conference Committee

Committee Clerk Signature



Explanation or reason for introduction of bill/resolution:

Relating to honey assessments

Minutes:

Attachments: #1-4

Chairman Miller opened the hearing in SB 2186

Senator Larsen introduced SB 2186; a bill the beekeeping association brought forward to allow 10 cents to be imposed on the colonies of honey bees. They asked that the sunset clause be removed and this be kept continuing. There have only been nine people who have requested a refund and those nine people can continue to choose to participate or not.

Bonnie Woodworth, Director for the ND Beekeeper's Association: (see attached #1) (2:00)

Chairman Miller: Without going off track, I was wondering what as an organization you have been doing to promote friendly relations between neighbors and beekeepers?

Bonnie Woodworth: We have to maintain very good relationship in our area. There's a beekeeper in virtually every small town in ND. As far as beekeepers getting along, North Dakota doesn't have a territorial limit anymore. So generally, with beekeepers there are territory issues. We do probably have more instances with beekeepers that come from out of state and put their bees out and aren't around.

John Miller, Beekeeper from Gackle, ND: (see attached #2) (7:38)

Chairman Miller: (14:50) Do you think there could be a possibility to be some sort of program to promote forage that could sustain bees in areas that could sustain the bees after the blooming period of the crops?

John Miller: In May, I'm taking charge of a forage project on the capital grounds where we can demonstrate the benefits of a forage project. Beekeepers place hives, sometimes on

contracted obligations. When the contract concludes, usually the bee keeper will move those hives because the forage has been exhausted. We are aware of issues where beekeepers bring and place hives for a significant amount of time. Stewardship of those hives is questionable. When large numbers of hives are left in an area of limited forage, they will fly farther from the colony to obtain nutrition: pollen, protein, nectar, carbohydrate, and water. Sometimes this can create issues at a homeowners dwelling and issues where homeowners can become more aware of bees because the bees are flying farther than a field from their hive. I don't have the answer for that, but I know the spirit of the law would guide the beekeeper to be thoughtful of his neighbors.

Senator Klein: I am supportive of what we are doing here, the check-off works and we understand what you're trying to do and what you've been doing. Your absence was noticed when we had the rewrite of the bee issue two week ago, what I'm hearing today is good stuff, but how do we regulate and fix these issues with these people?

John Miller: I wrote down Public Best Management Practices, ND Beekeepers Association action item October, 2015 to squarely address the beekeepers and encourage them to communicate that we may be complying with the letter of the law, but we must comply with the spirit of the law. We have a limited number of guys who are not respecting the spirit of the law. I personally have contacted 3 of the beekeepers who were listed on the complaint to attend meetings and I've asked them if there's a way to address issues. It did not turn out very well; they haven't tended a single meeting in ND or the California state meeting, or the nationals. We're as puzzled as what to do as this body. Increasing sanctions impacts all the beekeepers in all the communities that are trying to do good things. There is may a history of compliance with existing regulations that might enable the commissioner to deny a license to keep bees if they have failed to obey existing statute over time, but then the responsibility falls upon the department to document the lack of compliance.

Senator Larsen: Two reoccurring issues continue: (1) it's the motor cycle guys driving down the road getting wacked by the bees and (2) the people with canola with over grazing bees. Are you guys, with this research money, is there opportunities to go to motorcycle meetings and canola areas where the public can get education about bees and beekeepers?

John Miller: Bee guys don't have the reputation to show up at agriculture events. There's an opportunity to reach out to these guys and attend their meetings. Remember to keep the bees out of sight, out of mind. 90% of our issues go away if the bees are not visible. When the homeowner looks across the road and sees bees, 200 hives, and knows that by one in the afternoon he can't leave the house, we have a problem.

Senator Oban: How many members do you have in your association?

John Miller: The ND Beekeepers Association probably has 60 members representing approximately 25% of the registered beekeepers in the state.

Senator Oban: Is there a code of conduct that you share with each other that could help facilitate good relationships between beekeepers and neighbors?

John Miller: I will defer to the former president of the ND Beekeeper's Association on a code of conduct or if there would be inclusion of any language in the registration form which we now have.

Bonnie Woodworth: There's no code of conduct but our problem is that the bad beekeepers don't show up at meetings, the good beekeepers do. But there are always a handful of people that don't show up at meetings and there are laws that they are breaking. ND has always had this attitude that if you get people to comply, the whole thing works better. That's all well, but there are times when people don't respond to that. That is when fines that hurt can make a difference.

Senator Oban: We have been talking about these sanctions and I am of the opinion that firm penalties don't affect those who follow the law. I'm asking you if you believe firm penalties would help alleviate those concerns?

Bonnie Woodworth: Yes, we have over 100 locations. Yes, we get calls and we respond. Will fines make a difference? Well plant it and they will come. Canola is a huge crop in the North Eastern part of the state. They're making a lot of money, 125 lbs. per hive at \$2 a pound on canola. They're there because it's financially important for them to be there. So I don't know what fine is going to make them pay attention. I think limiting sizes of yards has been talked about, but then there is a problem with holding yard. The agriculture department has been up in that area many times and been in people's yards, they're not really seeing this as that widespread of a problem. The problem is are you going to make a whole state law over what is maybe 10 people? If there's 12,000 bee yards in the state, why aren't there 1,000 complaints? We've always said it's a communication issue, deal with landowners and problems one on one.

(31:10) If I was going to comment earlier about the forage issue you mentioned, ND Beekeepers were one of the few that supported measure 5 because we saw it as a state CRP option, something the farmers could get money to plant forage. Politically it became unpopular very quickly. The Agriculture Commissioner came our beekeepers meeting last October and he mentioned the Outdoor Heritage Fund as a possible way to give tax benefit to farmers who can plant forage. So we are hoping to ask farmers to set aside 10% of their land on margins for pollinating insects. Those are some of the things beekeepers would love to see but corn and soybeans aren't the answer as far as keeping bees happy.

Chairman Miller: Do you produce yourself or do you know of some sort of best practices document?

Bonnie Woodworth: (See attachment #3) The Pollinator's Summit, they had two of them. All of those issues were aired at those two meetings. The people from the North Eastern part of the state were voicing their opinion. Bee scientists mentioned at that meeting that 60% of the bees in the US go to the upper Midwest states: Montana, South Dakota, North Dakota, and Minnesota because a lot of the states become a desert for bees, so this really is the last best place. ND did develop this pollinator plan and this was basically the EPA starting to become concerned about bee losses and pollinating insects are declining. They developed this plan to work with aerial applicators or pesticide applicators and beekeepers

to develop best management practices. This is very comprehensive and has been distributed widely.

Chairman Miller: Is there neighborly practices in there?

Bonnie Woodworth: It talks about putting out water, about making sure that there is enough forage in the area, just all the common sense things that we know we need to do. Putting out water is probably the best thing we can do. Also giving the neighbor a pail of honey does wonders; they just want something.

Vice Chairman Luick: The issues that we are having with a few of the bad apples in this whole industry, are they residents of ND or are they from other states?

Bonnie Woodworth: There are three or four large operations that come out of TX. There was a lawsuit involved in this where three of these players were beekeepers: Rob Talbot Ryan Thomas, Ray Strupp. There was a lawsuit over this issue where Necoma township wanted to remove all bees from their township and they lost in court because the township wasn't following proper procedure when they tried to make it a law. I know in the past there has been wording in the century code that if you are an agriculture practice and you've been there for three years, people cannot deem you a nuisance. A zoning issue, there are a lot of cities to zone bees out of the cities

Senator Oban: Your testimony says you have 3600 colonies; is that hives or colonies?

Bonnie Woodworth: A colony is the bees themselves, a live colony with one queen. A hive is their home, so you could have a hive without it being a colony, technically.

Senator Oban: How many colonies is an average size operation?

Bonnie Woodworth: Ours would be medium to small. John Miller has 10,000 colonies. The largest beekeeper in SD who also keeps bees in ND runs 90,000 colonies, but that is a multifamily operation.

Senator Oban: When you say these operations that come in from out of state are really large, how large is really large?

Bonnie Woodworth: I would say five thousand or more. The thing is, if people are coming from out of state they may be coming to make honey, but a lot of times it's to summer their bees. They want to get out of California, get out of places where there's a lot of pesticide use. So they want to take their bees somewhere where they can build them up for the next year's pollination season in California. So they want forage and nutrition for their bees. Our beekeepers sometimes feel like it is an intrusion on them because our beekeepers are trying to make honey.

Senator Oban: You have to apply for a license every year, correct? Would it make sense to have graduated license size depending on the size of your flock?

Bonnie Woodworth: Is your concern to regulate large operations?

Senator Oban: Yes.

Chairman Miller: To interject, they pay a base fee and then its 15 cents per colony.

Senator Klein: Since we are already off topic, how do you feel about the SB 2025 rewrite? Is there anything else you would like us to look at? I would appreciate getting some of that information.

Bonnie Woodworth: Many beekeepers are getting ready for almond pollination in California, so the only way a lot of these beekeepers will be involved in the legislative process is if they email or call.

Getting back to SB 2025, the rewrite itself, we had an issue with the signage. Beekeepers wanted more signage than what the agriculture department was recommending. We would like to see our name and phone number on hives.

Chairman Miller: I think that's what we're intending on doing.

Bonnie Woodworth: There are a couple other bills that have come up, (1) distances from residences at two miles. We are totally opposed to because it is unworkable, I don't even think it's legal. The other thing (2) would be two miles from any spraying. The pesticide application and notification bill is also totally unworkable. Pesticide is a broad term and could include fungicides even water and soap. That bill would destroy the beekeeping industry in ND totally.

We like the law the way it was with written permission. Anita Thomas has been doing the rewrite and sometimes what she tells us is legal and what we want to see are two different things. She told us if we wanted written permission, we would have to it every year. That's near impossible with 100 bee yards. We could, but this would be a full time job. I would say yes, generally beekeepers are in favor of SB 2025. There are some recent things we are opposed to, the notification of spraying is a big issue. I know there's an amendment drafted that if someone truly was allergic, the past version we had was that if someone was truly allergic they could document that and bees would have to be moved from that location. We're ok with that and of course we're rather that be dealt with on the local level between the beekeeper and the neighbor.

Senator Warner: This refers to the other bill, we had talked about a unique identifying number which we associated with the license; but as youre moving bees back and forth between states that number must change, doesn't it?

Bonnie Woodworth: Yes, in California a lot of beekeepers actually stencil their information on their hives. And yes, they have a different number in California. Our only concern is that our name and number be on the hives. Putting a name at the entrance is not always practical either because there is no entrance and machinery is liable to knock it over and then we'd be in violation if someone tipped a sign over.

Will Nissen, President of the North Dakota Beekeepers Association: (see attached #4) submitted testimony in support of SB 2186.

Chairman Miller Closed the hearing on SB 2186.

Senator Klein Moved Do Pass

Vice Chairman Luick Seconded the Motion

Vice Chairman Luick: I just hope that by keeping this intact that the educational piece of this does take hold and we can resolve some of the concerns homeowners have about this. If we can somehow impress upon these bee keepers who aren't following the spirit of the law, that they get their act together or face stiffer fines. Maybe through education and this funding, we can address some of that.

A Roll Call vote was taken: Yes: 6; Nay: 0; Absent: 0.

Do Pass carries.

Senator Larsen will carry the bill.

REPORT OF STANDING COMMITTEE

SB 2186: Agriculture Committee (Sen. Miller, Chairman) recommends DO PASS
(6 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). SB 2186 was placed on the
Eleventh order on the calendar.

2015 HOUSE AGRICULTURE

SB 2186

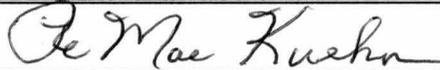
2015 HOUSE STANDING COMMITTEE MINUTES

Agriculture Committee
Peace Garden Room, State Capitol

SB 2186
3/19/2015
Job #25133

- Subcommittee
 Conference Committee

Committee Clerk Signature



Explanation or reason for introduction of bill/resolution:

Relating to honey assessments; and to provide an effective date

Minutes:

Attachment #1

Senator Larsen, Bill Sponsor: This bill was brought by the beekeeper industry. They had assessments on hives and they find they need extra cash to do research. One of the biggest problems is colony collapse.

They started with a trial run with this assessment to see how their members would like it. There were about nine beekeepers that wanted the refund back. They know they need to continue the research. They have found through the research that certain pesticides are hard on the hives. The fungicides might also play a part. They do not do research for this in our research universities in North Dakota. Most of the research is in Minnesota.

They changed the date by taking the date off. They want to continue the assessment.

Representative Cynthia Schreiber Beck: How many members are in the group? How much research is done? How many colonies are there?

Senator Larsen: The new amount will be \$50,000. The other answers I don't have.

When we had this in the Senate, there was no opposition. Refunds were quietly requested. They know the research dollars have to be spent to find out what is killing the colonies.

Representative Cynthia Schreiber Beck: Is it refundable if you don't want to participate?

Senator Larsen: Yes. That is in code already.

Marcia Gifford: I support this bill. There are about 150 members in the association. Colony collapse disorder is still a mystery. You can have a hive one day and the next day it is gone.

Chairman Dennis Johnson: Is there a type of insurance one could carry?

Marcia Gifford: No

Bonnie Woodworth, ND Beekeeper's Association Director: (Attachment #1)

Not present but submitted testimony.

Carrie Larson, ND Agriculture Department: In answer to Representative Schreiber Beck's question--220 people paid into the honey assessments last year. Nine people received refunds of about \$1,200.

Opposition:

None

Chairman Dennis Johnson: Closed the hearing

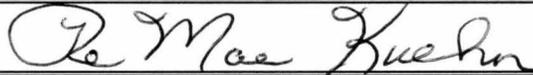
2015 HOUSE STANDING COMMITTEE MINUTES

Agriculture Committee
Peace Garden Room, State Capitol

SB 2186
3/20/2015
Job #25198

- Subcommittee
 Conference Committee

Committee Clerk Signature



Explanation or reason for introduction of bill/resolution:

Honey assessments
(Committee Work)

Minutes:

Chairman Dennis Johnson: On the fiscal note--If we pass this bill the \$50,000 is above the 5 cents. It still is going to be \$100,000. It takes away the sunset so it stays in place. Otherwise it would have gone back to 5 cents from the 10 cents it is now.

Representative Cynthia Schreiber Beck: Does the Agriculture Department handle all of this?

Chairman Dennis Johnson: They have a commodity group. This money is being used for research for colony collapse.

Representative Alex Looyen: Moved Do Pass

Representative Craig Headland: Seconded the motion

A Roll Call vote was taken: Yes 11, No 0, Absent 2.

Do Pass carries.

Representative B. Anderson will carry the bill.

Date: 3/20/2015

Roll Call Vote #: 1

**2015 HOUSE STANDING COMMITTEE
ROLL CALL VOTES
BILL/RESOLUTION NO. 2186**

House **Agriculture** Committee

Subcommittee

Amendment LC# or Description: _____

Recommendation

- Adopt Amendment
- Do Pass Do Not Pass Without Committee Recommendation
- As Amended Rerefer to Appropriations
- Place on Consent Calendar
- Other Actions:** Reconsider _____

Motion Made By Rep. Looyen Seconded By Rep. Headland

Representatives	Yes	No	Representatives	Yes	No
Chairman Dennis Johnson	X		Rep. Joshua Boschee	X	
Vice Chairman Wayne Trottier	X		Rep. Jessica Haak	X	
Rep. Bert Anderson	X		Rep. Alisa Mitskog	AB	
Rep. Alan Fehr	X				
Rep. Craig Headland	X				
Rep. Tom Kading	AB				
Rep. Dwight Kiefert	X				
Rep. Diane Larson	X				
Rep. Alex Looyen	X				
Rep. Cynthia Schreiber Beck	X				

Total (Yes) 11 No 0

Absent 2

Floor Assignment Rep. B. Anderson

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

SB 2186: Agriculture Committee (Rep. D. Johnson, Chairman) recommends DO PASS
(11 YEAS, 0 NAYS, 2 ABSENT AND NOT VOTING). SB 2186 was placed on the
Fourteenth order on the calendar.

2015 TESTIMONY

SB 2186

Testimony of Bonnie Woodworth**In Support of SB 2186**

January 22, 2015

Chairman Miller and members of the Senate Agriculture Committee:

My name is Bonnie Woodworth. My husband and I manage 3600 colonies of honey bees in Halliday, North Dakota. I am a Director-at-Large for the ND Beekeeper's Association and I coordinate the Honey Promotion Fund activities.

I am here today to testify in favor of SB 2186 to permanently increase the Honey Promotion assessments from 5 cents to 10 cents per colony. Honey Promotion fees are refundable. In 2014, \$2174.00 was dispersed as refunds. You can see that this small percentage of the \$50,000.00 collected this year shows the program is overwhelmingly supported by assessment payers.

One of the longtime programs supported by the Honey Promotion Fund is the Living Ag Classroom. This year we will educate over 4,000 fourth grade students in Minot, Bismarck and Fargo. I will brag a bit and say the "bee booth" is the favorite of both students and teachers. It is very rewarding.

The Honey Promotion Fund also pays the travel costs for speakers at the annual beekeeper's convention. In addition, the Honey Promotion Fund provides ongoing support for the University of Minnesota Bee Lab in St. Paul.

The 5 cent increase in assessments has helped beekeepers in North Dakota fund several projects tailored to help monitor varroa mite levels in honey bee colonies and test for viruses vectored by the mites. Managing varroa mite levels is the most important challenge beekeepers face to keep their colonies alive and healthy.

The Bee Informed Partnership, Minnesota Tech Team gather bee samples from participating beekeepers. The samples are sent to honey bee testing labs for analysis and reports are generated to create a data base for additional research. The participants receive timely reports, a valuable tool.

The Honey Promotion Fund also has funded research scientists who test for new mite treatments; research into insecticide usage and their impacts on honey bees; and provided grants for projects to improve forage for pollinators.

Thank you for your consideration of this legislation, I hope you will vote to approve this self-help measure to help keep honey bees healthy and productive.

Testimony of John Miller

In Support of SB 2186

January 22, 2015

Chairman Miller and members of the Senate Agriculture Committee:

My name is John Miller and I am a beekeeper from Gackle, North Dakota. In 2015, North Dakota will lead the nation in honey production. Our 600,000 hives will make North Dakota a national pollination preparation site for 2016.

The North Dakota Department of Agriculture is responsible for the Apiary program. The Ag Department provides a registration process, hive-health inspections, issues entrance permits, and collects the Honey Promotion Fund check-off fee.

Beekeepers voluntarily self-assess the check-off. The honey promotion fund is currently set at 10 cents per hive, which was temporarily increased from 5 cents per hive effective July 1, 2013 through June 30, 2015. The fund generated over \$60,000 in 2014. Ninety-five percent of North Dakota beekeepers support the honey promotion fund.

The authorizing legislation for the Honey Promotion Fund expires June 30, 2015. I am asking that this fund be continued at the rate of 10 cents per hive and eliminate the sunset clause.

The honey fund is used for research, education, and marketing development efforts which includes the Living Ag Classroom which provides vital agriculture education to students throughout the state.

Research is also needed as our beekeepers struggle to keep their hives alive. Pollination fees are high. Hives fail at unsustainable levels. The U.S. Honey crop is collapsing.

Three beekeeping groups lead industry research; these are the North Dakota Beekeepers Association, Project Apis m., and the California Beekeepers Association. Funding from Bayer Crop Science, Monsanto, Costco, beekeeping clubs and private donations supplement funding.

USDA programs include funding of the \$5MM Bee Informed Project, a main focus of this program documents the unsustainable losses in bees.

Ongoing research is needed. The 25-year search for effective *Varroa* control is elusive and expensive. Promising technology is years from application. If we don't solve *Varroa*, we will lose our bees.

In addition, CRP acreage has collapsed and the loss of safe bee forage is alarming. The need to repurpose acreage to forage for birds, bees, butterflies, upland game, even bats and the insects they eat, is urgent. USDA forage funding supports bees and other beneficial pollinators. Unfortunately, this USDA funding is limited and equals a Dixie cup of seeds tossed across 400 counties in five states...over five years.

In addition to funding and promoting educational and marketing efforts, the North Dakota Beekeepers Association can provide funding and support toward forage initiatives. Working with the ND Department of Agriculture and like-minded non-profit organizations, we can make these efforts more effective and maintain North Dakota's position at the top of honey production in the nation.

I urge passage of SB 2186.

SB 2186 #3
1-22-15
Bonnie Woodworth

NORTH DAKOTA POLLINATOR PLAN

A North Dakota Department of Agriculture Publication

Prepared by:

Jerry Sauter, Pesticide & Fertilizer Division

Samantha Brunner, Plant Industries Division

Jim Gray, Pesticide & Fertilizer Division

Carrie Larson, Plant Industries Division

3-1



*Doug Goehring
Agriculture Commissioner*



1-22-15

3-2

North Dakota is a giant in production agriculture. Our state leads the nation in the production of many grains, oilseeds, legumes and other crops. To the surprise of some, North Dakota is also the national leader in honey production. Relations between our farmers and beekeepers have traditionally been cordial, even friendly, but in recent years some tensions have arisen over unexplained increases in honey bee mortality, a phenomenon some have blamed on agriculture.

The North Dakota Pollinator Plan was developed in response to a growing need for a balanced public policy that mitigates risk to honey bees, while minimizing the impact of that mitigation on production agriculture.

Reducing honey bee exposure to pesticides is ideal. Our hope is to achieve this while continuing to provide access to habitat that supports bee health and derived benefits to agriculture.

This pollinator plan is not a static document, but a work in progress. We intend to revisit this document annually and update as needed. Far too little is known about the factors that may affect honey bee health. Research focusing on nutrition, bee repellants and the effects of pesticides is important. Other research into honey bee health, disease and parasite resistance and genetic diversity is also urgently needed so that more effective and comprehensive strategies can be put in place. We believe research can provide new answers and better solutions to the current dilemma.

Finally, effective communication among all parties is essential to the success of this plan. Unless we communicate freely and openly with one another, the rest of our goals cannot be reached.

Working together – farmers, beekeepers, pesticide applicators, scientists – North Dakota can protect its honey bees, while maintaining its position as a leading supplier of food, feed, fiber, and fuel for our nation and the world.

Sincerely,



Doug Goehring
Agriculture Commissioner

Introduction

North Dakota leads the nation in the production of over a dozen commodities including flax, sunflower, dry beans, canola, spring wheat, etc. North Dakota is also the top honey producing state in the nation. Beekeepers bring approximately half a million hives into North Dakota each year. With such a large number of hives in the state, and with over 90 percent of North Dakota acreage being used for agriculture, it is inevitable that hives will be placed in close proximity to areas where a variety of crops are grown and pesticides are commonly used.

Managed bees and wild pollinators are important to U.S. agriculture. Over 90 crops in the U.S., including almonds, tree fruits, cotton, berries, and many vegetables, are dependent on insect pollinators, such as the honey bee, for reproduction (USDA 2013). Bee-pollinated crops account for 15 to 30 percent of the food we eat (USDA 2013). Although not completely dependent on insect pollination, crops such as canola, dry edible beans, buckwheat, and sunflowers have been shown to greatly benefit from bee pollination. Almost all of the honey bees found in ND spend their winters in warmer climates contributing to the success of agriculture nationwide. North Dakota has been referred to as the “last frontier” where beekeepers can bring their bees to recover from the stress of pollination services and have adequate forage to produce high quality honey. This resting period is an important factor contributing to their winter survival.

A common misconception about ND beekeepers is that none of them are ND residents. This is not true; many of our 205 beekeepers consider ND their home and only follow their bees out of state for a few months each year.

Beekeepers have suffered significant colony losses over the past decade, raising questions about the sustainability of managed colonies in the U.S. This issue has gained national attention, and in response the U.S. Department of Agriculture (USDA) created the Colony Collapse Disorder (CCD) Steering Committee in 2007. Made up of personnel from USDA’s Office of Pest Management Policy, National Institute of Food and Agriculture, Agricultural Research Service, Animal and Plant Health and Inspection Service, and the Natural Resources Conservation Service, as well as staff from the U.S. Environmental Protection Agency (EPA), and public and private partners, the CCD Steering Committee was formed to look at factors contributing to bee decline.

The CCD Steering Committee hosted the National Honey Bee Health Stakeholder Conference in October 2012 to discuss multiple factors influencing honey bee health. The committee concluded that there are multiple factors impacting the decline of the honey bee in the United States and that no one factor can be blamed for the declines. These factors include pests, parasites, diseases, low genetic diversity and poor nutrition. The Steering Committee also concluded that additional research is needed to determine to what extent pesticides are contributing to the declines.

Even with significant losses by some beekeepers each year, North Dakota produced over 34 million pounds of honey in 2012, which made up over 23 percent of the honey produced nationally (USDA 2013). In addition to honey, the wax, pollen and propolis is also collected and sold in a variety of products including soaps, lotions, and vitamins.

Challenges Faced by Beekeepers

Beekeepers face a challenging task of keeping colonies alive with the threat of Colony Collapse Disorder, Varroa mites, Tracheal mites, small hive beetles, bacterial, fungal and viral diseases, declining quality forage, and pesticide exposure. Nationally, year to year colony survival is variable with some beekeepers reporting losses as high as 30%.

Growers and pesticide users cannot help beekeepers manage threats from mites, beetles and the microbes that weaken their hives. They can, however, help with reducing their exposure to pesticides and improving the quality of forage available. Even though Varroa is considered the greatest threat to honey bee colonies, a strong colony can handle the pressures of this tiny creature better than one exposed to various pesticides and poor forage that weaken the hive.

Honey bees feed on pollen for their protein source, and utilize nectar for carbohydrates. They must obtain these nutrients from a variety of plants in order to obtain all the essential amino acids and nutrients required to build and maintain a strong hive. Bees can become easy targets for pests, predators and pathogens when they do not obtain the proper balance of nutrients. Bees provided with high quality forage are better able to handle stressors from all directions including pesticides.

Honey bees are commonly exposed to pesticides either intended for use in agricultural production or in an attempt to rid them of the Varroa mite. Agriculturally-applied pesticides can impact bees from direct contact with the insect or by contaminating forage. Beekeepers worry not only about immediate lethal effects from exposure but also the more subtle sub-lethal impacts such as increased brood mortality and reduced adult longevity.

Challenges Faced by Growers

Growers face many challenges in an attempt to obtain acceptable yields. Growers contend with insect pests, diseases, weeds, drought, overland flooding and other factors that impact crop production and quality. They have a variety of pest management tools and strategies to choose from. While growers do not have to try to kill a mite on an insect, they often need to eliminate pests and competing plants without impacting yields. They also must consider the timing of pesticide applications with respect to harvest and rotational intervals. Even with integrated pest management systems, pests often are able to adapt quickly to different methods, rotations, or pesticides, or reproduce so quickly that they seem to explode within a short amount of time. Because of the nature of such pests, making timely chemical applications as part of an IPM plan are often essential to manage pests effectively.

Beekeepers can have difficulty finding land that will not be exposed to pesticides. Growers face difficult decisions when managing pests and minimizing impacts to pollinators. This plan should demonstrate how they can do both. Following the Best Management Practices (BMPs) within this document will help ensure abundant, affordable, safe, and nutritious food for years to come.

Challenges Faced by Pesticide Users

Pesticide users face many challenges in North Dakota. There are over 12,000 registered pesticides in North Dakota that are used to manage agricultural and non-agricultural pests. In many cases, pesticide applicators have a limited time window to make an application. Factors such as pest infestation levels, temperature, precipitation, wind speed, water levels, use buffers,

and presence of pollinators all affect pesticide choices and decisions on when, where, and how to apply pesticides. Applicators also must pay attention to the location of sensitive sites adjacent to treatment sites, such as surface water, endangered species, organic fields, vineyards, and beehives. The ideal time to apply many of these chemicals is likely to coincide with when the pollinators are most active, putting pesticide applicators in a difficult position of balancing pest management needs and protecting pollinators.

The Plan

The goal of this plan is not to eliminate pesticide use or to ban pesticides in hives or in close proximity to hives. Instead, the goal is to bring awareness to the issues faced by all parties and find a way for everyone to be part of a solution. The following Best Management Practices (BMPs) were developed with this in mind.

The North Dakota Department of Agriculture (NDDA) hosted two multi-stakeholder discussions in the past year focused on pollinator issues. These provided an opportunity for landowners, beekeepers, pesticide users, government officials, and other stakeholders to discuss pollinator/pesticide issues and offer input on reasonable practices that beekeepers, landowners, and pesticide applicators could do to protect pollinators and minimize impacts to livestock and crop producers.

The Pollinator Plan contains voluntary BMPs for pesticide users, landowners/growers, and beekeepers in hopes of creating the following positive outcomes:

- Ensuring positive relationships and peaceful co-existence among beekeepers, landowners, and pesticide applicators,
- Reducing pesticide exposure and subsequent risk of pesticides to pollinators,
- Ensuring both a robust apiary industry and agriculture economy, and
- Continued high compliance with state pesticide and apiary requirements.

Beekeeper BMPs

- **Work with landowners to choose hive locations.** Ideal hive locations will have minimal impact on agricultural activities but will still have adequate access to forage and water. Avoid low spots to minimize impacts from drift or temperature inversions on hives. Give consideration to timing after rain events when determining which roads to travel. Discuss with landowners preferred roads/trails to use. Beekeepers should also request contact information for applicators, renters, and neighbors (if applicable).
- **Be cognizant of neighboring landowners when placing and moving hives.** Neighboring landowners often use the same roads, trails, and section lines. Do not block these right-of-ways or place hives so close they may cause problems for other land-users. Take appropriate steps to ensure that bees do not negatively affect operations of neighboring landowners, such as considering the proximity of hives to neighbor's yard, bins, equipment, or storage sites.
- **Work constructively with applicators when notified of upcoming pesticide applications.** One of the recommended BMPs for pesticide applicators is to contact nearby beekeepers prior to making pesticide applications. Block, move, or net hives when

applicators inform you they are going to apply pesticides, or find other strategies to allow pesticide applicators to manage pests while minimizing pesticide exposure by bees.

- **Notify landowners and applicators when arriving and when moving hives.** If possible, notify nearby pesticide applicators and landowners when you place or move beehives. This will ensure they are aware of current hive locations and can notify you before making pesticide applications. Contact information for nearby pesticide applicators can usually be obtained from landowners.

- **Obtain landowner permission for hive placement every year and keep in contact.** As landowner information changes, it is important to ensure everybody is aware and bees are not placed without permission. This step is imperative to ensure hives to do not become a nuisance.

**During the 2015 legislative session we will seek changes in our beekeeping law that would eliminate the submission of signed landowner forms. If passed, beekeepers will need to obtain permission for hive placement every year, but will not need to submit forms to NDDA.*

- **Report all suspected pesticide-related bee kills to the NDDA pesticide program immediately.** Inspect bee behavior regularly. The NDDA is the lead pesticide regulatory agency in the state. The NDDA will respond to complaints, including collecting and analyzing the location for pesticide residues. Some pesticides degrade rapidly, and timely reporting will aid the pesticide investigation. Beekeepers can report suspected pesticide incidents by calling 1-800-242-7535 or 701-328-2231 and asking to speak to a representative from the pesticide program.

- **Use registered pesticides according to the label.** When pesticide use is necessary to manage pests within hives, use registered pesticides and comply with all restrictions, precautions, and directions found on the pesticide label. Failure to comply with label directions may decrease the effectiveness of pesticides, increase the risk of adverse effects to bees, cause unsafe pesticide residues in honey and other products, and potentially lead to pesticide resistance. Contact the NDDA pesticide program with any questions on pesticide labeling or to determine whether a pesticide is registered in the state.

- **Comply with all requirements of ND beekeeping law.**

- Obtain Beekeeper's License each year
- Register all apiary (hive) locations
- Clearly post contact information at all hive locations

Continue to provide up to date hive locations throughout the season. This ensures that all locations are accurate when applicators attempt to locate them.

- **Ensure hives are easily visible to applicators.** Hives must be visible so applicators can locate them before spraying. It is strongly suggested that hives are painted white, or a color that stands out from the surrounding area.

Landowner/Grower BMPs

- **Work with beekeepers to choose hive locations.** Ideal locations for hives will have minimal impact on farming/ranching operations, but will still allow bees to access forage and water. Communicate with beekeepers which roads/trails can be problematic when wet and any preferred traffic routes. Landowners may also want to provide contact information for applicators, renters, and neighbors (if applicable).
- **Communicate with renters about bee issues.** Renting land for agricultural production is a common practice. Landowners and renters should discuss bee issues, such as who has authority to allow bees, how long they will be allowed, and hive placement. These issues should be addressed and included when rental agreements are negotiated.
- **Communicate with pesticide applicators whose responsibility it is to look for hives, notify neighbors, etc.** When contracting with commercial pesticide applicators, make sure that there is a clear understanding of who has the responsibility to identify hive locations and communicate with beekeepers. Applicators may do this as part of their standard procedures, but some landowners may prefer to make beekeeper contacts themselves.
- **Agronomists should consider pollinator impacts when making pesticide recommendations.** Ensure that agronomists and crop consultants consider pollinator issues when making pesticide recommendations, including product choices and pesticide timing decisions.
- **Plant bee forage.** Plant flowering plants, trees, and shrubs to improve bee forage, especially in non-farmable or non-crop areas. Doing so provides forage and it may also concentrate bees away from fields to be treated with pesticides, thereby minimizing impacts to pollinators.
 - Many pesticide labels require untreated **vegetative buffer strips** around sensitive sites. Plant flowering plants in those buffer strips to provide additional bee forage.
 - If planting **cover crops**, add flowering plants into the mix. Even a small percentage of flowering plants can provide a considerable amount of forage for pollinators.
- **Utilize alternatives to talc/graphite in planters.** When planting seeds treated with insecticides, utilize alternatives to talc/graphite as they become available. The talc and graphite can abrade the insecticide treatment off of the seeds, thereby creating insecticide-containing dust that can drift onto hives and flowering plants.

Pesticide User BMPs

- **Use Integrated Pest Management (IPM).** Utilize economic thresholds and integrated pest management (IPM) to determine if insecticides are required to manage pests. When insecticides are required, try to choose insecticides with low toxicity to bees, short residual toxicity, or repellent properties towards bees.
- **Use registered pesticides according to the label.** Pesticide label language is developed to ensure that pesticides will not pose a risk of unreasonable adverse effects to human health or the environment. Failure to comply with the label not only puts humans and the environment

at risk, it is also illegal. Many pesticides, especially insecticides, have use restrictions prohibiting applications when bees are foraging in the treatment area. Some labels prohibit applications when crops are blooming and require that the applicator notify beekeepers in the area prior to application. Always comply with these and other label restrictions to reduce risks. Applicators are bound by all directions, precautions, and restrictions on pesticide labeling, even when following other BMPs. Contact the NDDA with any questions on pesticide label language.

- **When possible, apply pesticides early morning or in the evening.** Pollinators are most active during daylight hours and when the temperature is over 55 degrees Fahrenheit. Apply pesticides early in the morning or in the evening when bees are less active to reduce the chances that bees will be foraging in or near the treatment site.

- Be cognizant of temperature restrictions on pesticides. The efficacy of some pesticides is reduced at certain temperatures.
- Be aware of temperature inversions when choosing the best time for applications.

- **Avoid drift.** Pesticide drift involves the off-site movement of pesticides through the air from the treatment site to adjacent areas, either in the form of mist, particles, or vapor. Drift reduces the effectiveness of the chemical applied since only part of the applied amount reaches the target. Drifting chemicals also pose a risk to non-target organisms that come in contact with the off-target residues. These insecticides can negatively affect bees and other beneficial insects by direct contact or by contaminating their forage and habitat. Drifting herbicides have the potential to further reduce quality forage available to pollinators. Contact NDSU Extension Service for more information on how to reduce pesticide drift.

- **Identify and notify beekeepers in the area prior to pesticide applications.** Bees will fly several miles to find quality forage. Therefore, pesticide applicators should identify and notify beekeepers within two miles of a site to be treated at least 48 hours prior to application or as soon as possible. Timely notification will help ensure ample time for the beekeeper and applicator to develop a mutually acceptable strategy to manage pests while mitigating risk to honey bees. This may include covering hives, moving hives, or choosing the time of day to apply. **Notifying beekeepers does not exempt applicators from complying with pesticide label restrictions. Many insecticide labels prohibit use if pollinators (bees) are present in the treatment area.*

The NDDA has created an interactive searchable map where pesticide applicators can identify registered bee yards and other pesticide-sensitive sites. The GIS Map for Applicators also contains beekeeper contact information and can be found on the NDDA homepage (<http://www.nd.gov/ndda/>).

- **Choose products with lower risk to bees.** Avoid dusts and wettable powder insecticide formulations. Dust and wettable powder pesticide formulations can leave a powdery residue which sticks to hairs on bees. Bees then bring the pesticide back to the hive and potentially expose the entire hive to the pesticide for an unknown amount of time. Granular and liquid formulations are safer for pollinators since granules are not typically picked up by bees, and liquids dry onto plant surfaces. Also choose products with lower residual toxicity to bees.

Note that the NDDA will be working with NDSU to develop guidance on product choices to reduce risk to bees.

Supporting Pollinator Forage & Habitat

- **Bee Forage.** Everyone can plant forage for bees. Plants that support pollinators are also beneficial for other wildlife, are often visually attractive, and can help improve soil health. Flowers often come to mind when thinking about bees, but bees also utilize trees, shrubs, and other less-noticeable plants for pollen and nectar sources. It is important to consider diversity when choosing plants to ensure adequate forage for the entire growing season. Diversity will also ensure pollinators have access to all of the nutrients they require to be healthy. Here are some easy, efficient ways to improve pollinator forage.
 - **Municipalities** can plant trees, shrubs and flowers that provide good forage for all types of pollinators. Diversity is important, the pollen and nectar of each species carries a different nutrient load for the pollinators. This can be worked into new plantings, every time a plant is added/replaced choose a variety that will contribute to pollinator forage. Foraging honey bees are typically not aggressive.
 - **Counties** can create bee forage along secondary roads. Secondary road ditches often contain several species of plants that provide forage for pollinators. It is a common practice to mow ditches for the safety of motorists and to prevent drifting snow. Consider spot spraying noxious weeds and mowing ditches later in the year to ensure that bee forage is available. Incorporate short forbs into secondary road ditches to minimize attracting large wildlife.
 - **Homeowners** can put out flower pots, create flowerbeds, plant trees or shrubs, or establish gardens to provide forage. Homeowners should also take special precaution when applying pesticides. The pesticide user BMPs apply to anyone using pesticides. Remember, the pesticide label is the law and it is in place to minimize risk to the environment and human health.
- **Create habitat for beneficial, wild pollinators.** Roughly 70 percent of native bees nest in the ground. They burrow into areas of well-drained, bare, or partially vegetated soil. Other bees nest in abandoned beetle houses in snags or in soft centered, hollow twigs and plant stems. Bees will also utilize dead trees and branches. Habitats can be created by leaving deadfalls and brush piles as nesting habitat. Consider the type of habitat you wish to create and pollinators you want to attract. Be cognizant that certain structures might attract other animals such as fox, coyote, skunks, and porcupines.
- **Public land access.** Public land typically does not incorporate crop production and large scale insecticide use. There are some agencies that allow beekeepers to place honey bees on state and federal lands. Contact NDDA for more information. Permission must be obtained and locations placed on state or federal lands also need to be registered with the NDDA.

Testimony of William Nissen

President of the North Dakota Beekeepers Association

In Support of SB 2186

January 22, 2015

Chairman Miller and members of the Senate Agriculture Committee:

My name is William Nissen, I am the current President of the North Dakota Beekeepers Association. Due to the early starting of spring work away from home, I am not able to attend the hearing in person but respectfully submit this testimony in support of Senate Bill 2186. Likewise, most beekeepers that pollinate crops this time of year are also unable to attend and present verbal testimony.

Since legislation increased the honey fund assessment from 5 to 10 cents per colony in 2013, the North Dakota Beekeepers Association has been more readily able to promote our industry, provide education, and put extra funding into research. With the honey promotion fund, we are able to advance research in a positive direction to best facilitate the growth and progress of our industry.

All honey promotion assessed funds are refundable. Beekeepers simply need to apply for a refund; in 2014 only 5% of the North Dakota Beekeepers requested the refund reflecting their belief in our efforts to promote and advance the industry.

Honey promotion funds are primarily used for educating North Dakota youth with the "Ag in the Classroom" program. Other promotions that are deemed appropriate are undertaken upon careful consideration by the Association, our Board of Directors and the Ag committee.

Honey Promotion Funds also are used for research. Research is expensive but vital. Varroa mites and viruses can bring down our industry and research to combat these and other diseases is imperative to the survival of our industry.

With your support of Senate Bill 2186, the honey fund assessment will help us as beekeepers to keep our industry not only viable, but allow us to provide information, education, and research as we strive to stay at the top of U.S. honey production.

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Testimony of Bonnie Woodworth

In Support of SB 2186

March 19, 2015

Chairman Johnson and members of the House Agriculture Committee: My name is Bonnie Woodworth. My husband and I manage 3600 colonies of honey bees in Halliday, North Dakota. I am a Director-at-Large for the ND Beekeeper's Association and I coordinate the Honey Promotion Fund activities. I would like to be there in person to testify today, but we are in California taking care of our bees.

I am asking for your support of SB 2186 to permanently increase the Honey Promotion assessments from 5 cents to 10 cents per colony. Honey Promotion fees are refundable. In 2014, \$2174.00 was dispersed as refunds. You can see that this is a small percentage of the \$50,000.00 collected and shows the program is overwhelmingly supported by assessment payers.

One of the longtime programs supported by the Honey Promotion Fund is the Living Ag Classroom. This year we have educated over 4,000 fourth grade students in Minot, Bismarck and Fargo. I will brag a bit and say the "bee booth" is the favorite of both students and teachers.

The Honey Promotion Fund also pays the travel costs for speakers at the annual beekeeper's convention. In addition, the Honey Promotion Fund provides ongoing support for the University of Minnesota Bee Lab in St. Paul.

The 5 cent increase in assessments has helped beekeepers in North Dakota fund several projects tailored to help monitor varroa mite levels in honey bee colonies and test for viruses vectored by the mites. Managing varroa mite levels is the most important challenge beekeepers face to keep their colonies alive and healthy.

The Bee Informed Partnership, Minnesota Tech Team gather bee samples from participating beekeepers. The samples are sent to honey bee testing labs for analysis and reports are generated to create a data base for additional research. The participants receive timely reports, a valuable tool.

The Honey Promotion Fund also has funded research scientists who test for new mite treatments; research into insecticide usage and their impacts on honey bees; and provided grants for projects to improve forage for pollinators.

Thank you for your consideration of this legislation, I hope you will vote to approve this self-help measure to help keep honey bees healthy and productive.