Tennessee Pollinator Protection Plan

Michael D. Studer

Tennessee Department of Agriculture

Consumer & Industry Services

Apiary Section

The Stakeholders were identified and an initial planning meeting was held in December 2014

Tennessee Beekeeper's Association

Tennessee Farm Bureau Federation

Tennessee Aerial Applicators Association

Tennessee Department of Agriculture

Independent Crop Consultants

Tennessee Fruit and Vegetable Association

Tennessee Agricultural Production Association

Tennessee Soybean Association

University of Tennessee Extension

BEEKEEPER INFORMATION

Name: _____

Phone: _____

Email: _____

Hive Locations: _____

_____

_____

_____

FARMER INFORMATION

Name: _____

Phone: _____

Email: _____

Crops Grown on Property: _____

_____

Name/Contact Info for Applicator(s): _____

_____

CONTACT INFORMATION:

For questions concerning the Tennessee Pollinator Conservation Plan please contact:

Dr. John Skinner, UT Extension Apiculturist
at 865-974-0209 or jskinner@utk.edu
or
Dr. Scott Stewart, UT Extension Entomologist
at 731-425-4709 or sdstewart@utk.edu

TENNESSEE POLLINATOR CONSERVATION PLAN

TENNESSEE POLLINATOR CONSERVATION PLAN

A program presented and adopted by the following stakeholders to foster cooperation among beekeepers, pesticide applicators and agricultural producers for the purpose of preventing honey bees and pollinators from the unreasonable exposure to pesticides through education and stewardship recommendations in the state of Tennessee:

Tennessee Beekeepers Association, Tennessee Farm Bureau Federation, Tennessee Aerial Applicators Association, Tennessee Department of Agriculture, Independent Crop Consultants, Tennessee Fruit and Vegetable Association, Tennessee Agricultural Production Association, Tennessee Soybean Association, and University of Tennessee Extension.

MISSION STATEMENT

Our mission is to develop and promote a voluntary program of cooperative standards among farmers, beekeepers, and pesticide applicators when bees are located in or near crop production areas to ensure the compatibility of crop production, apiculture, and pollinator health.

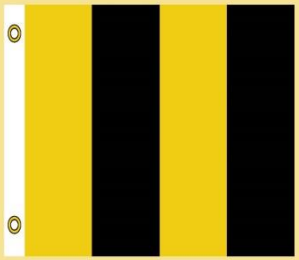
COMMUNICATION AND EDUCATION STARTS WITH EVERYONE

The stakeholders listed here are committed to educate their respective members on the components of the Tennessee Pollinator Conservation Plan and the advancement of its goal and purpose.

Farmers and beekeepers are encouraged to foster a strong level of communication with each other during any cooperative arrangement. Both the farmer and beekeeper should exchange some basic information including name, phone number, locations of hives on the farm property, commodities grown in the fields adjacent to hive locations, and general information concerning insecticides applied on these commodities and timing of these application during the normal growing season. Cooperators are encouraged to have open dialogue about this information every year to foster that strong level of communication that should exist in such arrangement.

Both the beekeeper and farmer should generate and review a comprehensive list of all apiary locations that occur on the farm property or on adjacent property not owned by the farmer annually. This is especially important when hives are moved to new locations. Bees located near agricultural fields could be exposed to chemical drift during applications. Bees may forage on any flowering plant whether it is a crop plant or "weed" without regard to landowner boundaries.

The presence of a yellow and black striped "Bee Aware Flag" will be used across the state to clearly identify the locations of honey bee hives that are on a farm property or near crop fields. These flags will serve as a visible reminder to farmers and pesticide applicators that honey bees and other pollinators are present in the area. All flags should be placed so as to be visible to applicators from both the ground and air.



CONSIDERATIONS FOR BEEKEEPERS

Hive Identification: The beekeeper should have a placard placed on a prominent hive within an apiary that clearly identifies the owner of the hives with emergency contact information. This placard should be highly visible from a distance.

Bee Aware Flag: All parties should work together to select a prominent location for the Bee Aware Flag that will be visible to applicators from the air or ground.

Apiary Locations: In any strong working cooperative agreement between farmers and beekeepers, all parties will discuss proper hive locations on or adjacent to the farm property where the bees will be kept beforehand. It is encouraged that beekeepers provide GPS coordinates to the farmer and his applicator to show exact locations of hives on or adjacent to the farm property. The beekeeper knows the best honey bee habitats and can help select an apiary locations that (1) uses natural barriers such as tree lines to mitigate against exposure to insecticide drift, (2) will best facilitate the entrances to hives from directly facing fields, and (3) are not too close to the immediate edges of fields.

CONSIDERATIONS FOR FARMERS AND PESTICIDE APPLICATORS

Notify Ground and Aerial Applicators of Hive Location(s): The farmer should make his employees (or other contractual parties) aware of all apiary locations and the associated bee flags on the farm property or adjacent property and should notify his aerial applicator (if applicable) of apiaries on farm property as well.

Timing of Insecticide Applications: When possible, especially when bees are actively foraging, farmers should consider applying insecticides as late in the afternoon as possible on fields that are near hive locations. Selecting this time to apply insecticides in sensitive areas near hives will help mitigate many risks of bee losses. Further, insecticides should always follow label guidelines and be made when pests reach economic threshold levels.

Wind Direction: Insecticides should only be made when drift onto bee hives is not likely (e.g., when winds are blowing away from the hive location(s).

TENNESSEE POLLINATOR CONSERVATION PLAN

Proposed in the Plan:

A program presented and adopted by the following stakeholders to foster cooperation among beekeepers, pesticide applicators and agricultural producers for the purpose of preventing honey bees and pollinators from the unreasonable exposure to pesticides through education and stewardship recommendations in the state of Tennessee:

Tennessee Beekeepers Association, Tennessee Farm Bureau Federation, Tennessee Aerial Applicators Association, Tennessee Department of Agriculture, Independent Crop Consultants, Tennessee Fruit and Vegetable Association, Tennessee Agricultural Production Association, Tennessee Soybean Association, and University of Tennessee Extension.

Pros and Cons:

- Pros: A good Managed Pollinator Protection Plan that is followed by all stakeholders will result in less loss of native and managed pollinators.

COMMUNICATION AND EDUCATION STARTS WITH EVERYONE

Proposed in the Plan:

The stakeholders listed here are committed to educate their respective members on the components of the Tennessee Pollinator Conservation Plan and the advancement of its goal and purpose.

Pros and Cons:

Pros: Education, cooperation and communication between and within stakeholder groups is critical for this to work.

COMMUNICATION AND EDUCATION STARTS WITH EVERYONE (Continued)

Proposed in the Plan:

Farmers and beekeepers are encouraged to foster a strong level of communication with each other during any cooperative arrangement. Both the farmer and beekeeper should exchange some basic information including name, phone number, locations of hives on the farm property, commodities grown in the fields adjacent to hive locations, and general information concerning insecticides applied on these commodities and timing of these application during the normal growing season. Cooperators are encouraged to have open dialogue about this information every year to foster that strong level of communication that should exist in such arrangement.

Pros and Cons:

Pros: Communication and Cooperation are Key

Pros: This plan provides for mitigation for apiaries in or adjacent to the crop field.

Cons: This plan does not consider apiaries not in or adjacent to the crop field.

Cons: The plan needs to address apiaries up to 5 miles from the crop field.

Cons: it is not realistic for a beekeeper to know the location of all crop fields within 5 miles of their apiaries or for a grower to know the location of all apiaries within 5 miles of their crop fields without a registration system.

COMMUNICATION AND EDUCATION STARTS WITH EVERYONE (Continued)

Proposed in the Plan:

Both the beekeeper and farmer should generate and review a comprehensive list of all apiary locations that occur on the farm property or on adjacent property not owned by the farmer annually. This is especially important when hives are moved to new locations. Bees located near agricultural fields could be exposed to chemical drift during applications. Bees may forage on any flowering plant whether it is a crop plant or "weed" without regard to landowner boundaries.

Pros and Cons:

Pros: Communication and Cooperation are Key

Pros: This addresses the issue of non-crop plants in the crop field.

Cons: This does not address apiary locations out to the 5 mile flight range of the honeybee.

COMMUNICATION AND EDUCATION STARTS WITH EVERYONE (Continued)

Proposed in the Plan:

The presence of a yellow and black striped "Bee Aware Flag" will be used across the state to clearly identify the locations of honey bee hives that are on a farm property or near crop fields. These flags will serve as a visible reminder to farmers and pesticide applicators that honey bees and other pollinators are present in the area. All flags should be placed so as to be visible to applicators from both the ground and air.

Pros and Cons:

Pros: This is a good Public Relations gimmick.

Pros: It is a reminder to pesticide applicators that honey bees are present if the flag is visible from the application site.

Cons: The Flag is really not a solution to adequately notifying the applicators that an apiary is located in the area.

Cons: The Flag is really to small to be readily seen from an aircraft dusting crops.

Cons: This does not address apiary locations out to the 5 mile flight range of the honeybee.

CONSIDERATIONS FOR BEEKEEPERS

Proposed in the Plan:

Hive Identification: The beekeeper should have a placard placed on a prominent hive within an apiary that clearly identifies the owner of the hives with emergency contact information. This placard should be highly visible from a distance.

Bee Aware Flag: All parties should work together to select a prominent location for the Bee Aware Flag that will be visible to applicators from the air or ground..

Pros and Cons:

Pros: The hive identification placard is a great idea.

Pros: The flag is a reminder to pesticide applicators that honey bees are present if the flag is visible from the application site.

Cons: The Flag is really not a solution to adequately notifying the applicators that an apiary is located in the area.

Cons: The Flag is really to small to be readily seen from an aircraft dusting crops.

Cons: This does not address apiary locations out to the 5 mile flight range of the honeybee.

CONSIDERATIONS FOR BEEKEEPERS (Continued)

Proposed in the Plan:

Apiary Locations: In any strong working cooperative agreement between farmers and beekeepers, all parties will discuss proper hive locations on or adjacent to the farm property where the bees will be kept beforehand. It is encouraged that beekeepers provide GPS coordinates to the farmer and his applicator to show exact locations of hives on or adjacent to the farm property. The beekeeper knows the best honey bee habitats and can help select an apiary locations that (1) uses natural barriers such as tree lines to mitigate against exposure to insecticide drift, (2) will best facilitate the entrances to hives from directly facing fields, and (3) are not too close to the immediate edges of fields.

Pros and Cons:

Pros: Addresses issues of apiaries close to the crop fields.

Pros: Addresses issues associated with drift.

Cons: This does not address apiary locations out to the 5 mile flight range of the honeybee.

CONSIDERATIONS FOR FARMERS AND PESTICIDE APPLICATORS

Proposed in the Plan:

Notify Ground and Aerial Applicators of Hive Location(s): The farmer should make his employees (or other contractual parties) aware of all apiary locations and the associated bee flags on the farm property or adjacent property and should notify his aerial applicator (if applicable) of apiaries on farm property as well.

Pros and Cons:

Pros: Good cooperation and communication.

Pros: Addresses issues of apiaries close to the crop fields.

Pros: Addresses issues associated with drift.

Cons: This does not address apiary locations out to the 5 mile flight range of the honeybee.

CONSIDERATIONS FOR FARMERS AND PESTICIDE APPLICATORS (Continued)

Proposed in the Plan:

Timing of Insecticide Applications: When possible, especially when bees are actively foraging, farmers should consider applying insecticides as late in the afternoon as possible on fields that are near hive locations. Selecting this time to apply insecticides in sensitive areas near hives will help mitigate many risks of bee losses. Further, insecticides should always follow label guidelines and be made when pests reach economic threshold levels.

Wind Direction: Insecticides should only be made when drift onto bee hives is not likely (e.g., when winds are blowing away from the hive location(s).

Pros and Cons:

Pros: Addresses issues of apiaries close to the crop fields.

Pros: Addresses issues associated with drift.

Cons: This does not address apiary locations out to the 5 mile flight range of the honeybee.

TENNESSEE POLLINATOR CONSERVATION PLAN WHAT IS NEEDED TO MAKE THIS PLAN WORKABLE

Cooperation between all parties is required for this to make a difference.

The plan needs to include consideration of apiaries within the 5 mile flight range of the bees from the crop fields.

The plan needs an automated system of notification for applicators to use to let beekeepers know they are going to spray.

The plan needs to include a 48 hour notification to beekeepers within 5 miles prior to applying any pesticide.

The plan needs to include all pesticides not just insecticides.

The plan needs to include the mandate that all pesticides are applied in strict compliance to the label and the law.

The plan need an exemption for the applicator that notifies the beekeepers 48 hour prior to spraying in flight range of the colonies allowing them to apply the pesticide at times when bees are flying to protect their crops. This is currently not allowable under the label law.

In order for the beekeeper's apiaries to be included in the notification they must provide the GPS locations of all apiaries.

Upon notification from the applicator the beekeeper can decide if they are going to move their colonies during the application, close up the hives to prevent flight during the application or do nothing.