

WHAT IS THE PLAN?

NOT A LAW or REGULATION

• Is <u>RECOMMENDATIONS</u>
preserve, protect and enhance
pollinator health

<u>Mandated</u> by presidential executive order.

Find at: http://ento.psu.edu/P4

Click on the hyperlinks to hundreds



of additional, reliable support sources.

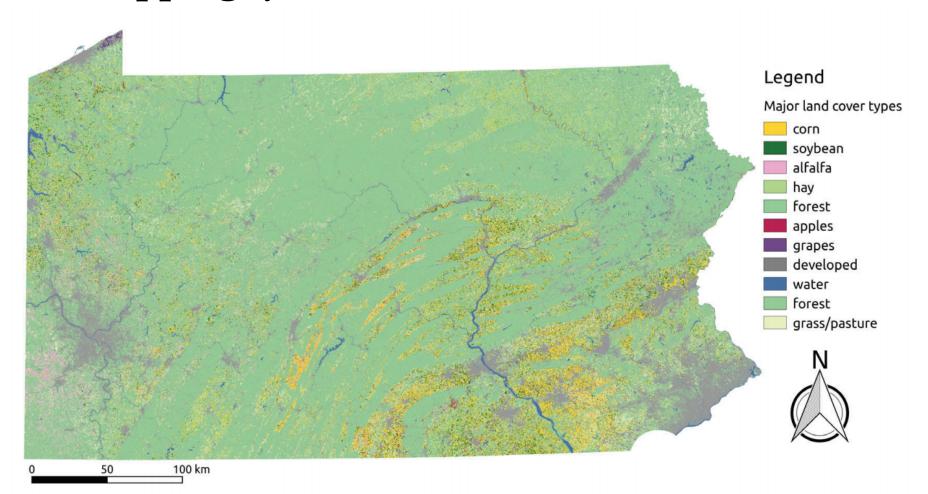


 Pennsylvania is home to over 500 species of pollinators that include bees, butterflies, moths, flies and beetles



http://ento.psu.edu/P4

• Pennsylvania has one of the most diverse cropping systems in the United States

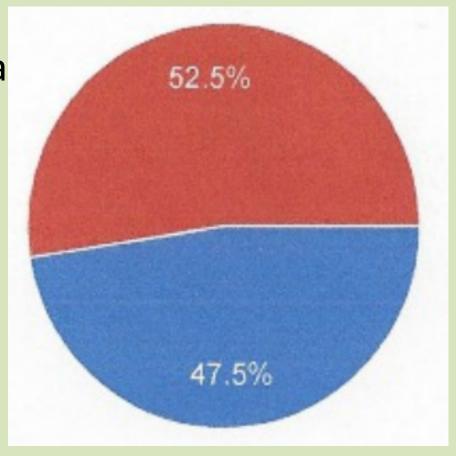






Honey bee Losses

 Pennsylvania beekeepers reported
 52% losses



in the winter of 2016-2017.

http://pastatebeekeepers.org/pdf/temp/Surve ySummary2017.pdf

Causes of Decline

Pests and Pathogens

Habitat Loss

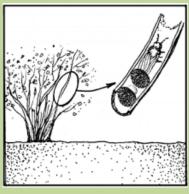
Pesticide Use

P4 Task Force

- Penn State University, Center for Pollinator Research
- Pa Department of Agriculture
- Pa State Beekeepers Association
- Pa Dept of Conservation & Natural Resources
- Western Pa Conservancy
- Pennsylvania Game Commission
- Longwood Gardens
- Phipps Conservatory & Botanical Gardens
- State Horticultural Association of Pennsylvania
- Pa Vegetable Growers Association

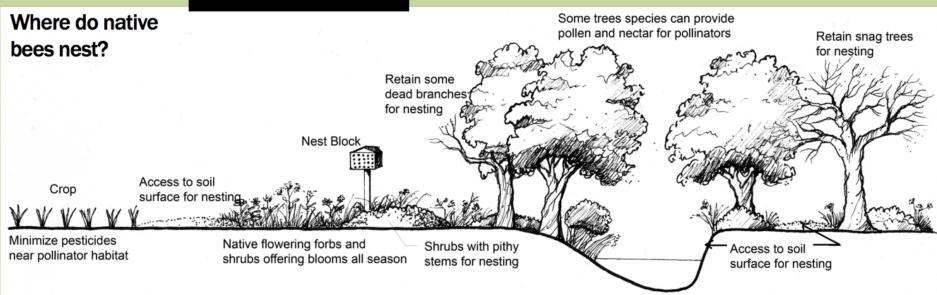
- Penn State University, Pesticide Education
- Penn State University, Master Gardeners
- Lawn Care Association
- Penn Ag Industries Association
- Environmental Protection Agency
- Xerces Society
- Pollinator Partnership
- Pa State Conservation Commission
- Pa USDA NRCS
- Pa Office of US Fish and Wildlife
- Philadelphia Beekeepers Guild
- Burgh Bees of Pittsburgh
- Pa Farm Bureau
- Pa Council of Farm Organizations
- Ernst Conservation Seeds
- Pa Grower
- Organic Grower and local Government
- Pennsylvania Turnpike Commission
- Pennsylvania Dept of Transportation

P4 Advisory Board



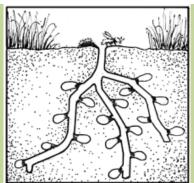
Where do Native Bees nest?

Plant Stems





Above Ground Under Ground



http://ento.psu.edu/P4





Examples of Special Food Sources

- Milkweed
- Wild parsnip
- Parsley
- Dill
- Queen Anne's Lace
- Native wild flowers





http://explore-philly.com/wp-content/uploads/2015/08/DSC_0633.jpg



Trade, Brand or Product Name: Brand names are given by the company. Many brands can contain the same active ingredient(s).

Statement of Practical Treatment: This tells users and medical professionals the emergency first aid needed in case of accidents.

Ingredient Statement: Every pesticide label must list the active ingredient(s) in the product. If the product contains more than one active ingredient, it must also list the percentage of each active ingredient. The period by the list pounds pagallon of the common name of the co

User Safety Recommendation essential and ections users to ensure their safety and the safety of the environment.

Precautionary Statements: These are additional statements on pesticide labels that offer precautions to pesticide applicators to reduce the potential for pesticide exposure. Sometimes these statements of the statements of the statements of the label contains statements that refer to the specific hazards, routes of entry you need to protect or specific actions you need to take to avoid exposure. The EP so requires that products that may have delayed (chronic) effects additional statements warning you of these potential hazards. These additional statements warn you if the product has been shown to cause long-term health issues, such as tumors or reproductive problems, in laboratory enimals.

Physical or Chemical Ha s: If a prod as pote fire, explosion or chemical Ha statements may be follo by ement the firemanable, keep away from open flame." This information may be in a separate section, may be listed under the signal word, or under a heading such as NOTE or IMPORTANT.

Protective Clothing and Equipment Statements: These statements are also referred to as Personal Protective Equipment (PPE) instructions. Many pesticide labels contain specific information concerning the type of clothing that must be worn during handling, mixing and/or applying a pesticide. Sometimes the requirements are different for mixing than they are for applying the pesticide. The PPE specified on the label is the MINIMUM protection that should be worn when handling the pesticide.

Environmental Hazards: This portion of the label explains any potential hazards to the environment, such as wildlife or water quality hazards. This information may be in a separate section, may be listed under the signal word, or under a heading such as NOTE or IMPORTANT. These statements may be general in nature or they may be quite descriptive.

Statement of Practical Treatment FIRST AID

Moderate eye irritation can occur.

- Harmful if swallowed or inhaled.

 Have the product container or label
- with you when calling a poison control center or doctor, or going in for
- treatment.

 You may contact 1-800-555-1234 for
- oformation.

 is product is identify a Weeds-
- is product is identified Weeds-Region 12345-67.
- open and rinse with water 15-20 minutes. Remove contact lenses after the first 5 minutes of rinsing and then continue rinsing eyes.
- If this product is inhaled: Remove individual to fresh air. If not breathing, give etificial respiration. Get medical attention.
- If this product's swallowed: This product will cause any intestinal training trainin

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic als: ul if swallowed or inhaled. / screathing vapor or spra Cau seerate eye irritation. Avoid cor ith eyes or clothing.

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enter treated area after 12 hours.

Personal Protective Equipment

Applicators and other handlers must wear:

- Long-sleeved shirts
- Long pants
 Chemical-resistant gloves
- Chemical-resistant footwear plus
- Protective eyewear

ENVIRONMENTAL HAZARDS

Do not apply directly to water. Do not contaminate water when cleaning equipment or disposing of equipment wash water.

Weeds-R-Dead Weed and Grass Killer

Kills all types of weeds and grasses
Active Ingredients:

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TEE JT OF REACH

WARNING! AVISO

Si usted no entlende la etiqueta, busqua a alguien para que se la explique a usted en detalle (if you do iderstand the label,) se cone to explain it to i in

not as in eyes or a

Av. breatting vapo

User Safety Recommendations

 Wash hands before eating, drinking, smoking, chewing gum or using the toilet.

taminated. Ti coughry and put on clean clot

Chemical Haza ore near heat or or

STORAGE AND DISPOSAL DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL.

Rotate the nozzle to closed position. Store this product in its original container in a safe place away from direct suntight. This product should be stored between 40 and 80 degrees F. Empty containers should be triplerinsed, punctured, then disposed of in the trash or recycled. Rinse water should be applied to the site. Partial containers should not be disposed of in the trash. Call your local recycling center for disposal directions. NEVER POUR UNUSED PRODUCT DOWN AN INDOOR OR OUTDOOR DRAIN!

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling. This product can only be used in accordance with the Directions for Use on this tuber to in separately published Supplemental Labelling. Do not apply this product in a way that will contact workers or other

persons, either wonders reintenders reintenders reintenders reintenders requirement our States, cor

OR GRASSES YOU WANT TO KEEP –
THEY WILL DIE. Not recommended for spot treatment in lawns, since this product also kills grasses.

are y. a. at nozze to the sets or y. Stray the weeds or passed on the set of the set of

When to apply: Apply when weeds are actively growing. For best results, apply when temperatures are above 60 degrees F and there is no change of rain

immediately with water.

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Protection Standard, 40 CFR part 170.

DO NOT ENTER OR ALLOW WORKER
ENTRY INTO TREATED AREAS DURING
THE RESTRICTED ENTRY INTERVAL (REI)

OF 12 HOURS.

Personal Protective Equipment (PPE) required for early entry to treated areas that is permising under the Worker Protection Standing and that involves contact with anything fast has been treated, such as plants, sooner water is: long sleeved shirt, long pants, Chunical resistant gloves, chemical-resistant footwer plus socks and protective sewweir.

EPA Reg. No. 12345-67, EPA Ext. No. 98765-NV-3 WILD WEST CHEMICAL COMPANY 456 Any Street Wild West, Any State, 98765 Restricted Use (RUP) or General Use (Unclassified Use). RUPs are only available to certified applicators. If this product was a Restricted Use Pesticide, it would be indicated above the product name.

Use Classification Statement: The EPA classifies pesticides as

Type of Pesticide: The type of pesticide refers to the pest the pesticide is supposed to control. For example, an insecticide controls insects; an herbicide controls plants, etc.

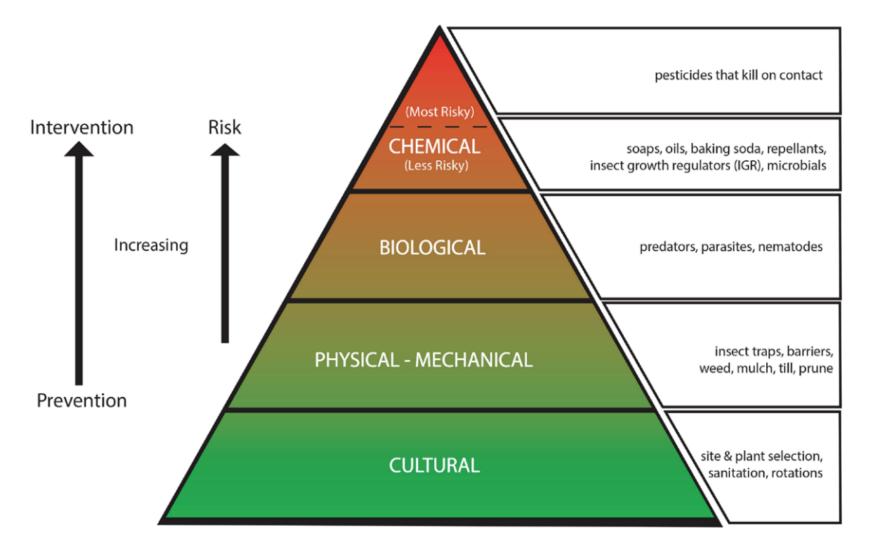
With a skull and crossbones symbol and the word for these two signal words must appear on any product c by any route of entry into the body. "PELIGRO," the capic words was also appear on the label. DANGER: but sive and can cause irreversible skin and eye damage. WARNING: These products are moderately toxic by mouth, skin or through inhalation. They can cause moderate skin or eye irritation. "AVISO", the Spanish word for "WARNING," must also appear on the label. CAUTION: These products are slightly toxic by mouth, skin or through inhalation. They may cause slightly toxic by mouth, skin or through inhalation. They may cause slight skin or eye irritation.

Directions for Use: This section directs the applicator how to properly mix and apply the pesticide to achieve the best results. It details the pests it controls (insects, plants, etc.); the crops or sites approved for use; the rate of application, which may differ for different sites or pests; the method of application and suggested application equipment; limitations and restrictions, such as harvest intervals and application frequencies; mixing directions; spray drift mitigation; and other direction whilbit spray of a ling the pesticide.

were the less of the labeled for use on it must conform to the Worker Protection Standard (WPS). The WPS has specific pesticide-labeling requirements designed to protect agricultural workers and pesticide handlers from pesticide exposure. One of the most important is the Restricted Entry Interval (REI). This is the time that must pass after pesticide application occurs before anyone can enter the treated area. If re-entry must occur, the Personal Protective Equipment (PPE) requirements for early entry are usually listed. Note: for non-agricultural products, such as turf or rights-of-way, there is no Agricultural Use Requirements box and there may be no re-entry period listed. If no REI is listed, the label will generally warn people and their domestic animals not to enter the treated area until the application has dried or the dust has settled.

Storage and Disposal Statement: Most pesticides include some basic guidelines for pesticide storage. Most often, this section notes that pesticides should be stored in cool, dry, well-ventilated spaces away from food, feed and water supplies. Pesticides should always be stored in their original containers with the label attached. This section also details disposal directions. Most often, empty containers should be triple-rinsed or pressure-rinsed and punctured to prevent re-use.

EPA Registration Number: An EPA registration number must appear on all pesticide labels, unless it is an EPA-approved minimum risk (FIFRA 25b) pesticide product. This indicates the product was registered and its label approved by the U.S. EPA. EPA Establishment Number: This number refers to the facility that produced the product. Name and Address of Manufacturer: The law requires this information to be provided so that consumers know who made the product.



Pyramid of IPM Tactics for Crops, Lawn & Garden







Urban and Suburban

- Pesticides needed to control rapid spread of pests and diseases,
- optimize home garden yield and control human pest and disease.

Recommend IPM approach

Remove standing water for mosquitos

IPPM Recommendations

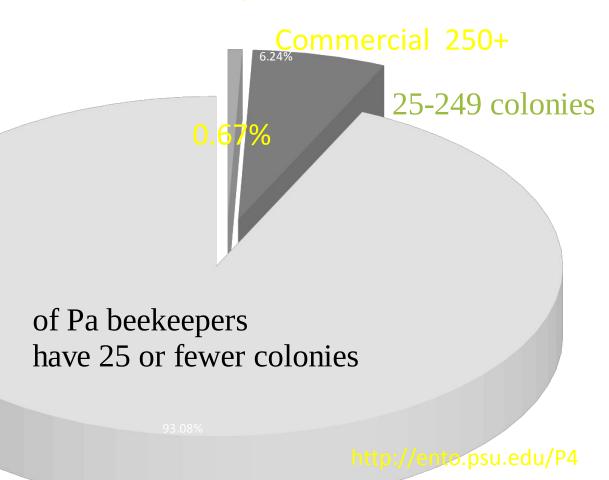
- Only use pesticides when pest/disease levels exceed economic threshold
- Adjust timing spray at night

Include buffer zones between treatment and pollinator habitat

 Choose tank mixes carefully to avoid synergistic impacts



 Pennsylvania beekeepers manage about 56,000 honey bee colonies.



Beekeeper Education

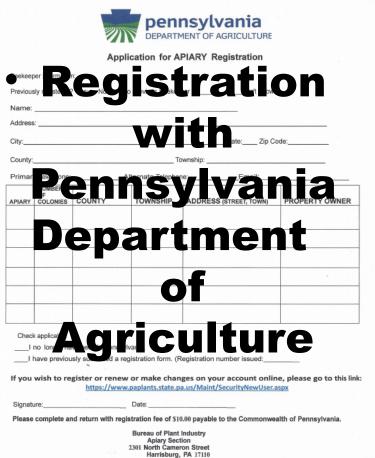
30 Local beekeeping organizations

Recommend Beginner Beekeeping Classes

Caution when using social media sources

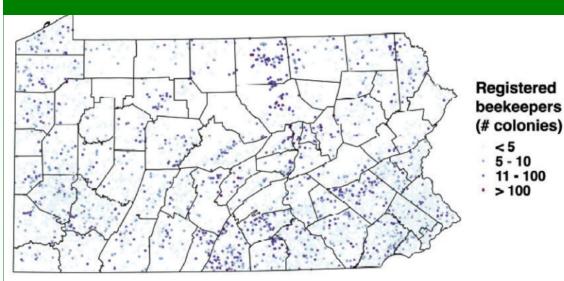
Voluntary Best Management Practices

Keeping Honey Bees in Pa



Phone 717-346-9567 FAX 717-783-3275

Selecting apiary **locations**



Keeping Honey Bees in Pa



Managing for Varroa mite control



Reducing Exposure to

• Location consideration for industrial, residential and public travel.

 Have a plan to move or cover when pesticides are applied nearby.

Help growers know hive locations

Add a BEE FLAG



Dauphin County

Farm Bureau

Pilot Pollinator

Project

Summer 2017







Recognizes communities that encourage beekeeping & habitat

http://www.beefriendlypa.org/



Pennsylvania Pollinator Protection Plan

 Pennsylvania-specific recommendations for pollinators in different landscapes across
 Pennsylvania

Brought to you by

Pennsylvania Department of Agriculture





Penn State University's Center for Pollination Research

Pennsylvania State Beekeepers Association

