

Pennsylvania Pollinator Protection Plan



<http://ento.psu.edu/P4>

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WHAT IS THE PLAN ?

- NOT A LAW or REGULATION
- Is RECOMMENDATIONS
preserve, protect and enhance
pollinator health
- Mandated by presidential executive
order.

Find at: **<http://ento.psu.edu/P4>**

Click on the **hyperlinks** to hundreds



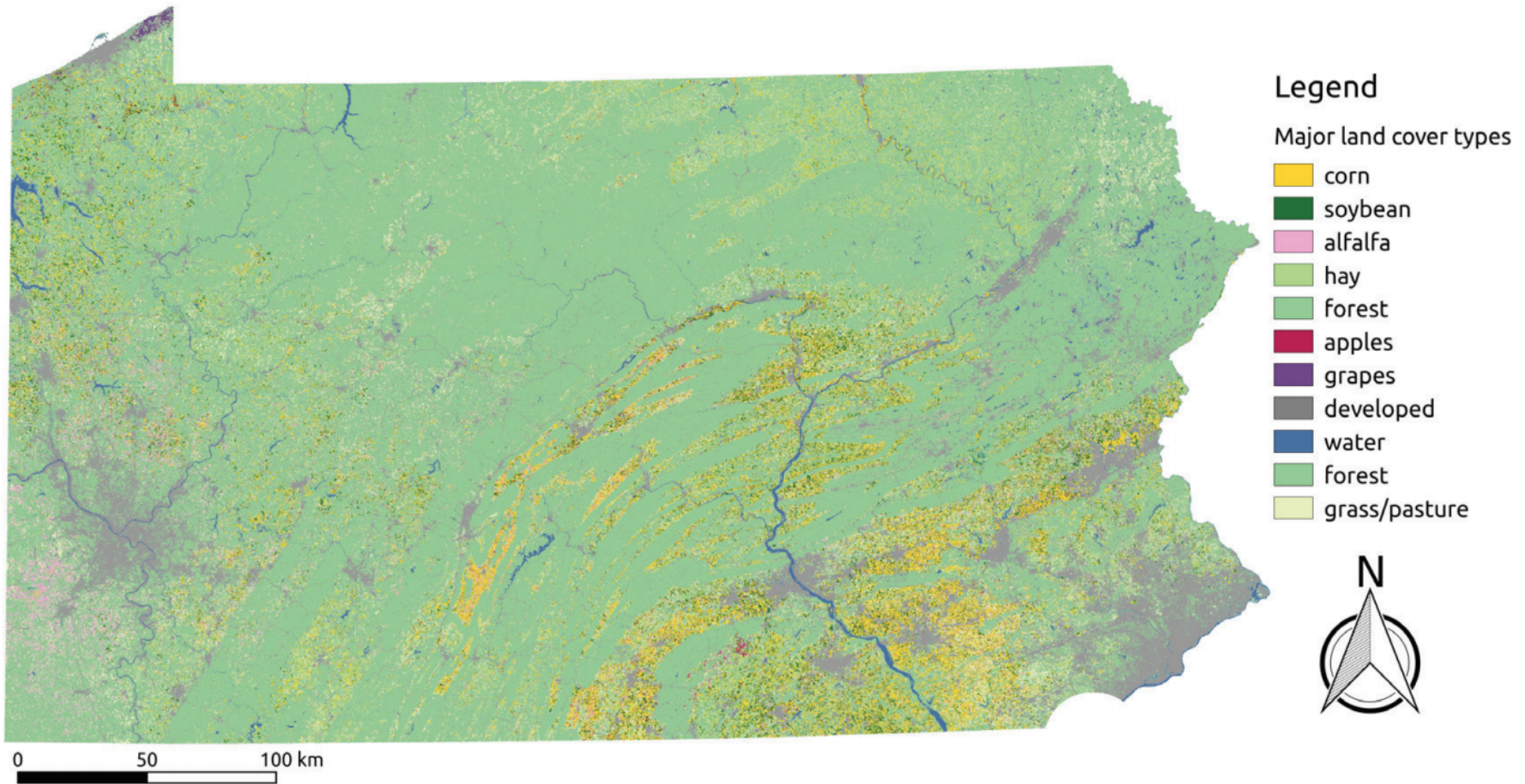
of additional, reliable support sources.

A close-up photograph of a yellow flower with several ants. Two ants are in the upper left, one is in the center, and a larger group is clustered around a bright yellow, oval-shaped structure in the lower right. The background is a soft-focus yellow.

...more than just honey bees

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

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





Pennsylvania pollinated
crops contribute
\$260 Million in
Economic value each year.

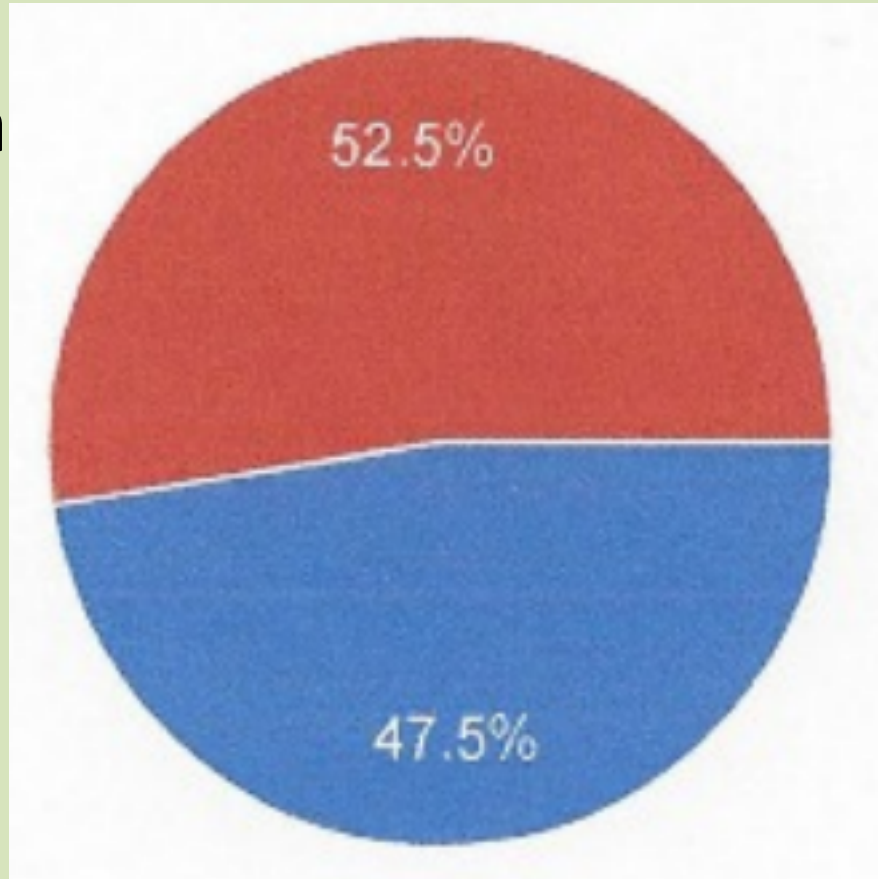
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Diverse Landscape

- Landscapes span agricultural, suburban and urban

Honey bee Losses

- Pennsylvania beekeepers reported 52% losses



in the
winter of
2016-2017.

<http://pastatebeekeepers.org/pdf/temp/SurveySummary2017.pdf>

Causes of Decline

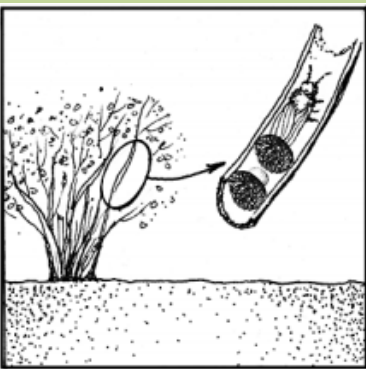
- Pests and Pathogens
- Habitat Loss
- Pesticide Use

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

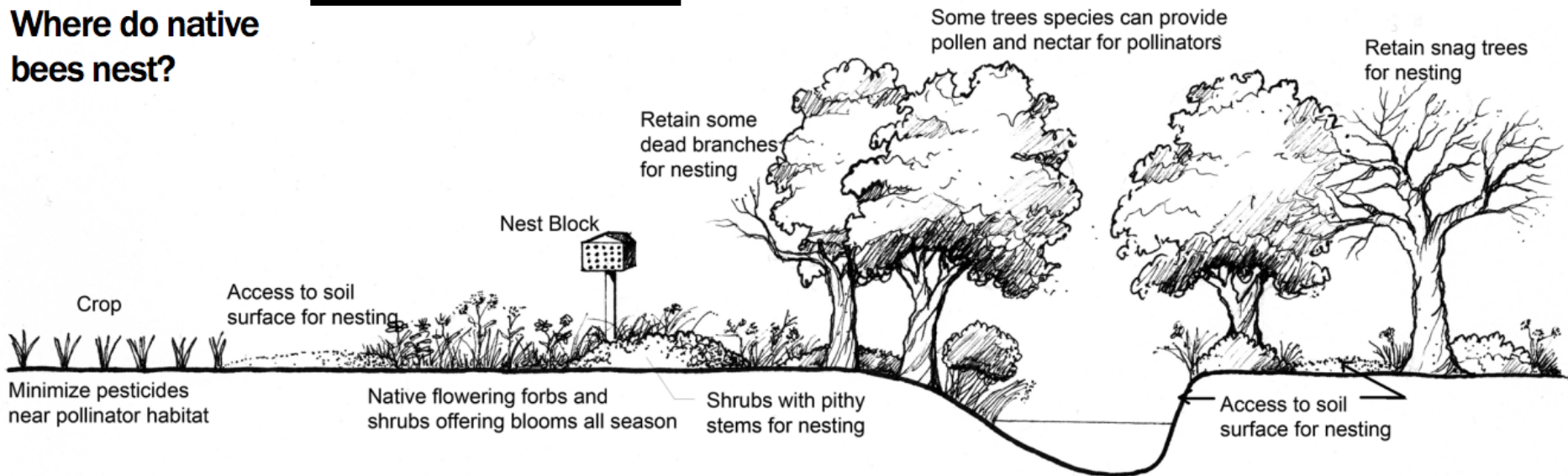
P4 Advisory Board



Where do Native Bees nest?

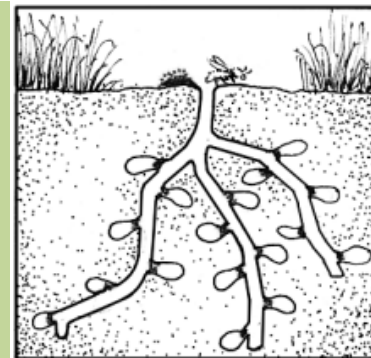
Plant Stems

Where do native bees nest?



Above
Ground

Under
Ground



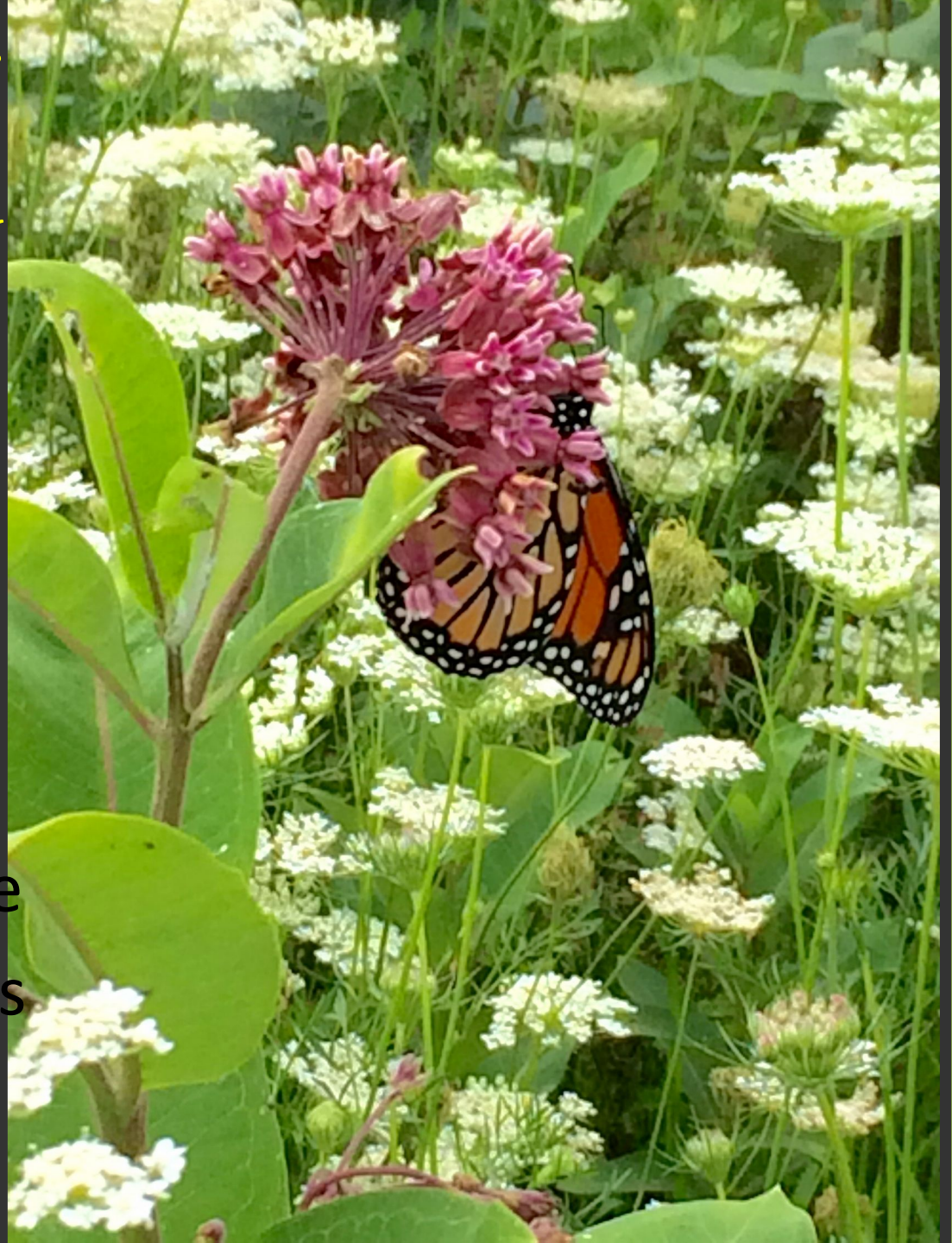
FORAGE AND HABITAT

- Ensure landscapes contain abundant and diverse array of nesting opportunities and flowering plant species

30% wood and 70% ground nesting

Examples of Special Food Sources

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





Urban & Suburban Landscapes

Gardens and Green Space

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

Urban & Suburban Landscapes

- Ordinances to provide more than grass
- Allow dandelion and clover in lawns
- Mow HIGH
- Use natural methods to manage pests, diseases and weeds

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.

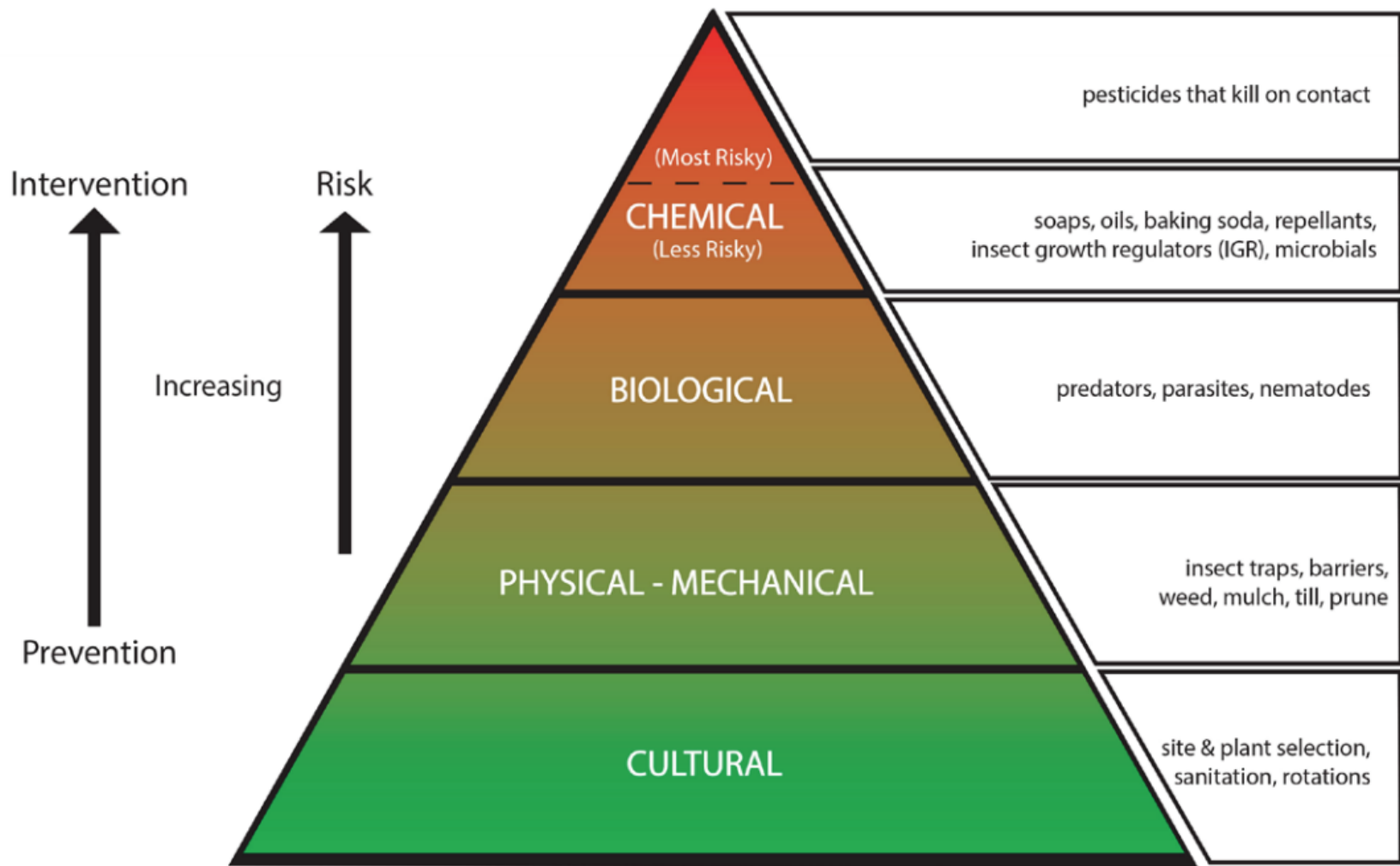
Manufacturer: The law requires

information to be provided so that to

ers know who made the product.

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.

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Pyramid of IPM Tactics for Crops, Lawn & Garden

PENNSTATE



College of
Agricultural
Sciences



Pennsylvania Department of
AGRICULTURE

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



Orchard bees



Honey bees

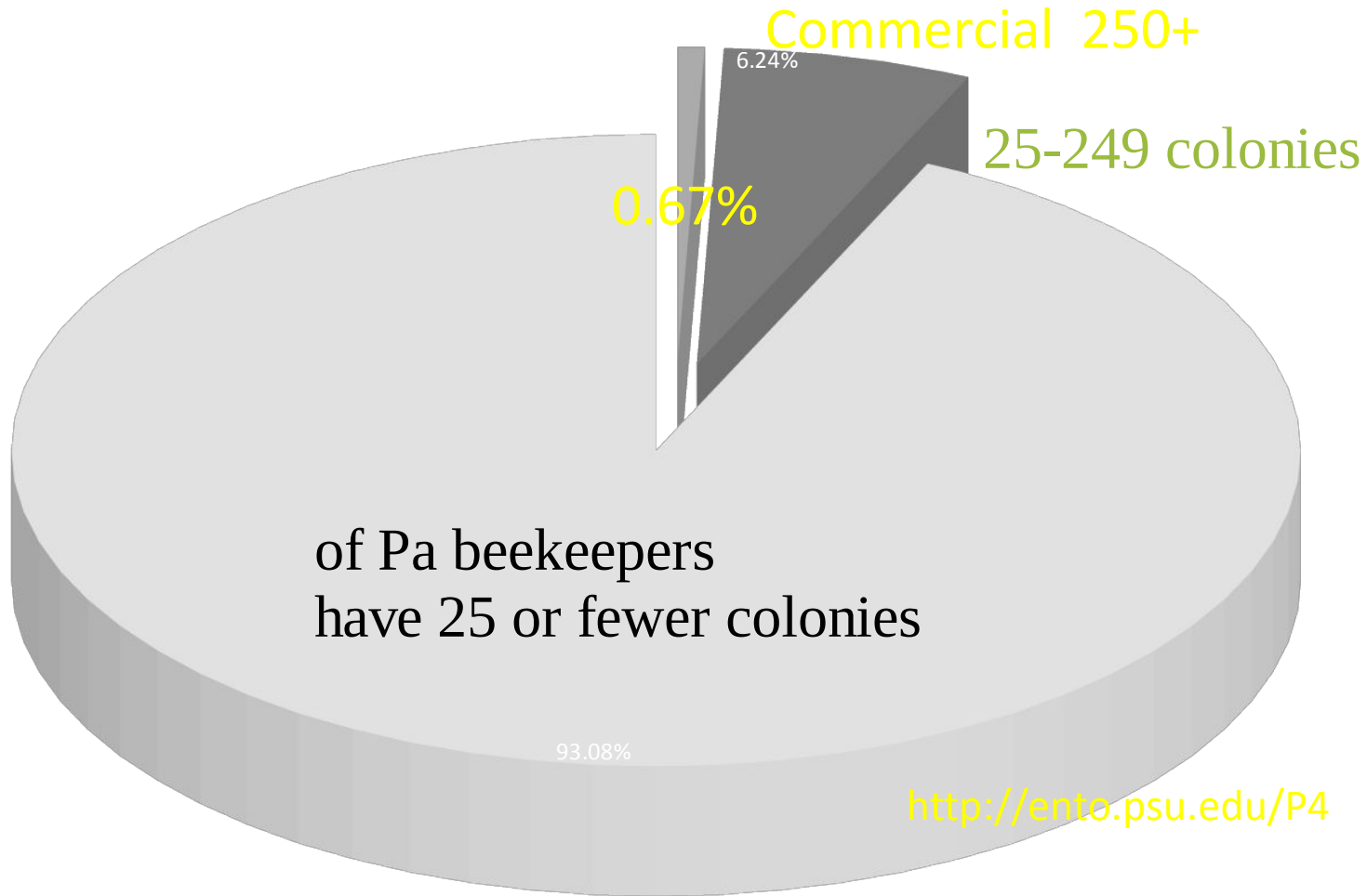
Beekeeper Practices

Bumble bees



are managed for pollination services.

- 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



Application for APIARY Registration

• **Registration with Pennsylvania Department of Agriculture**

Beekeeper Name: _____
Previously Registered: Yes/No _____
Name: _____
Address: _____
City: _____ State: _____ Zip Code: _____
County: _____ Township: _____

APIARY	COLONIES	COUNTY	TOWNSHIP	ADDRESS (STREET, TOWN)	PROPERTY OWNER

Check application _____
I no longer have bees _____
I have previously submitted a registration form. (Registration number issued: _____)

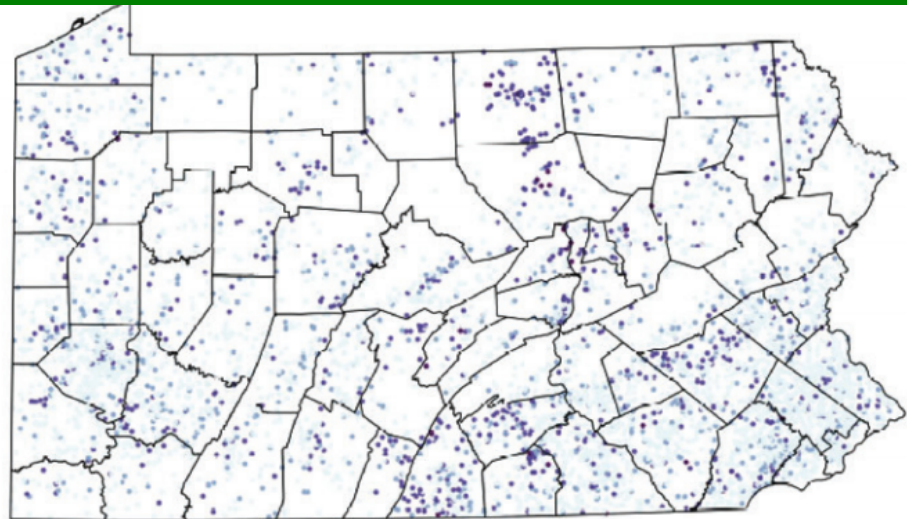
If you wish to register or renew or make changes on your account online, please go to this link:
<https://www.paplants.state.pa.us/Maint/SecurityNewUser.aspx>

Signature: _____ Date: _____

Please complete and return with registration fee of \$10.00 payable to the Commonwealth of Pennsylvania.

Bureau of Plant Industry
Apiary Section
2301 North Cameron Street
Harrisburg, PA 17110
Phone 717-346-9567 FAX 717-783-3275

Selecting apiary locations



Registered
beekeepers
(# colonies)

- < 5
- 5 - 10
- 11 - 100
- > 100

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Keeping Honey Bees in Pa



**Managing for
Varroa mite
control**



**Disease
and Pest
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





Penn DOT Adopt a Highway

CAPITAL AREA
BEEKEEPERS
ASSOCIATION
(CABA)

Dauphin County
Farm Bureau
Pilot Pollinator
Project


Summer 2017

Pollinator Gardens for Dauphin County





 Dauphin County
Farm Bureau

 Nationwide
NATIONWIDE

Wildlife Pollinator Area
Because
Farmers Care



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

