

IPM FOR REDUCING PESTICIDE RISK TO POLLINATORS

Kimberly Tate
Associate Extension Instructor
U of Idaho Extension
Pest Management Program



Image credit: Brad Stokes, University of Idaho Extension



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WHO IS A POLLINATOR?



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WHY CARE ABOUT POLLINATORS?

- Carry pollination from flower to flower
- 1/3 of human food
- 130 food crops
- ~\$150 Billion



WHY CARE ABOUT POLLINATORS?

- Human food (I like to eat!)
- Food for Wildlife
 - Elk
 - Deer
 - Grouse
 - Wild turkeys
 - Bears
 - Song birds



IDAHO AGRICULTURE

Crops Insect Pollinated

alfalfa seed,
clover seed,
canola seed,
mustard seed,
peaches, apples,
grapes and more!



REDUCING RISKS POLLINATORS

- **Understand How Pesticides Can Harm Bees**
- Recognize Pollinator Foraging Habits
- Read the Label
- Use IPM
- ISDA Beneficial Practices



EPA & POLLINATOR PROTECTION

EPA prohibits (liquid or dust) foliar applications of pesticides highly toxic to bees when:

- Crops are in bloom
- Bees are under contract



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FORAGE


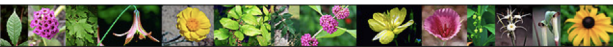
- Trees
- Shrubs
- Perennials
- Annuals
- Ensure access throughout the growing season



Image credit: Brad Stokes, University of Idaho Extension

FORAGE

USDA United States Department of Agriculture
Natural Resources Conservation Service

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You are here: Home / Pollinators NRCS Documents

PLANTS Pollinators

NRCS documents for pollinator conservation and enhancement:

The 2008 and 2014 Farm Bills both made pollinators a priority for all USDA conservation programs. See [Using 2014 Farm Bill Programs for Pollinator Conservation](#) for details. To support this mandate, state and national guidance documents have been developed by the NRCS to help conservation planners and landowners who are working to protect and improve pollinator habitat.

These technical documents include plant lists, fact sheets, and other general guidance such as technical notes, habitat installation guides, and habitat assessment guides that provide additional information to improve planning and implementation of conservation practices or broaden understanding of a practice's value. The NRCS and its partners have also presented and recorded webinars to help train NRCS staff, partners, and landowners on pollinator habitat conservation techniques.

The following table lists links to national, regional, and State-specific NRCS guidance on pollinator conservation. NRCS administrative regions follow.

- West Region: AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, Pacific Islands Area, UT, WA, WY
- Central Region: IL, IN, IA, KS, MN, MO, NE, ND, OK, SD, TX, WI
- Northeast: CT, DE, ME, MD, MA, MI, NH, NJ, NY, OH, PA, RI, VT, WV
- Southeast: AL, AR, Caribbean Area, FL, GA, KY, LA, MS, NC, SC, TN, VA

<https://plants.usda.gov/pollinators/NRCSdocuments.html>

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POLLINATOR PROTECTION STATEMENTS

REMEMBER:

Take time, uninterrupted and undisturbed, to read and understand the label



Your actions must protect bees during application and afterwards!

THE “BEE ADVISORY BOX”

THE NEW EPA BEE ADVISORY BOX
On EPA's new and strengthened pesticide label to protect pollinators

PROTECTION OF POLLINATORS

APPLICATION RESTRICTIONS EXIST FOR THIS PESTICIDE

Alerts users to separate restrictions on the label. These prohibit certain pesticide use when bees are present.

The new bee icon helps signal the pesticide's potential hazard to bees.

Highlights the importance of avoiding drift. Sometimes, wind can cause pesticides to drift to new areas and can cause bee kills.

The science says that there are many causes for a decline in pollinator health, including pesticide exposure. EPA's new label will help protect pollinators.

Read EPA's new and strengthened label requirements: <http://go.usa.gov/JHH4>

EPA

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INTEGRATED PEST MANAGEMENT

- Preventing pest problems
- Pest identification
- Monitoring
- Guidelines for when management action is needed
- Evaluating risk and choosing options that reduce risk
- Using a combination of biological, cultural, physical/mechanical and chemical management tools



*Image credit: Blue vane trap
Brad Stokes, University of Idaho Extension*

REDUCING RISKS POLLINATORS

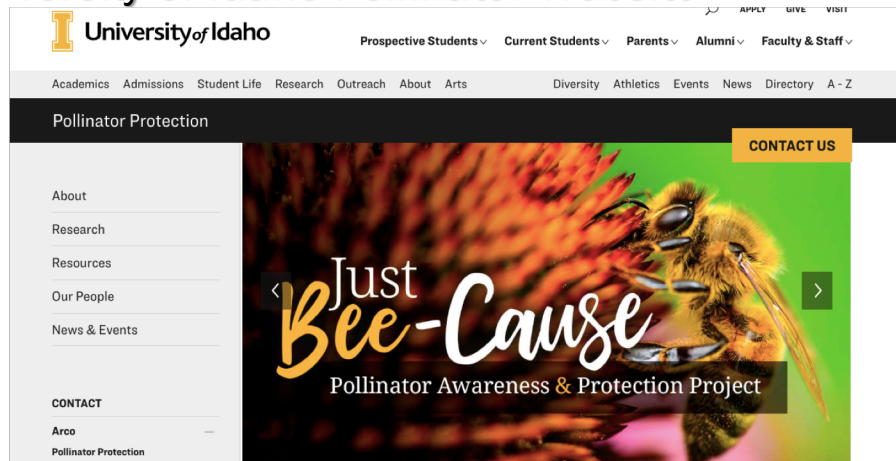
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- **ISDA Beneficial Practices**



ISDA BENEFICIAL PRACTICES

Location of Practice	Management Practice	Potential Benefits
Outside crop fields	<ul style="list-style-type: none"> * Leave existing nesting habitat (dead wood, bare patches of soil, hollow stems, bunch grasses) * Add wildflower strips or flowering hedgerows on slopes, field margins or roadside ditches. 	<ul style="list-style-type: none"> * Pollinator communities can be maintained long-term if nesting habitat is located near flowering crops. * Higher yields of adjacent pollinator-dependent crops. Strips can be configured to prevent loss of water, soil and nutrients from crop fields.
Within crop fields	<ul style="list-style-type: none"> * Use pollinator attractive plants for intercropping or cover cropping * Grow multiple types of blooming crops * Reduce tillage intensity 	<ul style="list-style-type: none"> * Higher yields of adjacent pollinator-dependent crops. * Increased pollinator health and diversity; higher yields of pollinator-dependent crops; diversified income streams.

University of Idaho Pollinator Website



<https://www.uidaho.edu/extension/pollinator-protection>



QUESTIONS?

THANK YOU!

