



Pollinator habitat on small acreages, farms and ranches



Hairy goldenaster

Here are a few steps that landowners can take to improve pollinator habitat on their property.

- Keep variety and diversity in your fields. A plant monoculture is not healthy habitat for pollinators, soil organisms or plants. For example, a mix of grasses and legumes (i.e. alfalfa, clover) makes a better pasture than a pasture of only smooth brome. A diversity of plants provides pollinator forage throughout the growing season.
- Leave native plants in pastures and fields. When spraying for invasive weeds, spot spray instead of spraying the whole field. Some native plants may be poisonous to livestock so know what plants you have and when they might be the most poisonous or tempting and either fence them off or graze at a different time of year or remove just those plants.
- Areas of bare ground are not necessarily bad as our native bees don't nest in colonies like honeybees (not native to the U.S.). They may nest in the ground by making underground tunnels, or in cavities in dead wood or other plant material. Areas of untilled bare soil can be nesting sites for native ground nesting bees. Not every single inch of a property needs to be covered with vegetation. When possible, leave dead trees or other old wood on the property to provide nesting locations for pollinators to build nests. Obviously, if a tree is a safety hazard, remove it but you might want to leave some larger branches on the property for nesting sites.
- Take waste or unused areas and plant native flowering plants to provide additional
 pollinator forage. Consider what pollinator species you would like to attract and plant
 species that provide pollinator forage, egg laying or larval food opportunities. Allow
 plants in your vegetable garden to go to flower (i.e. lettuce, radish, etc.) before
 removing them when they are done producing.



Showy milkweed is poisonous but is not normally a problem.



Death camas, the name says it all.

For the health of your forage plants, soil health as well as pollinator health, manage your grazing and haying. Never cut or mow your forage plants below 4". This maintains forage plant and soil health. If you can, leave other "waste" areas higher than 4", these areas provide habitat for pollinators. Obviously if you have noxious weeds in this area, you will need to manage them. This is not a license to allow you to ignore weeds. Time your mowing or grazing to wait until native flowers have finished blooming. This is not always possible if you are haying.



Sand lily



Fringed sage

Practice IPM, Integrated Pest Management, when managing weeds or undesirable plants or insects. IPM consists of these steps: Preventative (purchase seed with minimal weed seed in it, don't bring home weed seeds on your equipment, limit soil disturbance), cultural (keeping desired vegetation healthy by not over grazing/mowing, after disturbing an area plant either desired seed or a cover crop to compete with weeds), biological (insects or livestock to help manage the weeds) and chemical ("organic" and "synthetic" herbicides). When using an herbicide, read and follow the label to minimize the impact to pollinators (time your spraying to

when the pollinators are not out, spray when plants are not blooming, spot spray). Monitor your property for undesirable vegetation and deal with it when it is a small population.

References:

Pollinator Partnership

https://pollinator.org/

U. S. Fish & Wildlife Services

http://www.fws.gov/pollinators/

U. S. Forest Service

http://www.fs.fed.us/wildflowers/pollinators/index.shtml

Natural Resources Conservation Service

http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/pollinate/

Utah State University

Gardening for Native Bees in Utah

http://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1907&context=extension curall

Gardening and Landscaping Practices for Nesting Native Bees

http://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1723&context=extension_curall

Xerces Society

https://xerces.org/

eXtension

http://articles.extension.org/category/native bees

CSU Extension

Attracting Butterflies to the Garden, CSU Extension Fact Sheet #5.504

https://articles.extension.org/pages/19581/conserving-pollinators:-a-primer-for-gardeners

Attracting Native Bees to Your Landscape, CSU Extension Fact Sheet #5.615

https://extension.colostate.edu/topic-areas/insects/attracting-native-bees-landscape-5-615/

Creating Pollinator Habitat, CSU Extension Fact Sheet #5.616

https://extension.colostate.edu/topic-areas/insects/creating-pollinator-habitat-5-616/