

Pollinator Plantings

Colorado Job Sheet for Pollinator Plantings

Definition

Pollinator plantings consist of locally adapted grasses, forbs, shrubs, and trees that, when planted in the proper combination, will provide habitat for all life stages of pollinators.

Purpose

Pollinator plantings are used to increase habitat for pollinators.

Where to Apply

Pollinator plantings may be developed in or adjacent to field borders, riparian forest and herbaceous buffers, pivot corners, windbreaks, odd areas, and other suitable locations.



Practices

Any suitable combination of practices in the electronic Field Office Technical Guide may be used to establish, manage, and maintain the planting. Some suggested combinations of practices that can be used in establishing pollinator plantings are:

- 327 Conservation Cover and 645 Upland Wildlife Habitat Management plus 612 Tree Planting - as appropriate for the site - and 595 Pest Management as needed
- 550 Range Planting and 645 Upland Wildlife Habitat Management plus 612 Tree Planting - as appropriate for the site - and 595 Pest Management as needed
- 512 Pasture and Hayland Planting and 645 Upland Wildlife Habitat Management plus 612 Tree Planting - as appropriate for the site - and 595 Pest Management as needed
- 643 Restoration and Management of Declining Habitat plus 612 Tree Planting - as appropriate for the site - and 595 Pest Management as needed
- Other combinations of practices that will result in meeting the following criteria are also acceptable.

Criteria

The following criteria must be met in any pollinator planting:

- Minimum size is ½ acre. No maximum size.
- Planting consists of at least 3 early, 3 middle, and 3 late blooming plants. See Biology Technical Note Number 47 for suggested plant species and bloom times.
- Planting contains at least one bunchgrass.
- All planned disturbance activities (mowing, haying, grazing, burning, etc.) are conducted outside the growing season or blooming period.
- Invasive plant species will be controlled with the least intrusive method possible.
- No insecticide use is allowed in the planting.

- The CO-ECS-5 for pollinators is required to specify the herbaceous seed mixture, seeding rate, seedbed preparation, and other information about establishing the planting, and for landowner self-certification of completion of planting. This form may also be used for shrubs that are included in the seed mix.
- If woody species are planned in the planting, use the 612 Job Sheet for Tree and Shrub Establishment to specify the woody species to be planted and for landowner self-certification of completion of planting.
- If 645 Upland Wildlife Habitat Management will be reported on the planting, it must meet a 0.5 or higher value on the Pollinator Wildlife Habitat Evaluation Guide (WHEG) when established.

Considerations

Insecticides kill pollinators and herbicides destroy plants that provide food and shelter for pollinators. If pesticides are used in adjoining fields, consider how application will affect pollinators. A pest management plan may be developed that considers timing of application during periods of pollinator inactivity.

Consider planting shrubs or trees between the pollinator planting and adjacent cropped fields where pesticides may be applied on the cropland.

Plant clusters of a single species when possible. Research suggests that clump-plantings of at least three foot by three foot blocks of an individual species (that form a solid block of color when in flower) are more attractive to pollinators than when a species is widely and randomly dispersed in smaller clumps. Even larger single-species clumps (e.g. a single species cluster of perennials or shrubs more than 25 square feet in size) may be more even ideal for attracting pollinators and providing efficient foraging (Frankie et al. 2002).

Strive for an herbaceous plant community that mimics a local native ecosystem assemblage of plant density and diversity (generally with a greater diversity of forbs) to maximize pollinator habitat. Grasses often provide forage resources for beneficial insects (including larval growth stages of native butterflies), potential nesting sites for colonies of bumble bees, and possible overwintering sites for beneficial insects, such as predaceous ground beetles. The combination of grasses and forbs also form a tight living mass that will resist weed colonization (Vance et al. 2006).

Consider how closely the planting meets the *10-20-30 Rule*. This rule states that a stable managed plant community (i.e. one able to resist insect and disease epidemics) should contain no more than 10% of a single plant species, no more than 20% of a single genera, and no more than 30% of a single family (Santamour 1990).

Operation and maintenance

Pollinator plantings will be inspected regularly for invasive or noxious plants that may compromise the intended purpose. Control methods will meet criteria.

References

- Frankie, G. W., R. W. Thorp, M. H. Schindler, B. Ertter, and M. Przybylski. 2002. Bees in Berkeley? *Fremontia* 30(3-4):50-58.
- Santamour, F. S. Jr. 1990. Trees for Urban Planning: Diversity, Uniformity, and Common Sense. *Proc. 7th Conf. Metropolitan Tree Improvement Alliance*. 7:57-65.
- Vance, N. C., A. Neill, and F. Morton. 2006. Native grass seedling and forb planting establishment in a degraded oak savanna in the Coast Range foothills of western Oregon. *Native Plants Journal*. 7(2):35-46.