

Establishing/Re-establishing Native Grasses in Yavapai County Answers to Frequently Asked Questions

If you have land that has been disturbed due to recent construction, want to re-establish native grasses on your property or are having problems managing weeds on your property, this document will be helpful. Disturbed soil will invite "weeds" and can result in erosion problems, as bare soil has a limited capacity for absorbing water, especially with intense rainfall events. Disturb native vegetation as little as possible. Establishing native grasses takes time and supplemental irrigation is needed the first year. The grasses will, over time, colonize the available soil with roots and prevent/decrease subsequent weed growth.

Native Grass Selection

- Perennial native grasses are a good choice for erosion control; their fibrous root systems bind soil together and will require little or no irrigation once they are established. Leaves and litter from grasses protect the soil from raindrop impact. Perennial grasses also increase soil organic matter and water infiltration rates. As roots die, their decomposition leaves behind organic matter and the empty spaces create voids where water can more easily flow into and through the soil profile.
- 2. Choose the correct species for your site.

Grass Classifications

- **Season of Growth**: Grasses are usually classified as warm-season or cool-season species. This refers to the season in which they grow most readily.
- **Perennial vs annual**: Annual grasses grow for only one season; perennial grasses grow for multiple seasons.
- **Growth Habit**: Bunch grasses grow in clumps. Sod-forming grasses spread through stolons (above ground shoots) and/or rhizomes (below ground shoots) and are preferable for erosion control due to their spreading growth habit.

Perennial Grass Species Recommended for Yavapai County

Bunch Grasses	Sod-forming Grasses
Warm Season	Warm Season
 deergrass (Muhlenbergia rigens) 	 buffalograss (Bouteloua dactyloides)
• sideoats grama (Bouteloua curtipendula	 vine mesquite (Panicum obtusum)
• sand dropseed (Sporobolus cryptandrus)	 blue grama (Bouteloua gracilis)
 Cool Season needle and thread (Hesperostipa comata) Indian ricegrass (Achnatherum hymenoides) bottlebrush squirreltail (Elymus elymoides) 	 black grama (Bouteloua eriopoda)

See <u>https://cals.arizona.edu/yavapaiplants/</u> for detailed description & photos of each grass. This link provides a listing of uses for many Yavapai County grasses

https://extension.arizona.edu/sites/extension.arizona.edu/files/attachment/yavapaicountygrasses.pdf



Seed Sources

Contact the Master Gardener Help Desk for local sources. If you have acres to cover, bulk seed can be purchased from the following suppliers.

- Curtis & Curtis Seed <u>https://www.curtisseed.com/</u>
- Pawnee Buttes Seed <u>https://pawneebuttesseed.com/</u>
- Western Native Seed <u>https://www.westernnativeseed.com/</u>
- Wind River Seed http://www.windriverseed.com/
- Sharp Brothers Seed Co. <u>https://sharpseed.com/</u>

When to Plant

Warm season grasses are best planted when soils become warmer; the monsoon rains will help them establish. Cool season grasses are best planted in the fall.

If you want to plant something to contain erosion but it is not correct time to plant the desired native grasses, e.g. it is fall and too early to plant the warm season grasses, you may plant rye or beardless barley (plant annuals, not perennials) as you want those annuals to germinate, grow quickly and die off. You can then plant the warm season grasses in the summer.

How to Plant

This website provides information on soil prep and seed planting on a large scale. <u>https://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/nmpmcmt8352.pdf</u>

If you are filling in small areas, planting plugs (small patches of rooted grass) is a good option. The benefits are that you won't have the possibility of birds eating the seed or seeds washing away with heavy rains, and the soil surrounding the plugs will not be disturbed, thus reducing the opportunity for weed growth.

Grass plugs may be purchased or you may purchase seed and grow your own plugs. For warm season grass, starting seeds in flats or small pots indoors in early April will usually provide nicely grown pots of grass that are ready to plant when the soil warms up (before the monsoon rains).



Blue grama seeds started on heat mat sprouted in a few days

If plugs are started indoors, allow them to harden-off in outdoor shade for a period of time before planting in the direct sun. To plant, broadcast ammonium phosphate and scratch it in with a rake, dig a small hole and add the plug. Leave a small well around the plug to hold water. Keep moist, like you would newly planted lawn seed (e.g. twice a day until monsoon rains are available to supplement the irrigation).



What to Expect

The grass will grow slowly. You should only have to provide supplemental irrigation the first year. It could take a few years before you see significant growth, and you will need to keep monitoring for weeds until the native grasses spread.

Additional Information:

https://cals.arizona.edu/yavapai/anr/hort/byg/archive/slowingerosionwithnativegrasses2017.html

Establishing Irrigated Pastures https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az2020-2023.pdf

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