

Restoring Remnant Native Plant Communities Suppressed by Undesirable Grasses

Missouri Information Sheet

IS-MO-643 Restoring Remnant
Native Plant Communities

Natural Resources Conservation Service (NRCS)
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Missouri Conservation Practice 643

PROPER SITE PREPARATION AND TIMING IS CRITICAL FOR RESTORING REMNANT NATIVE PLANT COMMUNITIES SUPPRESSED BY UNDESIRABLE GRASSES -

Remnant native grass communities and established warm-season grass fields are commonly invaded by cool-season grasses. Prescribed burning in late spring will only temporarily suppress invading cool-season grasses. Ultimately, an herbicide application is needed to eradicate the unwanted vegetation. Good site preparation and well-timed herbicide application are necessary to avoid harming desirable vegetation when eradicating cool-season grasses from a native plant community. Certain conservation programs may restrict some of the recommended activities described in this information sheet. Do not begin any work without prior approval from USDA.



RESTORING REMNANT NATIVE PLANT COMMUNITIES SUPPRESSED BY UNDESIRABLE GRASSES

Option 1 – Fall Treatment. Cool-season grasses can be eradicated from native plant communities or established warm-season grass plantings by completing the following:

1. If possible, burn, graze, hay or mow the field you plan to treat in May. This will prevent the undesirable cool-season grasses from setting seed and possibly re-infesting the field later on. Multiple treatments may be needed from the end of April through the end of June to prevent seed set.
2. Burn, graze, hay or mow the field again in August. This will remove the residual vegetation and prepare the field for an herbicide application.
3. Spray the field with a broad spectrum herbicide (For example - glyphosate, glyphosate + imazapic, sulfosulfuron or other equivalent products) after a killing frost (mid-October through November) at the labeled rate for controlling cool-season grasses. Spraying at this time will not harm most native grasses and wildflowers since they are already dormant. Cool season grasses must still be green and growing. Spray on a warm, sunny day with temperatures above 60 degrees for the best results.

NOTE:

- Do not spray fields with a mix of cool-season grasses and desirable native grasses and forbs in the spring with a broad-spectrum herbicide since native forbs begin growing at the same time as cool-season grasses.



- **Read and follow all herbicide and adjuvant label directions.**

Option 2 – Spring Treatment. Certain chemicals that control tall fescue and annual cool-season grasses generally do not harm native warm-season grasses or forbs if sprayed in the spring. If fields are to be left in production use for grazing or haying, do not use chemicals that are not labeled for this purpose. These products should not be sprayed on native warm-season grass seedlings less than one year old and are not effective on smooth brome or reed canarygrass.

1. Mow or burn the field in February or March to prepare the field for spraying.
2. In late April or early May, when there is 6 to 8 inches of new growth on tall fescue or annual cool-season grasses, spray chemical at the labeled rate.
3. Two weeks later, spray again at the labeled rate.
4. If a second application is not made, repeat steps 1 and 2 the following spring.

NOTE:

- A non-ionic surfactant is preferred over crop oils as crop oils can damage some wildflowers.
- **Read and follow all herbicide and adjuvant label directions.**

MAINTENANCE CONSIDERATIONS:

- Maintain the field for wildlife by conducting a management practice (prescribed burn, light disk, herbicide treatment) on 1/3 of the field each year.
- Overseed native forbs and legumes after a management practice to improve plant diversity.
- Scout for undesirable species. Spot spray infestations as soon as possible.

PRIMARY CONSIDERATIONS for RESTORATION:

- RESTORATION and MANAGEMENT of RARE or DECLINING HABITATS (643).
- Provide habitat for wildlife.
- Recreate rare and declining natural communities.
- Restore degraded native plant communities.

For additional information on restoring remnant native plant communities, contact your local USDA Service Center or Missouri Department of Conservation office.

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