TEXAS A&M AGRILIFE EXTENSION

South Texas Natives

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Reseeding Natives in South Texas: Targeting Noxious Plants

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Native reseeding sites often have problems with noxious plants—competitive, unwanted, or invader species growing out of place. Noxious species on restorations can be native or exotic grasses, forbs (broadleaf plants), or woody plants (Fig. 1).

The key to managing these species is to control them early, before they produce seed and spread.

Grasses

Some of the most common noxious grasses for native reseeding sites in South Texas are Old World bluestems and buffelgrass. To manage these species:

- Avoid practices such as mowing or burning because these plants thrive after disturbances.
- When preparing seedbeds, treat these grasses on the site (and next to it) with glyphosate, a broad-spectrum herbicide that kills growing plants.
- Because many seeds will remain in the topsoil, plow or disk the site repeatedly over a period of months or more before seeding to reduce the likelihood of the invader seeds germinating post-planting.
- If these species do return after planting, control them early by spraying individual plants with a high rate of an herbicide containing glyphosate as the active ingredient. Learn to identify and treat these grasses before they produce mature seed.
- For patches that may have been missed in site preparation, you may need to decide to sacrifice an area of the planting by broadcast-spraying glyphosate more aggressively or disking the area repeatedly to eliminate the spread of noxious plants into the remaining reseeded area. Be aware that glyphosate will control most green grasses and forbs where you spray.

Forbs

Forbs can establish rapidly in disturbed soils, including prepared seedbeds and newly seeded sites.

Mow larger forbs, such as annual sunflower or pigweed, to allow sunlight to reach the newly planted native seeds if shading is problematic. Mow before extreme weed canopies develop to prevent inadvertently mulching small native plants.

Figure 1. Noxious huisache tree.

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In fields where you have planted native grasses only, apply a herbicide containing 2,4-D as the active ingredient after the planted grasses reach at least 6 inches tall and have developed true leaves.

Before applying any herbicide, read the label and double-check that the chemical does not target or harm any of the planted species.

Deciding when to control broadleaf weeds can be difficult, as some of these weeds act as nurse plants for establishing natives. Nurse plants are those that create a more favorable environment for the seedlings underneath them.

Control may be warranted if the seeded natives under the weed canopies are significantly smaller or are growing more slowly than are the same plants elsewhere.

Woody plants

In South Texas, woody (brush) species often invade an area after natives are planted. Brush is difficult to treat because the plants are likely to be small above ground but have roots as large as those of the original trees.

Treat or remove the brush before planting, to discourage later resprouting.

Mechanical control options

Individual trees may be mechanically "grubbed" out of the ground by removing the stem down to the first lateral roots. This is often 12 to 18 inches below the soil surface.

If you must remove trees mechanically, be sure to grub the plant adequately to the appropriate depth. If you simply mow the tree, the bud zone underground will remain intact and will resprout multiple stems.

Chemical control options

Three methods are available to treat brush plants individually in a native reseeding site: foliar, basal, and cut-stump.

Foliar: The tree will need to be at least 3 feet tall and have healthy, mature leaves. This method is the easiest for trees with multiple stems and works best for trees between 3 and 6 feet tall.

Figure 2. Individual plant treatment using a backpack sprayer.

Apply a mix appropriate for that tree species making sure to coat all the leaves until they are wet but not dripping (Fig. 2). For more information on chemicals for specific species, see *Chemical Weed and Brush Control Suggestions for Rangeland,* available from the Texas A&M AgriLife Extension Bookstore http://www.agrilife.bookstore.org. All foliar applications should include 0.25% surfactant and the appropriate chemical mixed in water.

Figure 3. Treated brush in rangeland.

Leave the tree intact for at least 1 year before removing it or applying other management treatments.

Because most foliar treatments could kill adjacent forbs—including many species that you may have seeded—try to limit the amount of area sprayed to reduce off-target kill (Fig. 3).

Basal: The basal or stem spray method is best for trees with fewer than three stems. It works especially well on new seedlings that may sprout in the newly planted site.

To use this method, apply a mix of 25 percent triclopyr and 75 percent diesel to the stem. Cover the entire stem with the mix up to 12 inches and all the way down to the ground.

Although you can use this method any time of the year, it usually works best during the growing season. Leave the tree intact for at least 1 year after application.

Cut-stump: Cut the tree as flat and as close to the ground as possible. Spray the remaining stump and any stem with a 15 percent triclopyr and 85 percent diesel mix.

Use this method any time of the year. Although it requires more labor up front, it is essentially 100 percent effective if done correctly.

For more information on controlling specific brush species, see the Brush Busters publications available from the AgriLife Bookstore.

Summary

Address noxious plant issues early to increase your chances of eliminating problems before they can spread. Using individual plant control strategies will enable you to target the noxious plants directly while protecting the desired species.

For more information

The Reseeding Natives in South Texas series also offers these publications:

- *Planting Techniques and Equipment*
- *Site Preparation*
- *Selecting the Seed Mix*
- *Post-Planting Management*
- *Top 10 Mistakes to Avoid*

They are available from the Texas AgriLife Extension Bookstore at http:// www.agrilifebookstore.org/.

How-to videos are also available on the Web:

- *The Benefits of Reseeding with Natives* (http://youtu.be/KmSv9kCD7uU)
- *Seedbed Preparation* (http://youtu.be/8HXjTXNqYYs)
- *Reading Tags, Storage, and Handling of Seed* (http://youtu.be/aLKu3lExXIw)
- *Selecting Native Seed Mix* (http://youtu.be/bhZwro-eq2dI)
- *The Parts of a Seed Drill and Calibration* (http://youtu.be/VhMlfapT1vQ)
- *Timing and Planting Expectations* (http://youtu.be/jGGq8TrQtC4)
- *Maintenance with Brush Management* (http://youtu.be/00TjO-t4Ze0)

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