

Agriculture/Horticulture Newsletter

January 2025

Bearing with Sandburs—Managing a Painful Pest— Zach Howard, Ext. Program Specialist Soil and Crop Science

February is the time for forage and turf managers to begin waging war against this pest.

Many *Cenchrus* spp. go by grassburs, sandburs, stickerburs, or other names. This genus includes annual and perennial grasses that produce a pain-inflicting seed head. The burs that house the seed not only have spines but have fishhook-like barbs that grip what they have grabbed (Fig. 1).

There are three native species of sandburs in Texas that make up most infestations. These are also referred to as grassbur by many:

field sandbur – *Cenchrus spinifex*

longspine sandbur – *Cenchrus longispinus*

southern sandbur – *Cenchrus echinatus*

Fig. 1. Scanning electron microscope image of sandbur: a) bur; b) close-up of a single spine.
(Photo credit: Erin Jenkins, Oklahoma State University, 2013.)

Field sandbur causes most of the problems in grass forages. Surveys across East Texas found all seed samples being this species. This species is particularly problematic as it over-winters or perennializes. These perennials produce foliage earlier, more seeds, and will displace more forage than their annual counterparts.

Forages and turf sites are at risk for sandbur infestations in nearly every county in Texas. The **first line of defense** is ensuring no seed is introduced onto the landscape.

These seeds will travel many miles on wildlife, vehicle tires, and will stick in equipment like hay rake tines, baling belts, and shredders.

One to three seeds in the sandbur pod will germinate once soil temperatures reach ~52°F and moisture is available. Germination ceases at about 74°F soil temperature. Many forage and turf managers experience two periods of germination, spring and fall, when soil temperatures are in this range. In my experience, most seeds germinating in a growing season do so in the spring.

In 7-13 weeks, a seed head forms (Fig. 2).

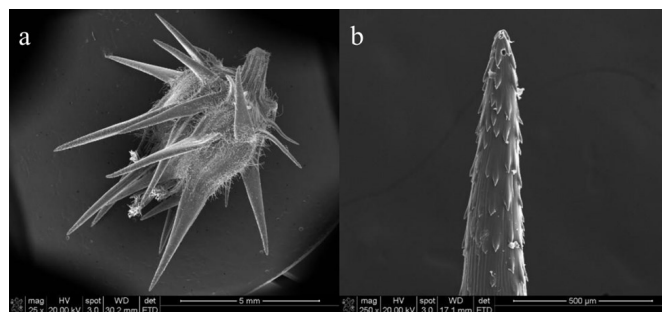
Fig. 2. Left, sandbur seedling; right, mature plant.

The **next line of defense** against this pest is healthy forage that is competitive. Whether in well-managed bermudagrass hayfields or lush grazed natives, many forage managers still encounter an ever-growing sandbur population. The first step to wage war against these is knowing their location and if perennials are present.

Perennial identification is easiest in winter when the plant is dormant. Sandbur carcasses can be found, excavated, and the root area observed for green tissue (Fig 3). Pale green tissue indicates the potential perennial. If found, your management tactics will change once the growing season is underway.

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- Sandbur ID
- Sandbur Control
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Bearing with Sandburs-Managing a Painful Pest – cont.

Herbicide Options

Upon late winter for your area, forage and turf managers can apply a pre-emergent herbicide with the active ingredient [indaziflam](#). *Working from South to North Texas, the beginning to the end of February is an ideal month for application.* Though other products exist and can be effective, research across Texas points to this active ingredient performing the best for forage and turf settings. **Fig. 3.** Dormant perennial sandbur plant with green tissue in the root.



Soon (February) for Best Initial Control in **Forages**

In a perennial warm-season grass forage where no seeded annuals are present, the preferred program is 3 oz./acre of Rezilon applied in 15 gallons per acre of water minimum. After the first hay cutting or major grazing event where the forage canopy is low and open, another application at the same rate should be made. This will ensure enough residual to last through the fall germination period.

Ongoing Control in **Forages**

If seedlings are found ($\leq 2''$) after baling the first hay cutting or major grazing event, Pastora herbicide at 1.25 oz. per acre included with the Rezilon application will be required for post-emerge (existing weeds) control. If perennials have been identified, Pastora will only be expected to provide suppression to these and any plants larger than 2 inches. Glyphosate at 0.4 lbs. acid equivalency per acre will eliminate larger plants and perennials. This acid-equivalent rate translates to 17 oz. per acre of a 3 lbs. acid equivalency per gallon (lb ae/gal), 12.8 oz per acre of a 4 lb. ae/gal, and 11.4 oz per acre of a 4.5 lb. ae/gal product. (If you need help determining which 'ae' your product is, contact your Extension agronomy specialist.) For any post-emerge application, medium droplet size should be produced. Forage injury may occur with glyphosate, but damage is likely to be transient if the application is made within 7-10 days of cutting.

Soon (February) for Best Initial Control in **Turf**

In a perennial warm-season turf setting where no seeded annuals are present, Specticle Flo at 6 oz. per acre (4 milliliters per 1,000 square feet) should be applied in a minimum of 20 gallons per acre of water (0.5 gallon per 1,000 square feet). A repeat application should be made 45-90 days later. Dry formulation, Specticle G, is available and can be used at 125 lbs. per acre (2.9 lbs per 1000 square feet) at each application.

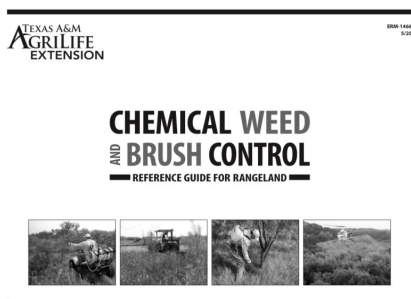
On-going control in **Turf**

If seedlings, mature plants and/or perennials are found in turf settings, applications of Celsius WG can be effective at 3.7 oz. per acre (2.5 grams per 1,000 square feet). A repeat application 4-6 weeks later may be necessary for larger plants. This application can be made with the second Specticle Flo application.

Forage Herbicide Labels: [Rezilon Herbicide Label](#), [Pastora Herbicide Label](#)

Turf Herbicide Labels: [Specticle Flo Herbicide Label](#), [Specticle G Herbicide Label](#), [Celsius Herbicide Label](#)

Chemical Weed and Brush Control Reference Guide—Updated



ERM-1466 Chemical Weed and Brush Control Reference Guide was updated in May of 2020 to include the most recent chemicals.

This publication provides general suggestions for herbicides used to control brush and weeds on Texas rangelands. It also gives information on the levels of control expected. Visit the Agrilife



Figure 9. Mesquite tree showing lateral roots and branching taproot.

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Wildfire preparedness publication to aid Texas land-owner

By Blair Fannin

A new publication released by the [Texas A&M AgriLife Extension Service](#) aims at helping landowners take preventive measures to mitigate the impact of wildfires.

[Wildfire: Preparing the Ranch](#) is an online educational resource debuting at Fire and Rangeland Management Symposiums in the Texas Panhandle. The first event was in Pampa on Jan. 21 and a second event will be in Canadian on Feb. 13. The resource is designed to equip Texas agricultural producers with educational information and tools to prepare for wildfires.

The publication includes information on identifying early or intense wildfire environments, risk management, infrastructure protection, livestock evacuation and a wildfire preparation checklist.

The publication draws on the expertise of AgriLife Extension specialists, the agency's [Disaster Assessment and Recovery](#) agents, and the [Texas A&M Forest Service](#) – all part of [The Texas A&M University System](#).

Actionable, proactive steps

"Landowners and producers understand Mother Nature better than anyone else," said Morgan Treadwell, Ph.D., lead author, AgriLife Extension range specialist, San Angelo, and professor in the [Texas A&M College of Agriculture and Life Sciences Department of Rangeland, Wildlife and Fisheries Management](#).

"This publication was created to supplement existing producer knowledge and present science- and experience-based actionable, proactive steps and strategies," Treadwell said. "This will serve as a one-stop shop in living and ranching with the reality of wildfire conditions."

More than 1.2 million acres burned in the Texas Panhandle beginning in late February 2024, making it the largest wildfire in Texas history. Initial loss estimates were \$123 million in short-term losses, including more than 12,000 cattle deaths, lost grazing values and fence repair costs, according to AgriLife Extension economists.

"Just as land stewards set goals for habitat and forage production, with this publication we can realize and implement the prioritization of wildfire preparation along every step of the grazing management process," Treadwell said.

"We can't just live by the traditional wildfire season anymore," she said. "We need to read the pastures, landscapes and plant communities and understand how the ranch management strategy fits into the big picture, which inevitably includes wildfire."

Developing a plan

Treadwell said ranchers should develop a year-round plan based on environmental conditions, similar to how they manage grazing and livestock.

"Most ranchers and producers have a plan and very successfully execute each step that prepares their operation based on conditions and short- and long-term outlooks," she said.

"Whether preparing for drought, extreme heat, cold weather, calving, branding or weaning, we can do the same for our communities and our ranching operations when it comes to the threat of wildfire. This publication is a starting place for those conversations and, hopefully, actions."



(Texas Panhandle Fire)

Horticulture: Winter/Spring Garden

TIME TO PLANT ONIONS



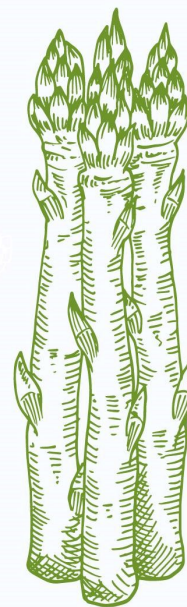
January is the time to plant onion sets! Purchase from local nurseries or feed stores. Choose short-day varieties.

For growing info, visit <https://aggie-horticulture.tamu.edu>

TIME TO PLANT ASPARAGUS



Check out aggie-horticulture.tamu.edu
for growing info!



PLANT LEEKS NOW

- Care is similar to onions
- Plant transplants in late winter or fall, or start early from seed indoors
- Apply a diluted fertilizer solution after planting
- Use the white fleshy stem base for cooking



It is time to start thinking and preparing your garden here in West Texas. Take time to use resources such as aggie-horticulture.tamu.edu for more information on varieties and planting dates. It is a good time to plant onions, leeks, and asparagus crowns. In the case of onions, purchase from local nurseries or feed stores. Be sure to choose short-day varieties.

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