



The Plant Manager's Christmas Wish List

December 11, 2024
10:00-11:30 am



Thank
You
*to our door
prize
sponsors*



United States
Department of
Agriculture

Natural Resources Conservation Service





PLANT PARTY

Agenda

Welcome

The Plant Manager's Christmas Wish List
Dr. Megan Clayton and Tim Siegmund

Wildflower Wish List
Tim Siegmund

Door Prizes

Spot Spraying Wish List
Megan Clayton

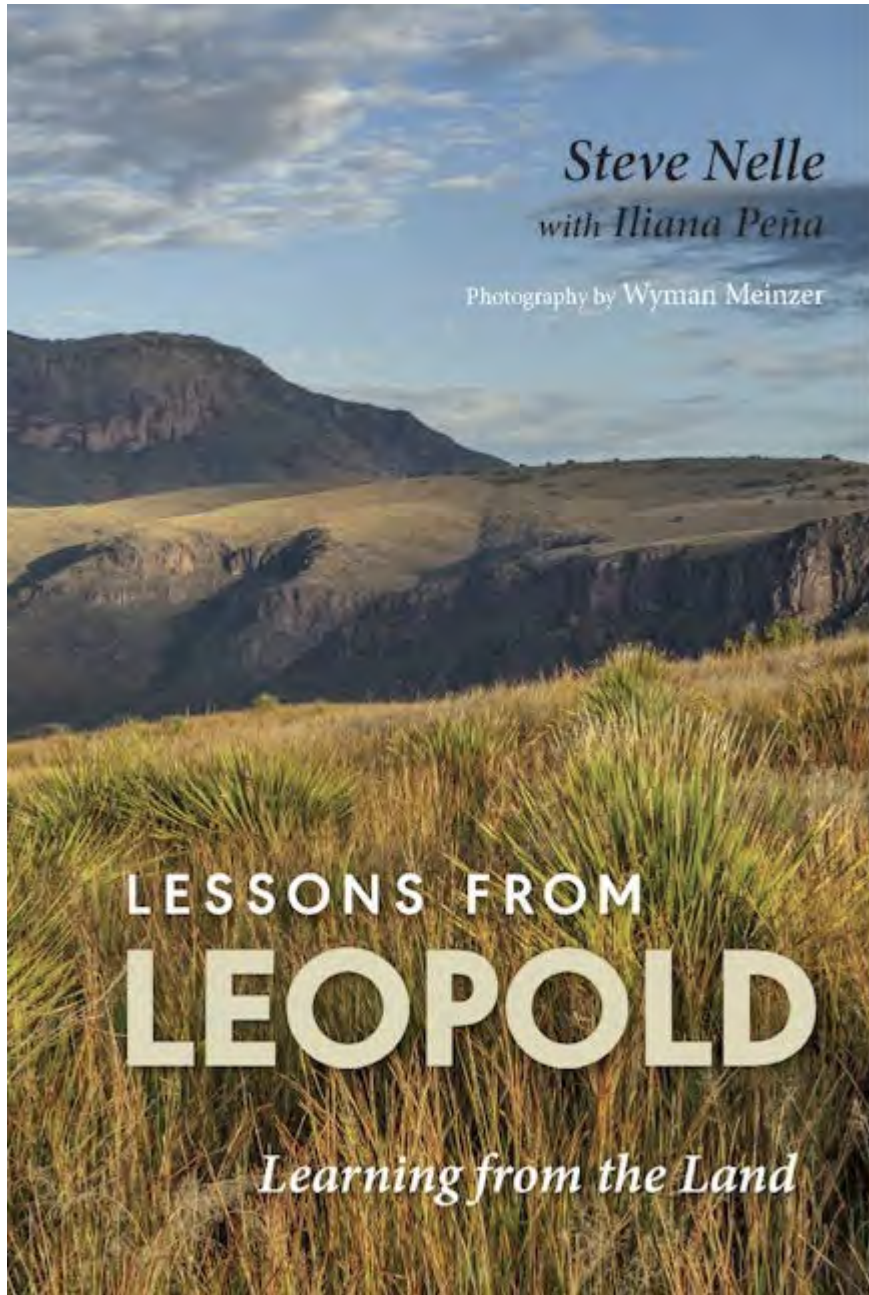
The Plant Manager's Christmas Wish List
Dr. Megan Clayton and Tim Siegmund

Adjorn

Steve Nelle

- Retired, Soil Conservation Service and NRCS (1976-2011)
- Private Consultant in land, water, and wildlife conservation





- Takes key passages of Aldo Leopold and provides commentary about the practical current day applicability of his philosophies of the land
- Man's responsibility to manage and sustain nature

A Boring Bush (about obscure under-appreciate plants)

Ecological Face Powder (about non-native plants that cover up a bad landscape complexion)

Understanding the Language (about learning to read the land via the plant life)

The Personality of Silphium (discovering the "personality" of individual plant species by study)

Dark and Bloody Ground (how prairie plants created the great prairie soils)

Healthy Curiosity (an essential element for one who seeks to understand nature and natural resources)

Intelligent Tinkering (the role of discovering new techniques and methods of management by experimentation)

Overgrazing (what is overgrazing and how to overcome it)

With Ax in Hand (about selective brush and tree removal)

A Land to Please Everyone (the win-win for landowners and society when land is well cared for)

Your Signature (how we leave our unique signature on the land by the way we manage it)

Cost: \$35

30% Discount using "LEOPOLD" until 12/15/24





Dr. Jamie Foster

- Professor in Forage Agronomy, Texas A&M AgriLife Research, Beeville & Corpus Christi
- Warm-season legumes, drones, cropping systems, livestock production



Harvest Sickle



- Forage/Grass Sampling Tool
- Less painful than grass clippers!
- \$7



Picaridin Bug Spray

- Not oily/greasy
- Will not break down plastics on equipment
- Can be sprayed on your clothes
- 2 – 4 oz pack \$22.78



Dr. Vanessa Corriher Olson

Professor & Extension Forage
Specialist

Texas A&M AgriLife Extension,
Overton

Increase forage (grass) production
and utilization, introduced forages,
hay, fertilizers



KHS Soil Probe – Kleen Hole Spade



- From M&M Supply Co., IA
- Alligator style opening allows core to be inspected and easily extracted for a representative sample
- Handles & Foot peg, 1" diameter
- 8" - \$184
- 12" - \$195





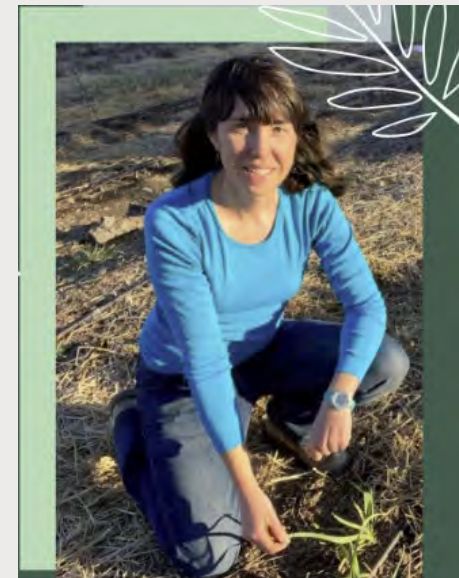
Beth McMahon

Gillespie County Horticulture Agent

Texas A&M AgriLife Extension

BS – Rangeland Management, TAMU

MS – Horticulture, OSU



Cheap Steak Knife – Or Hori Hori Knife



- Cuts the roots of weeds
- Hori Hori knife makes you fancy
- \$14.99



Weedeater Strap

- Takes weight off arms
- Can use on brush cutters as well
- \$25.35



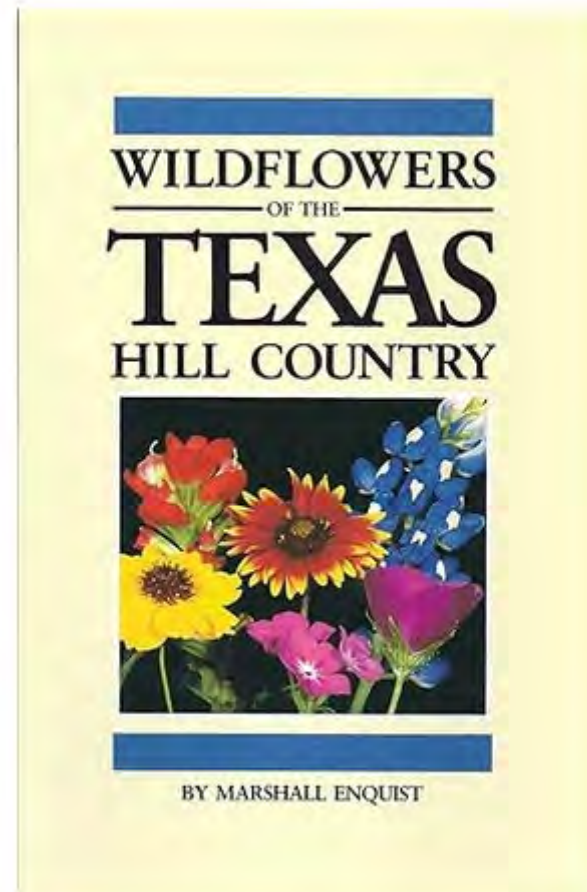
HDX Sprayers – Home Depot

- Cheap
- Handle small enough to fit in her hand
 - Expensive ones have thick handle that hurts her wrist
- 1 gallon - \$11.97
- 4 gallons - \$59.97



Wildflowers of the Texas Hill Country

- By Marshall Enquist
- For TX Hill Country and Llano Uplift Regions
- \$17.64



Dr. Tony Falk

Dan L. Duncan Endowed Director of
Texas Native Seeds, a program of
Caesar Kleberg Wildlife Research
Institute at Texas A&M University –
Kingsville

Develop new native seeds for releases
across Texas



Heavy Duty Paper Bags

- Life saver for seed or forage over the dollar store bags
- No specific vender, example from Amazon
- Rated for 57 lb, 50 count - \$19.99



Commercial Plant Press w/Pre-cut Cardboard

- More sturdy than many homemade ones
- Mini 3"x5" – \$20.75
- Student 6"x9" – \$29.75
- Student 12"x18" – \$58.50
- Professional - \$84.95





Tim Siegmund
Texas Parks & Wildlife
Department





Planting Wildflowers


Tim Siegmund

TPWD-Private Lands Program Leader







The image is a composite of two photographs. The left side shows a close-up of a person's hand holding a large quantity of small, dark, elongated seeds. The right side shows a similar quantity of seeds scattered on a plain white surface. A white diamond-shaped graphic with a thin black border is centered over the image, containing text. The text is arranged in five lines, providing advice on seed collection and sowing.

Hand Collect or Purchase?
Provide Diversity
Understand Seeding Rates
Seeding Depth
Surface-1/4"







Planting Time for Wildflowers

Timing is Usually More Important for Annuals

- March-May Bloomers
 - Plant late September-mid December
- May-July Bloomers
 - Plant late September-mid February
- June-Frost Bloomers
 - Whenever!
 - Usually late September-early April





Plantings Take Time

- Supplement Seedlings with Potted Perennials
- There will be some mess
- Plan for those different life histories
 - Annuals and Perennials
 - Tall and Short Stature
 - Spring and Fall Blooms
 - Different Flower Structures
 - Composite
 - Tubular
 - Massed Plantings

5 Rules for Establishing Successful Plantings

- 1) Establish your Goals
- 2) Procure Good Quality, Clean Seeds
- 3) Eliminate/ Minimize Competition Before Planting
- 4) Plant at Proper Rates, Season and Depth
- 5) Control Weedy Competition if Necessary



Resource Guides with Step-by-Step Instructions

- 9 Natives — Coastal Prairie Conservancy
 - <https://www.coastalprairieconservancy.org/9-natives>
- Pollinator Conservation Resources: South Central Region | Xerces Society
 - <https://xerces.org/pollinator-resource-center/south-central>
- Wildflower Gardening in Oklahoma | Oklahoma State University (okstate.edu)
 - <https://extension.okstate.edu/fact-sheets/wildflower-gardening-in-oklahoma.html>
- Texas Top 20 - Lady Bird Johnson Wildflower Center
 - <https://www.wildflower.org/texas-top-20>
- Publications | Caesar Kleberg Wildlife Research Institute (tamuk.edu) Texas Native Seeds Program
 - <https://www.ckwri.tamuk.edu/research-programs/texas-native-seeds/publications>
- Plant lists by region – Native Plant Society of Texas (npsot.org)
 - <https://npsot.org/wp/resources/plant-lists-by-ecoregion/>

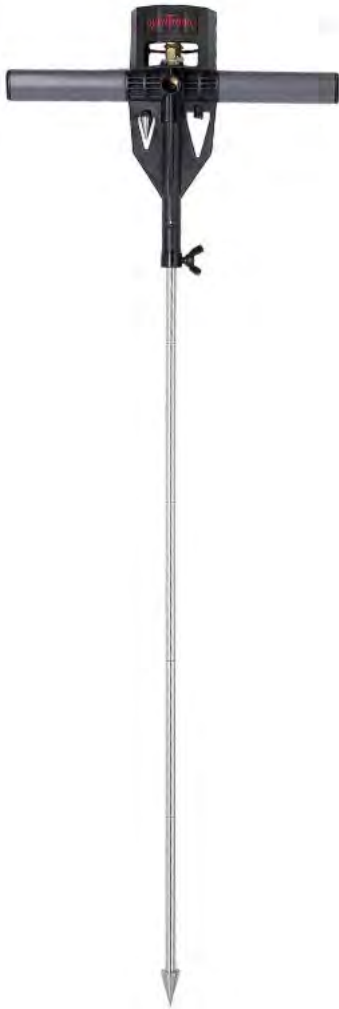
Using Backpack Sprayer for Individual Plant Treatments (IPT)



Untreated vs. Treated



Soil Compaction Tester



- Measures compaction by psi
 - 0-200 psi: Good
 - 200-300 psi: Fair
 - 300+: Poor Growing Conditions
- \$189





Dr. Megan Clayton

Texas A&M AgriLife Extension Service



Equipment for Tackling IPT Herbicide Applications

Unwanted Invasive Grasses, Weeds, and Brush

MANAGEMENT TOOLS



Fire



Chemical



Mechanical



Biological

HERBICIDE TREATMENT OPTIONS

1. Leaf Sprays
 - Individual Plant Treatment (IPT)
 - Broadcast
2. Stem Sprays (IPT)
3. Cut Stump Sprays (IPT)
4. Soil Applied
 - Spot/Whorl Sprays (IPT)
 - Liquid Sprays (Broadcast)
 - Pellets (IPT/Broadcast)

Solo Professional Backpack Sprayer, 4 gal

- Includes Harness
- \$110.65



Delux Shoulder Saver Harness

\$60.75





LEAF SPRAYING INDIVIDUAL PLANTS

TIMING IMPORTANT!!

Leaf Spray Mix - IPT

- Chemical
 - Active Ingredient and %
- Dilute in Water
- Surfactant (0.25%)
 - Want non-ionic
 - Dish soap as last resort
- Blue dye (0.25-0.5%)



Syringe with Ounces for Measuring

- Easier than pouring
- I like 'Catheter Tip' with at least 2 oz (60 cc)
- \$9.99 for 2-Pack



Hi-Light Blue Spray Indicator

- Mixes well with chemical
- Easy to see – don't use too much!
- \$33.25 for 1-quart easy pour



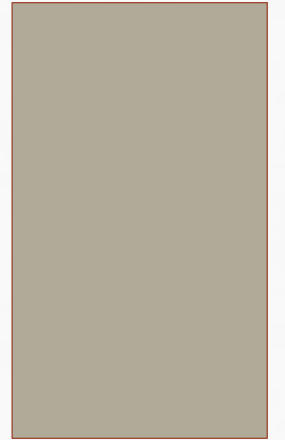
Non-ionic Surfactant

- IF it's not already in the ready-to-go jug; most are not
- Helps cut surface tension of the droplets
- \$35.95/gallon





STEM SPRAYING INDIVIDUAL PLANTS



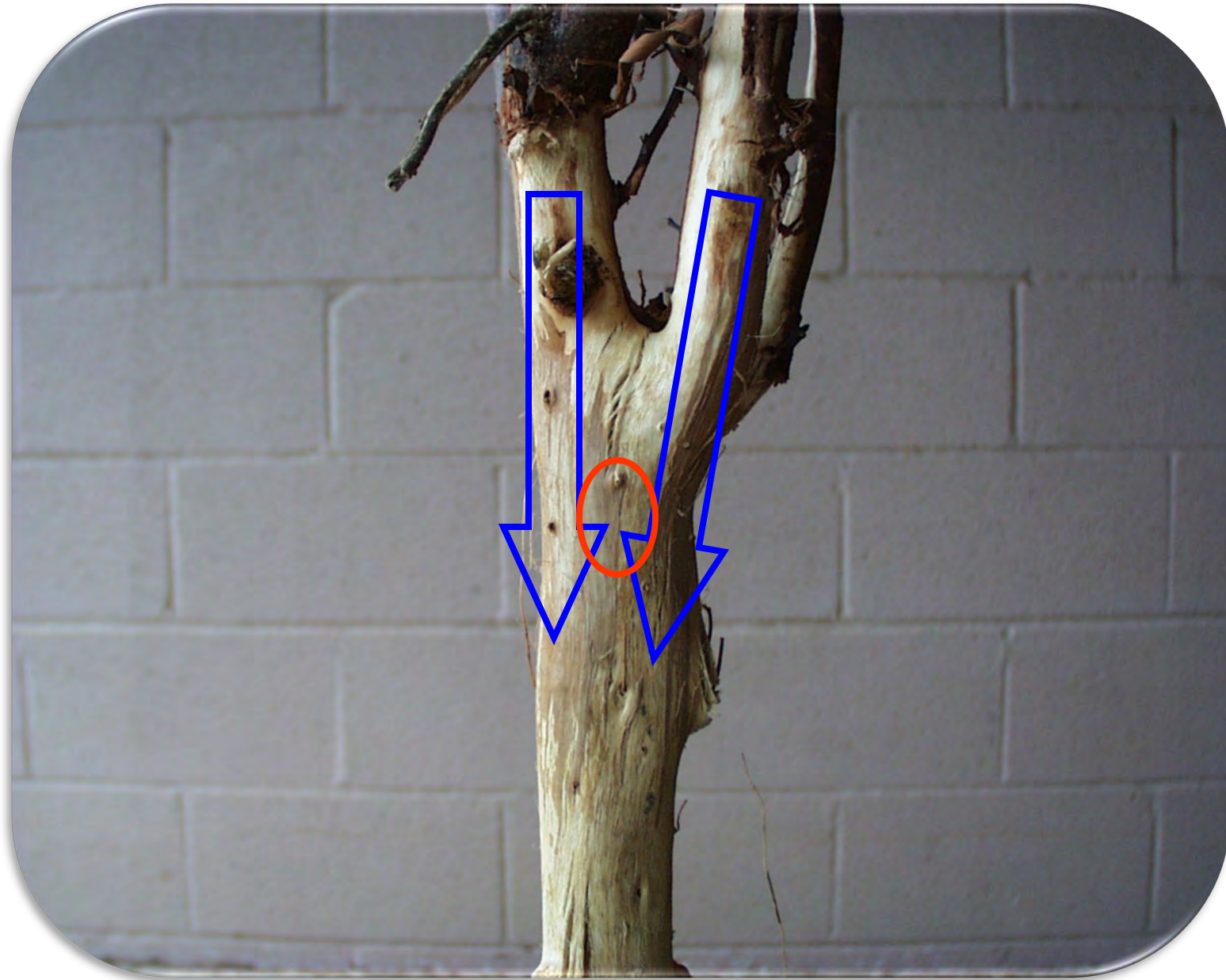


Spray Bottle – Labeled for Chemical Use



- Works great for a few trees!
- No need to dirty a large sprayer
- \$3.98





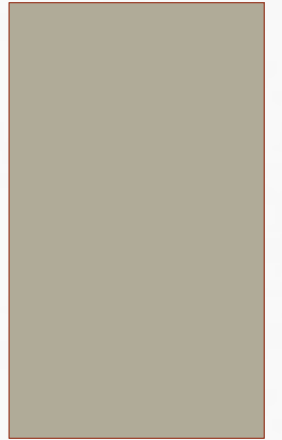
Mix for Stem Sprays

- Chemical (15-25%)
 - Usually Remedy Ultra (Triclopyr)
 - Check Active Ingredient and %
- Diesel (75-85%)
- Blue Dye (0.25-0.5%)
- No Surfactant





CUT STUMP ON INDIVIDUAL PLANTS





BRUSH CUTTER



- Replacement blades ~\$40 but can sharpen!
- Need handlebars
- I have Stihl, but found this Husqvarna online for \$593.20



MIX FOR CUT STUMP

- Chemical (15%)
 - Usually Remedy (Triclopyr)
 - Check Active Ingredient and %
- Diesel (85%)
- Blue Dye (0.25-0.5%)
- No Surfactant

*Tordon 22K @ 4% with surfactant in water for Redberry Juniper

BRUSH BUSTERS

TEXAS A&M
AGRI LIFE
EXTENSION

RWFM-PU-099 11/2021



HOW TO BEAT MESQUITE: Individual Plant Treatment Leaf and Stem Applications

Robert K. Lyons and Megan K. Clayton*

The mesquite tree is one of the toughest, most noxious brush species on Texas rangelands. It thrives across the western two thirds of the state, both in rural pastures and on urban lots.

Here are two three-step methods to control mesquite; both are easy, inexpensive, and environmentally responsible. They involve spraying a small but potent concentration of herbicide directly on each plant to selectively control unwanted mesquite. Remember, controlling mesquite is not a one-time job. Both livestock and wildlife spread seeds, so monitor your land regularly to control unwanted seedlings.

These Brush Busters control methods were developed and approved by professionals with Texas A&M AgriLife Extension Service and Texas A&M AgriLife Research, both agencies of the Texas A&M University System. Your results may vary with weather and other plant conditions, but you should usually be able to kill 76 to 100 percent of the trees you treat.

These Brush Busters control methods depend on the tree shape and size. For mesquite with three or fewer smooth bark stems coming out of the ground, the stem spray method may be a good option. For bushy mesquite less than 6 feet tall with many stems at ground level, the leaf spray method may be the best option. Either method can be successful.



Honey Mesquite leaves and beans. Courtesy of: TREES, SHRUBS AND WOODY VINES OF THE SOUTHWEST by Robert A. Vines, Illustrated by Sarah Kahlden Arendale, Copyright ©1960

BRUSH BUSTERS LEAF SPRAY METHOD

Works well on: Mesquite plants that have good leaf canopy and are less than 6 feet tall. This method is also known as high-volume foliar spraying.

When to apply: Begin in spring, when mesquite leaves change color from light pea-green to a uniform dark-green; continue through July 31st for East and South Texas, while other parts of the state may be able to spray through September. If mesquite has been top killed by fire, hand cutting, herbicide methods, or any mechanical methods, allow two full growing seasons before

1. Prepare the Equipment

Many types of sprayers work well for this method. Backpack sprayers are the most efficient for small acreage places or those with a high density of mesquite trees. Larger places with lower densities may find ATV or UTV sprayers more efficient. Before you start spraying, make sure that you have an adjustable cone nozzle, such as the Conejet™ 5500-X6 or X8 nozzle that can deliver a coarse spray with larger droplets to the top of a 6-foot tree.

2. Mix the Herbicide Spray

You can achieve 76 to 100 percent mortality by spraying with one of several herbicide options (see options A, B, or C in the table on the next page) under ideal conditions. To prepare the spray mix, add the selected herbicide to water. To make sure the foliage is coated thoroughly, add a high-quality (80 to 90 percent active ingredient) non-ionic surfactant (see table on the next page) to the spray mix or crop oil, methylated seed oil (MSO), or MSO-OS (organosilicone) adjuvant at manufacturer specified rates. Add a dye, such as Hi-Light™ blue dye, to mark plants that have been sprayed and ensure proper coverage.

3. Spray the Mesquite

Adjust the nozzle to deliver a coarse spray in a wide pattern. Wet ALL the leaves of each mesquite plant until the leaves glisten but not to the point of dripping.

Keep These Points in Mind:

- ▶ Follow herbicide label directions.
- ▶ For best results, do not spray when:
 - Rains have stimulated new growth at the end of the stems
 - Leaves are wet from rain or dew
 - Foliage shows damage from hail, insects, or disease
 - Working upwind of desirable trees, shrubs, or crops
- ▶ The cost of treatment rises rapidly as the brush becomes bigger and denser. Download the Brush Busters Cost



CHEMICAL WEED AND BRUSH CONTROL

— REFERENCE GUIDE FOR RANGELAND —



Megan.Clayton@ag.tamu.edu

Extension Range Specialist

Uvalde Research & Extension Center

SouthTexasRangelands.tamu.edu

Facebook: Texas Range Extension



Pete Flores

Lee Knox

Associate Professor,
Houston Livestock Show
and Rodeo Professorship
in Ranch Management,
Texas Christian University

Previously with USDA-
NRCS for 20 years

Prior to that, a County
Extension Agent!



Drip Torch for Prescribed Fire

- Sure-Seal Classic Double-Bottom Drip Torch
- \$179.50



Hand Pruner



- Corona Model BP3160 Hand Pruner
- \$24.95





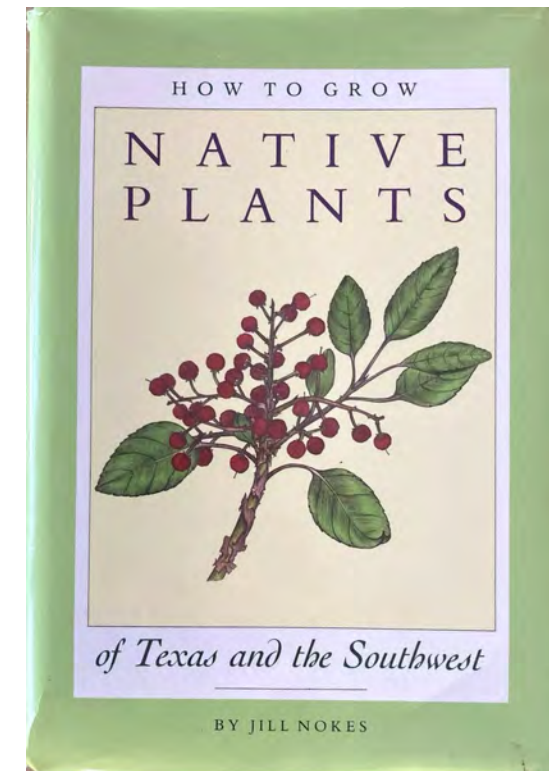
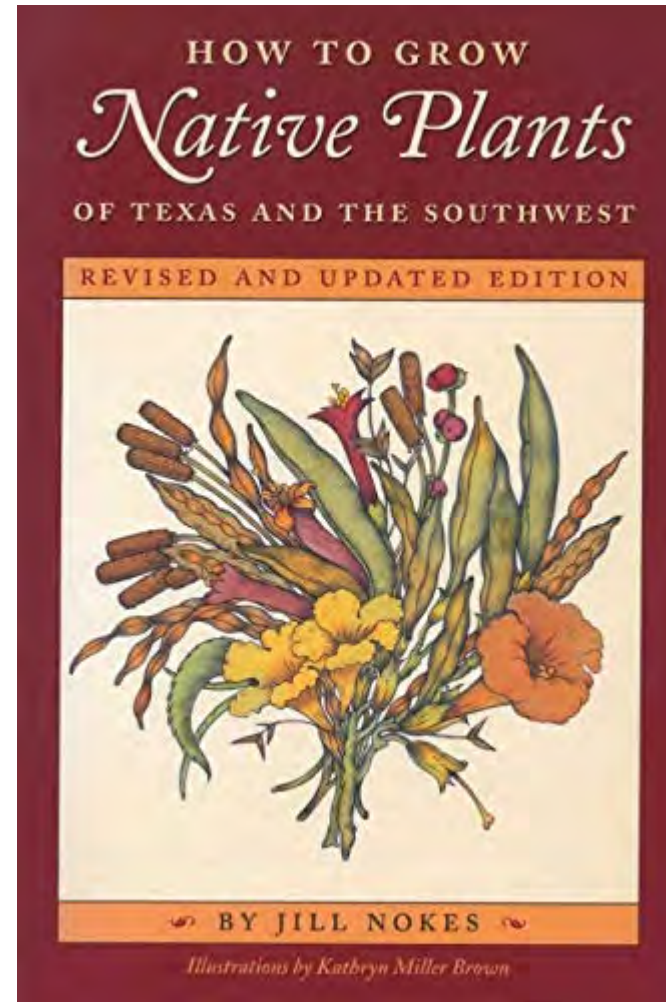
Dr. Wayne Hanselka

Professor, Former Associate
Department Head for Extension,
Extension Range Specialist Emeritus

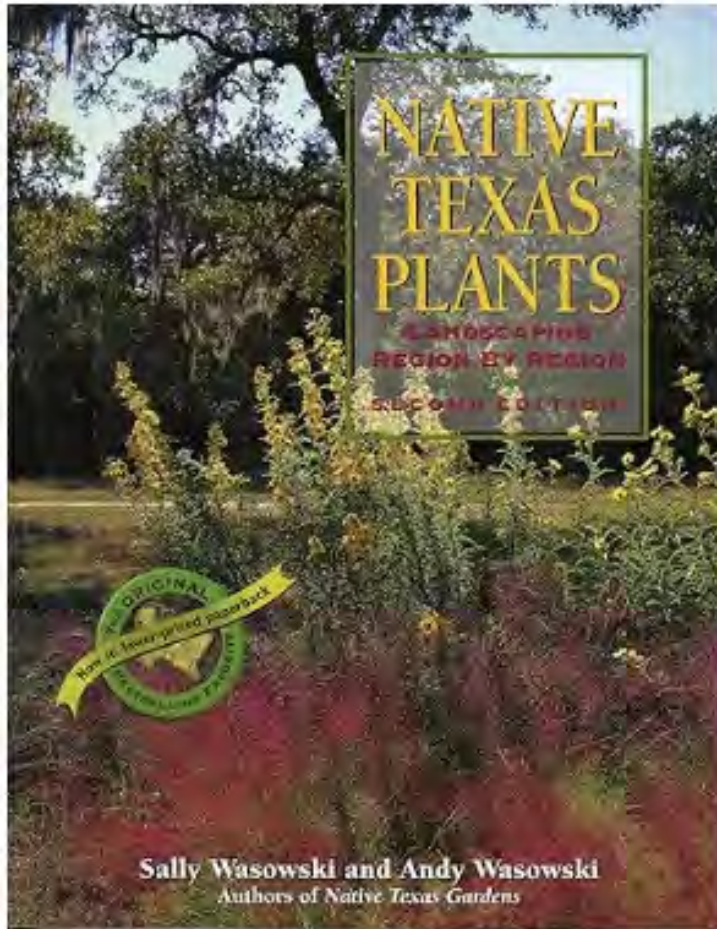
Consultant for holistic rangeland
management

Book 1: How to Grow Native Plants of Texas and the Southwest

- By Jill Nokes
- Now 425 species of trees, shrubs, and woody vines
- Gathering and storing seed, propagation, transplanting
- \$55.77+ @ Amazon (updated)



Book 2: Native Texas Plants Landscaping Region by Region



- By Sally Wasowski with Andy Wasowski
- Includes 21 landscaping design plans for inspiration
- Amazon has on sale for \$45.47, usually \$60
- Kindle version for \$31.67



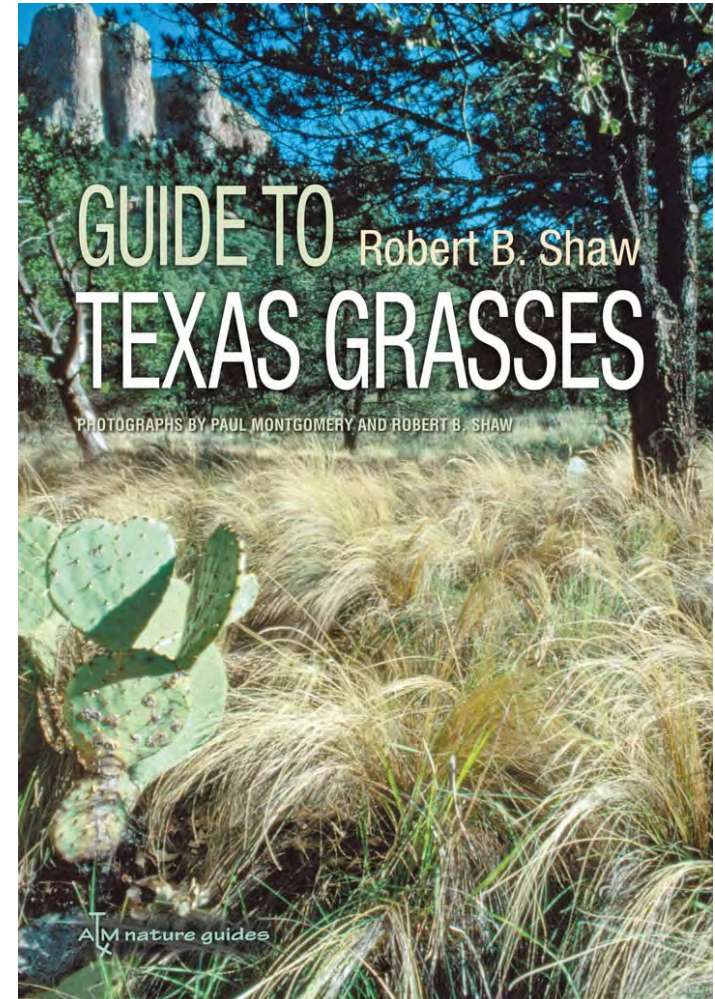
Taylor Schroeder

- Rangeland Management Specialist, Zone 3, USDA-NRCS



Guide to Texas Grasses

- Dr. Robert B. Shaw
- 2012 – but maybe updating!
- 670 grass species
- Kindle \$9.99
- Paperback \$112.07



A Nice, Metal Sharpshooter Shovel!

- Picked one off Amazon \$29.99 with 5% coupon (currently)



Deanna Pfeffer

- Wildlife Biologist with Texas Parks & Wildlife Department at the Kerr Wildlife Management Area, Hunt, TX
- Previously self-employed with ranching services company with husband
- Previously technician with Kerr County SWCD



Folding Hunting Stool

- Pursuit Hunting Stool
- Pocket to carry your field supplies
- Seat to save your knees while vegetation sampling!





Thank You

for participating



Please complete the survey at:

<https://www.surveymonkey.com/r/PPWishListFinal>



