

TMN Prescribed Fire Webinar

Why Burn?

Fire History & Fire Effects

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Presented by

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Wildlife Division

State Fire Program Leader

Chris's Bio

For over 30 years, Chris Schenck has been active in Fire and Aviation Management, as well as a member of Incident Management Teams (IMT's). He is currently the State Fire Program Leader for the Wildlife Division of the Texas Parks and Wildlife Department. He retired from federal service in 2015 as Forest Fire Management Officer of the National Forests and Grasslands in Texas.

He has been in Fire and Aviation management in complex and diverse ecosystems throughout the country, where he has held positions in Engines, Helitack and Administration.

He now resides in the community of Beulah, Texas just east of Bear Creek with his wife Mari Ziegler, senior cat Andrew, Timmy-tomcat, kitten Petey and Australian Shepherds Coco and Ellie. They have three grown children and seven grandchildren that live in Utah and California.



Why Burn ? . . .

- Fire History in Texas
- Prescribed Fire Effects



Objectives:

- Develop a brief understanding of Fire History in the U.S. and Texas
- Understand how various Ecosystems came to be under the influence of Disturbance / FIRE

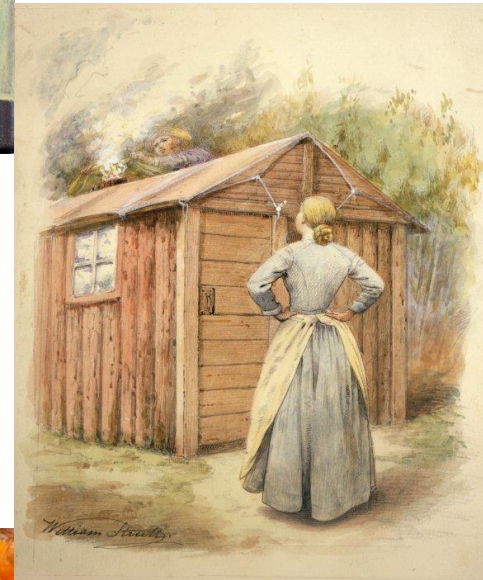


- Understand the effects of Prescribed Fire on the land
- Develop a mental picture of how you would like your land to look
- Consider Fire as a tool(?)



Early History

- Native Americans used fire for hunting & rejuvenation of the prairies.
- Pioneers were a little more resistant to fire use. Burning Grass in Texas was illegal in 1845.
- The Great Wildfires of 1910 changed public attitude about fire.





Recent History

- Benefits of Prescribed Fire in various ecosystems
- Fire Culture slowly develops
- Perceptions of large wildfires
- Fire as an economical land treatment

Rx Fire in Urban Areas



Land in Balance Video

Talking Points for RX Fire

- “Wildland Fire” has long been part of a natural process of disturbance in Texas. (*Wildland Fire includes Wildfire and Prescribed Fire*)
- Prescribed Fires are safer, easier, and less expensive to manage than Wildfires.
- Society’s influence has altered historic fire cycles, leading to a dangerous and difficult buildup of vegetation on landscapes in Texas.
- Planned, prescribed fires and other fuels treatments, improve the land and help prevent wildfires by providing better opportunities for firefighters to protect people and property.
- Improving the health of the land, and reducing undesirable impacts from wildfire in Texas requires partnerships among governmental agencies, tribal governments, industry, fire departments, communities, and most of all, private landowners.

Fire Effects

Individual fires vary in:

- What they burn (fuel consumption)
- Where they burn (spread pattern)
- When they burn (seasonally and diurnally)
- How intensely they burn (heat released)
- How long they burn (residency time)



Fire Effects

- Reduces the risk of wildfire by decreasing dense understory shrubs, harvest residues, and accumulated dead fuels.
- Improves wildlife or grazing habitats.
- Maintains successful forest/grassland regeneration.
- Cycles nutrients for healthy ecosystems.
- Preserves fire-dependent species.
- Controls insect and disease problems.
- Improves forest access.



Fuel Reduction



Mechanical
Chemical
Fire
Grazing
Timber Harvest

Fuel Reduction what's left

- Residual Bio-mass

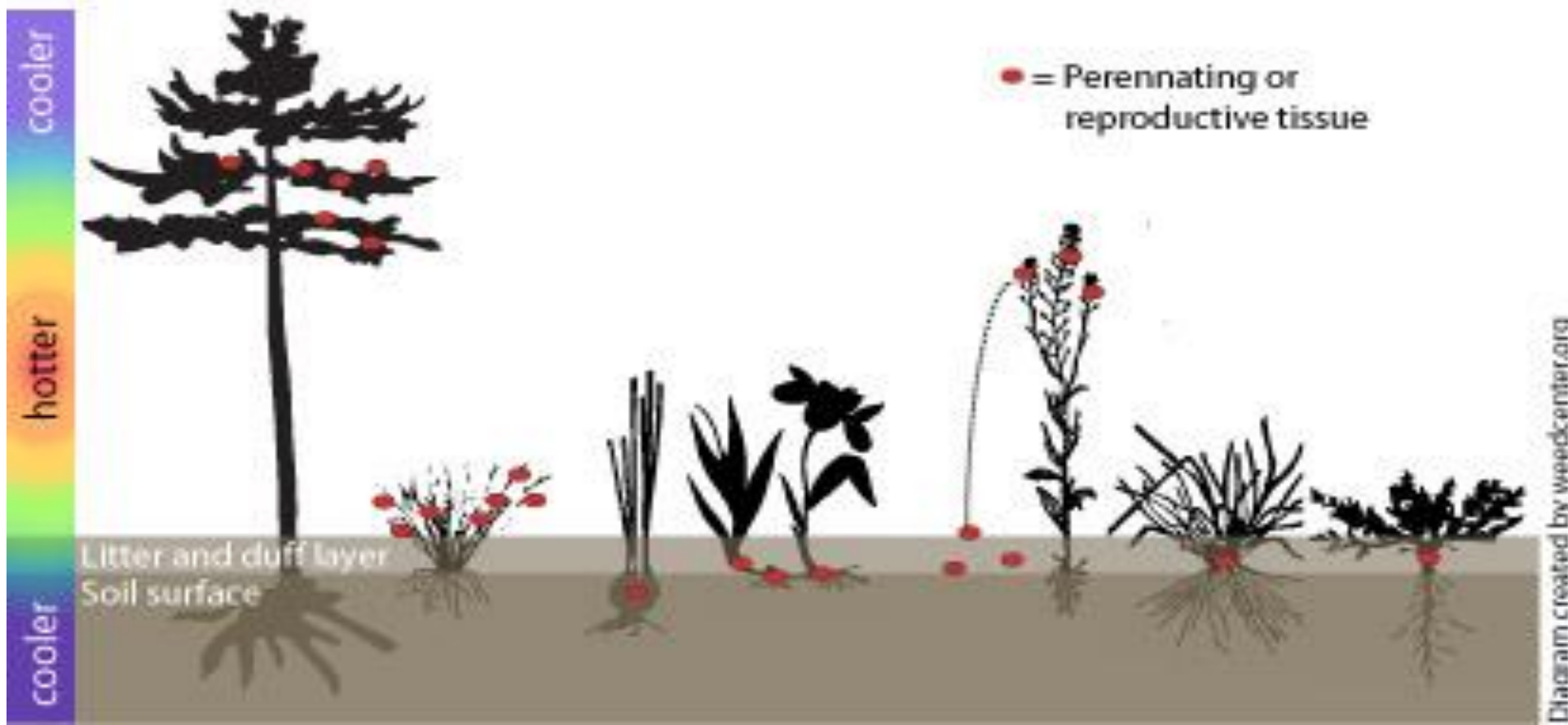


Rx Fire Residual



Fire Effects on Different Plant Structures

Location of Vulnerable Plant Structures Relative to Temperature During a Fire



Fire Effects---Before / During / After



Bastrop Complex Fire, Texas 2011

September 4, 2011 to October 20
Burned 33284-acres
Destroyed 1,660 homes
2 Fatalities
Suppression Cost \$ Millions
Recovery Cost \$ Billions
Cause: Power lines



Bastrop 2011 Rx Fire vs No Rx Fire



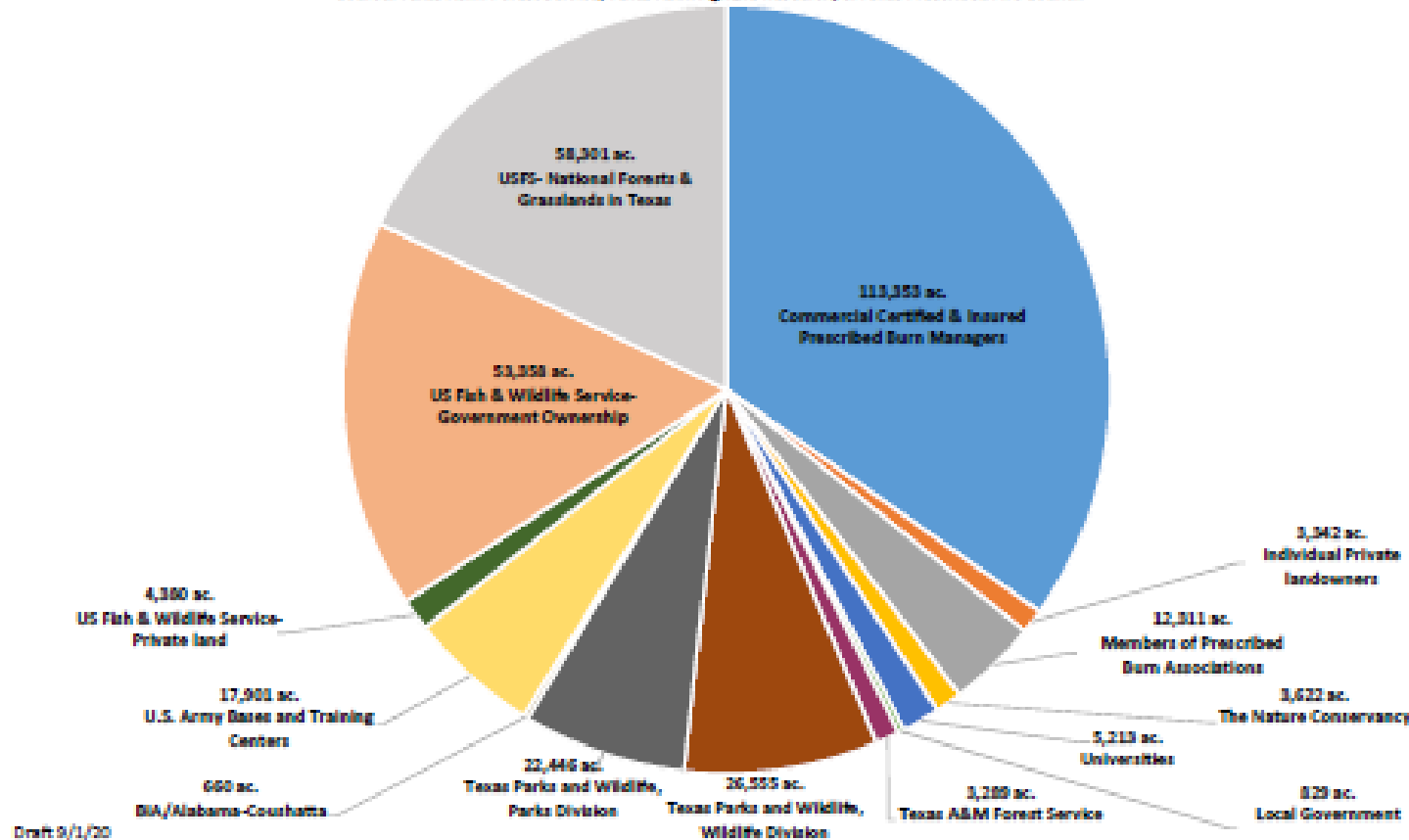
- Business of Burning Video
- Organization in a landscape scale Prescribed Fire
- Landowners Prescribed Fires are a little simpler

Texas RX Fire Numbers

Survey of Prescribed Fire in Texas

Total of 325,560 acres treated with prescribed fire on forests and rangelands in Texas in 2019.

Source: Texas A&M Forest Service, Texas A&M AgriLife Research, & Texas Prescribed Fire Council



In 2019,
325,560 acres of forests and
rangelands were reported treated
with prescribed fire in the State of
Texas.

Probably closer to
400,000 acres
reporting error
Could we do Better!

Fire Effects and Land Management Goals



- Have a Goal in Mind
- Consult with a Specialist *
- Develop a Measurable & Achievable Plan
- Implement the Plan (small parts)
- Monitor Progress and make Changes if Needed
- ENJOY YOUR BLESSINGS!

* How can I get involved ?

- Attend a Landowner / Community Workshop
- Hire a Certified Insured Prescribed Burn Manager
- Contact / Join a Prescribed Burn Association
- Contact a TPWD Biologist or Regional Fire Coordinator
- Contact Texas Forest Service
- Contact Natural Resource Conservation Service (NRCS)
- Contact Texas A&M AgriLife Extension
- Contact some Local Fire Departments

TPWD Technical Guidance for Rx Fire

- If Prescribed fire makes sense, we will work with you to develop a **Burn Plan** that includes a prescribed **fire prescription**.
- When **conditions are right** (in prescription) we would **team up** with you, members of your family and neighbors, for the **Burn Day** or implementation.
- The **landowner is the actual Burn Boss** guided by TPWD employees.
- We will bring some **Prescribed Fire Equipment** like Fire Tools, Drip Torches, UTV's with sprayers, we hope the landowner and neighbors will bring some too.

TPWD Wildlife Regional Fire Coordinators

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TPWD Fire Page

https://tpwd.texas.gov/landwater/land/wildland_fire_management/

Questions ?

