Working with Nature:
Creating Sustainable Solutions for All

WHF

Conserving Texas Habitats

WHF is a 501(c)(3) nonprofit organization working to create resilient grasslands and healthy watersheds statewide.

Our mission is to provide on-the-ground restoration, management and generational sustainability of prairie habitat for the conservation of soil, water, air and wildlife.

ORIGINAL GRASSLANDS OF TEXAS

Historically, about two-thirds of Texas was comprised of prairies, savannahs, and other types of grasslands.

These ecosystems were formed by a combination of climate, soil, hydrology, and topography.

Fire played a critical role in the maintenance of these lands, as well as grazing from bison herds.

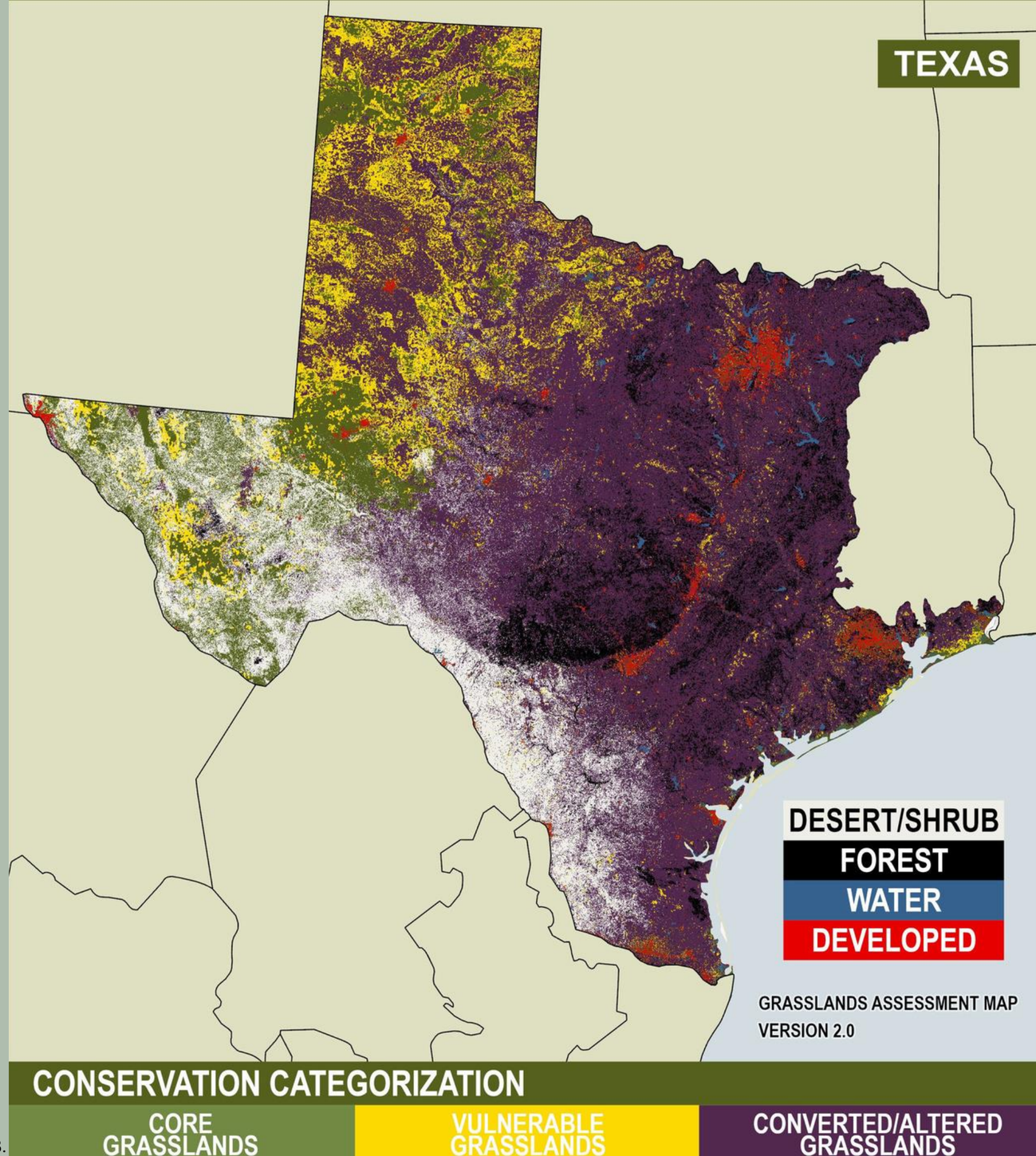
Texas Parks and Wildlife Department, Texas Ecoregions, 2024;
Ladybird Johnson Wildflower Center, TLP_Map007_Prairies_PR, 2017.

HABITAT LOSS AND DEGRADATION

Today, about **one percent** of the original native grasslands **remain** throughout the state of Texas.

- Agricultural production
- Urbanization
- Industrial development

Cultivation and conversion of the landscape has influenced the loss of native plant communities, as well as changes in soil, hydrology, and topography.

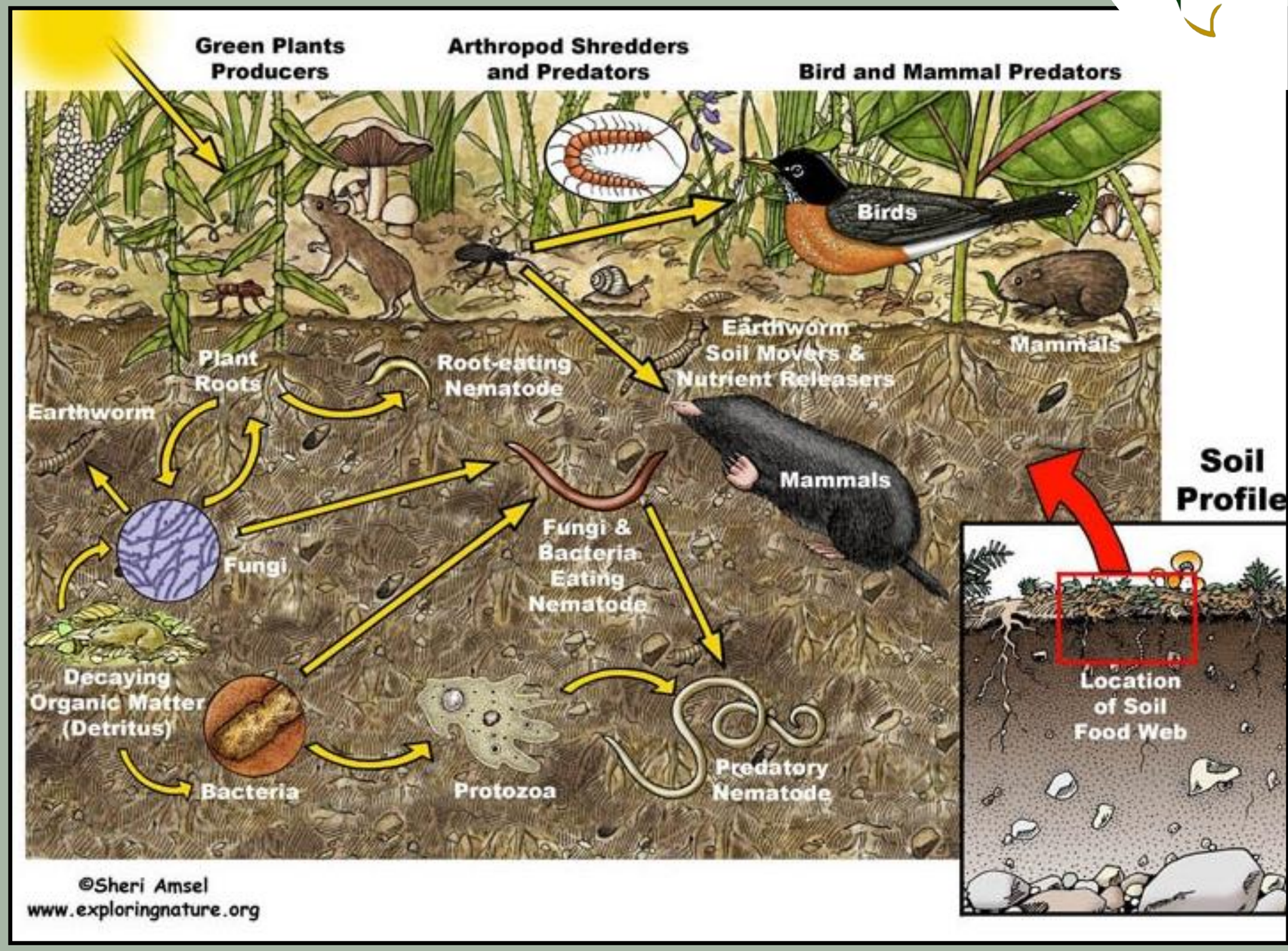


The Central Grasslands Roadmap, 2023.

Soil is its own ecosystem!

Organisms including bacteria, fungi, protozoa, nematodes, insects, earthworms, and plant roots.

Responsible for nutrient cycling, decomposing organic matter, storing plant nutrients, building soil structure, reducing compaction and erosion, sequestering carbon, increasing water holding capacity, and allowing for deeper root structures.



SUSTAINABLE PRACTICES

Using best management practices to restore **urban** and **rural** lands to their highest ecological function.

- Regenerative agriculture (adaptive grazing, cover crops, use of no-till drill).

- Restoring native habitat (brush management, invasive species control, native seed plantings).

- Habitat-friendly management (prescribed burns, strategic mowing).

BRUSH MANAGEMENT

Brush management is a tool used to remove or manipulate woody species to create a desired plant community.

Methods used can be mechanical or chemical, often requiring both.

Can vary in intensity based on goal and ecological site.

INVASIVE SPECIES

An invasive species is a non-native species that causes harm to the environment, economy, and/or human, animal, or plant health. Invasive species can be a plant, animal, or disease.

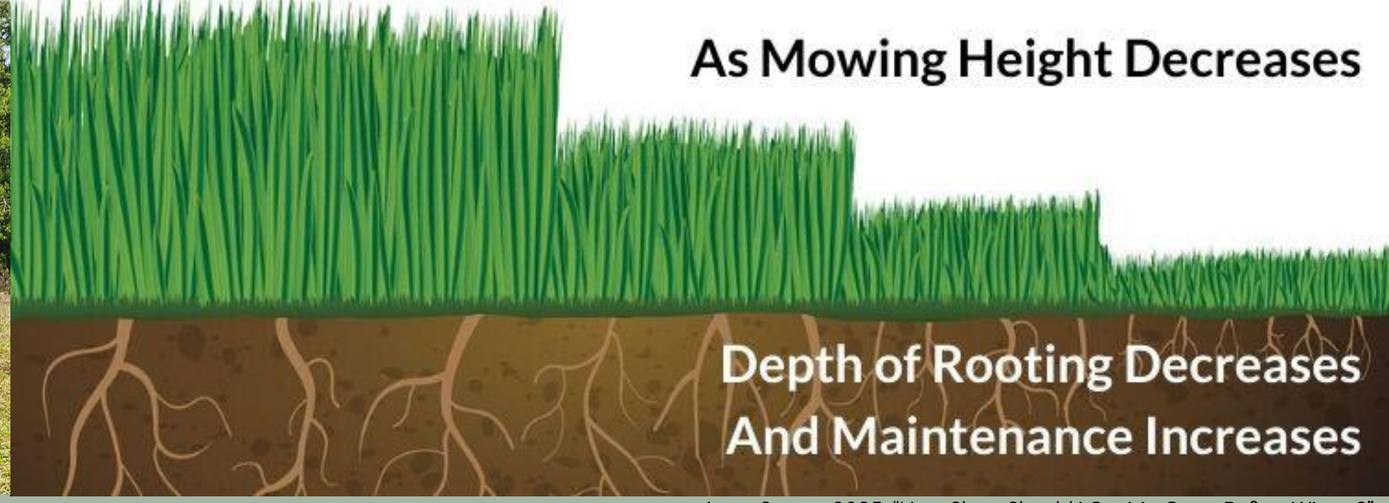
Must be eradicated to the highest extent possible. Methods used can be physical, mechanical, biological or chemical methods.

Multiple chemical applications may be necessary to gain control for proper seedbed condition.

COVER CROPS

Cover crops can increase soil organic matter and have a positive effect on a soil's physical, biological and chemical properties, as well as provide competition for space and sunlight with undesirable species.

WHF utilizes a site specific multi-species seed mix of Brassicas, Grasses, and Legumes.



LawnSavers, 2025, “How Short Should I Cut My Grass Before Winter?”.

MOWING & HAYING

Mowing or haying can be used as an effective management tool if done properly and timely! 6-inches of stubble should be left to ensure that the root system of plants are not impacted.

Traditional mowing of turf lawns has several negative environmental impacts: significant water usage, chemical runoff from fertilizers and pesticides, reduced biodiversity due to monoculture planting, soil compaction from frequent mowing, and high carbon emissions and air pollution from lawn maintenance equipment.

PRESCRIBED BURNS

Historically, fire was Mother's Nature management tool, which heavily influenced the native plant communities. Still is a great management tool!

Benefits include:

- Managing fuel loads, reducing wildfire risks
- Improving habitat and diversity
- Promoting new growth
- Nutrient cycling
- Managing vegetation, controlling woody encroachment

ROTATIONAL GRAZING

Traditional grazing practices allow livestock continuous access to pastures for an extended period of time.

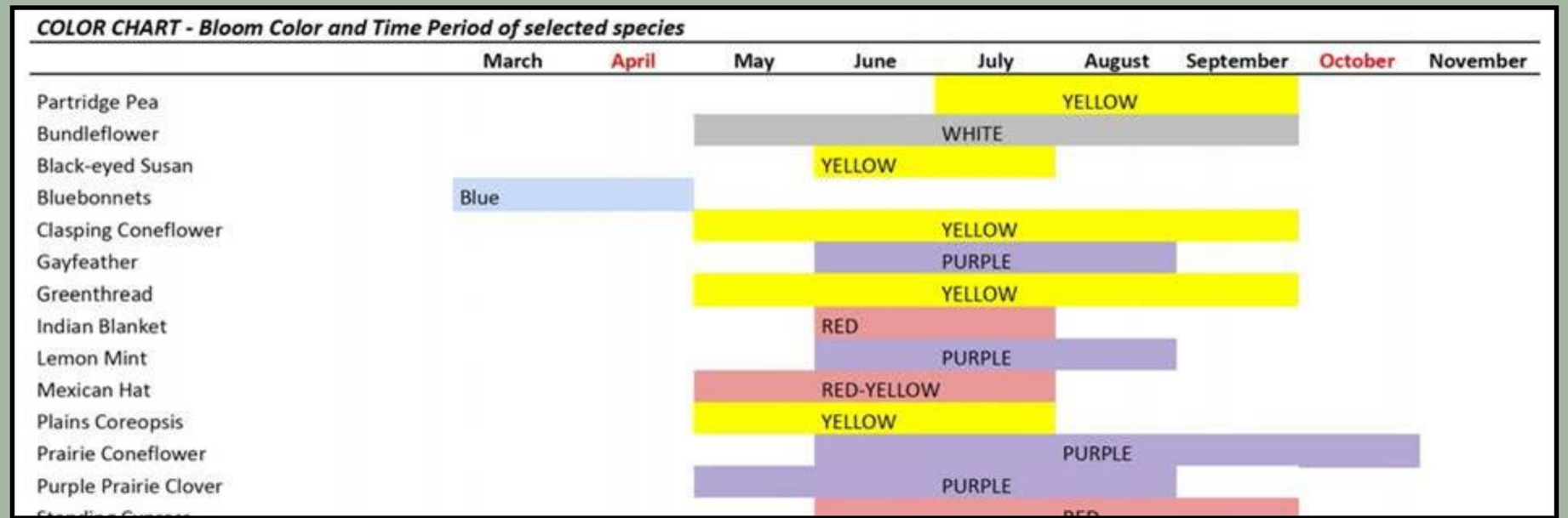
Rotational grazing practices involve cycling livestock through **different grazing areas** for a certain amount of time. Allows for **rest and regrowth** between grazing periods, mimicking bison herd movements.

Benefits include:

- Increased forage production and quality of forage
- Improved soil health and reduced soil erosion
- Improved water infiltration and retention
- Improved animal health
- Increased livestock productivity, increasing carrying capacity
- Enhanced manure distribution, reducing supplemental fertilization
- Increased profitability

NATIVE SEED MIX

- Dependent on the goals and capabilities of the landowner.
- Species selected based on soils and Ecological Site Descriptions (NRCS).
- The costs and availability of seed is important. The use of locally sourced ecotypes is preferable.
- Incorporation of a diverse mixture of native annual and perennial forbs (40-60%) is provided to ensure floral resources are available throughout the pollinator season.



WHY DO NATIVE PLANTS MATTER?

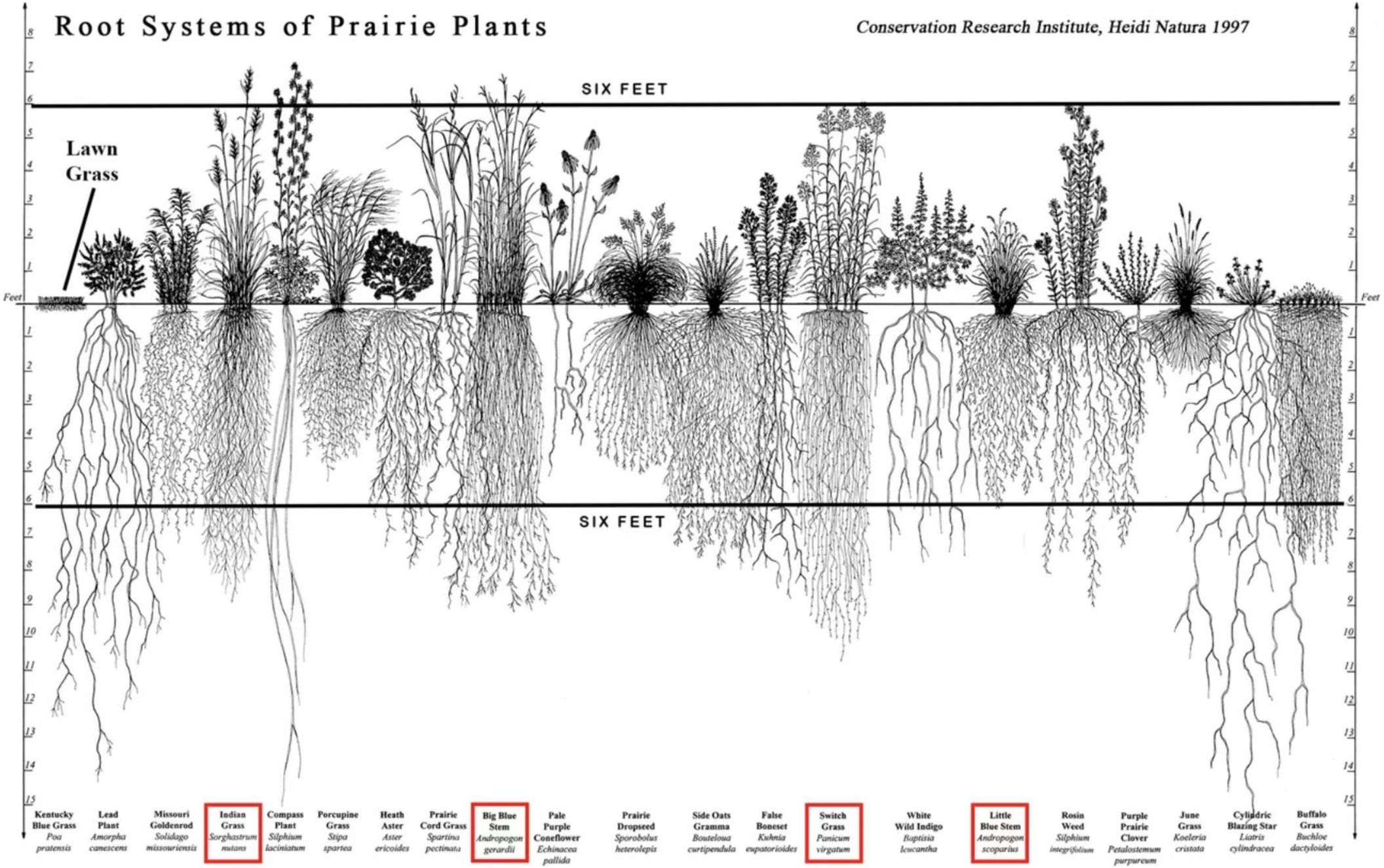


Illustration of prairie plant roots and surface growth. The four dominant tallgrasses are highlighted with a red box.

Heidi Natura, Conservation Research Institute, 1997

BENEFITS OF NATIVE PLANTS

SOIL:

- Prevent erosion
- Improve water infiltration
- Add organic matter
- Nitrogen fixation

AIR:

- Sequester carbon

WATER:

- Reduce runoff
- Mitigate drought and floods
- Replenish groundwater
- Remove pollutants

WILDLIFE:

- Provide necessary food and cover for native wildlife
- Provide necessary habitat for pollinators
- Maintain biodiversity

HUMANS:

- ALL OF THIS EFFECTS YOU!!!

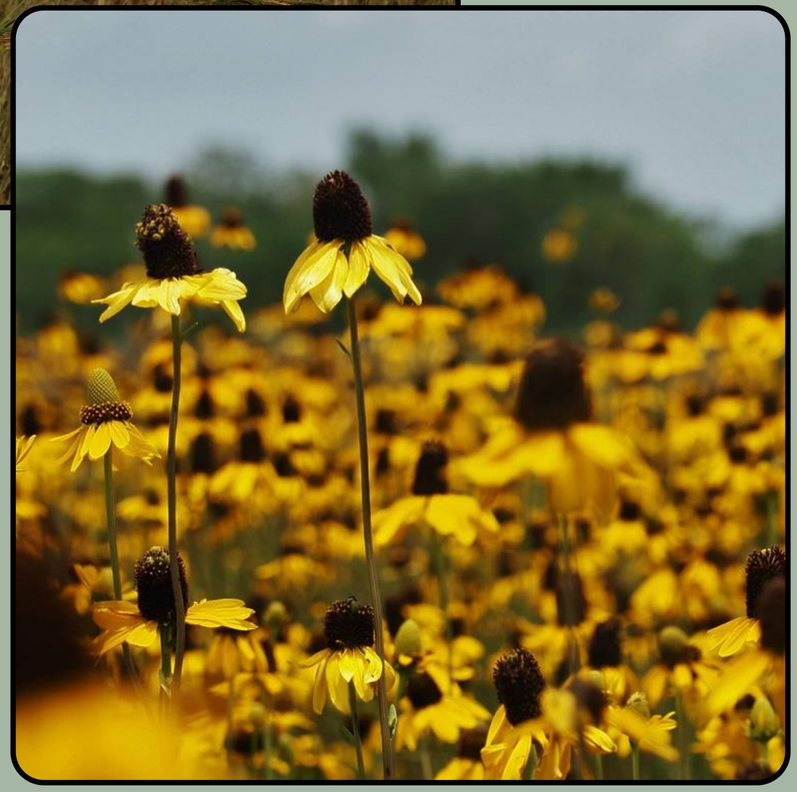

Rodney Ellis
COMMISSIONER
PRECINCT ONE


JONES CREEK
RANCH PARK
Hello
September


JONES CREEK
RANCH PARK

DIVERSITY = STABILITY

CONNECT WITH US



WHF

832-760-4372

sky.rhea@whf-texas.org

www.whf-texas.org

Follow us on social media!
@whftexas