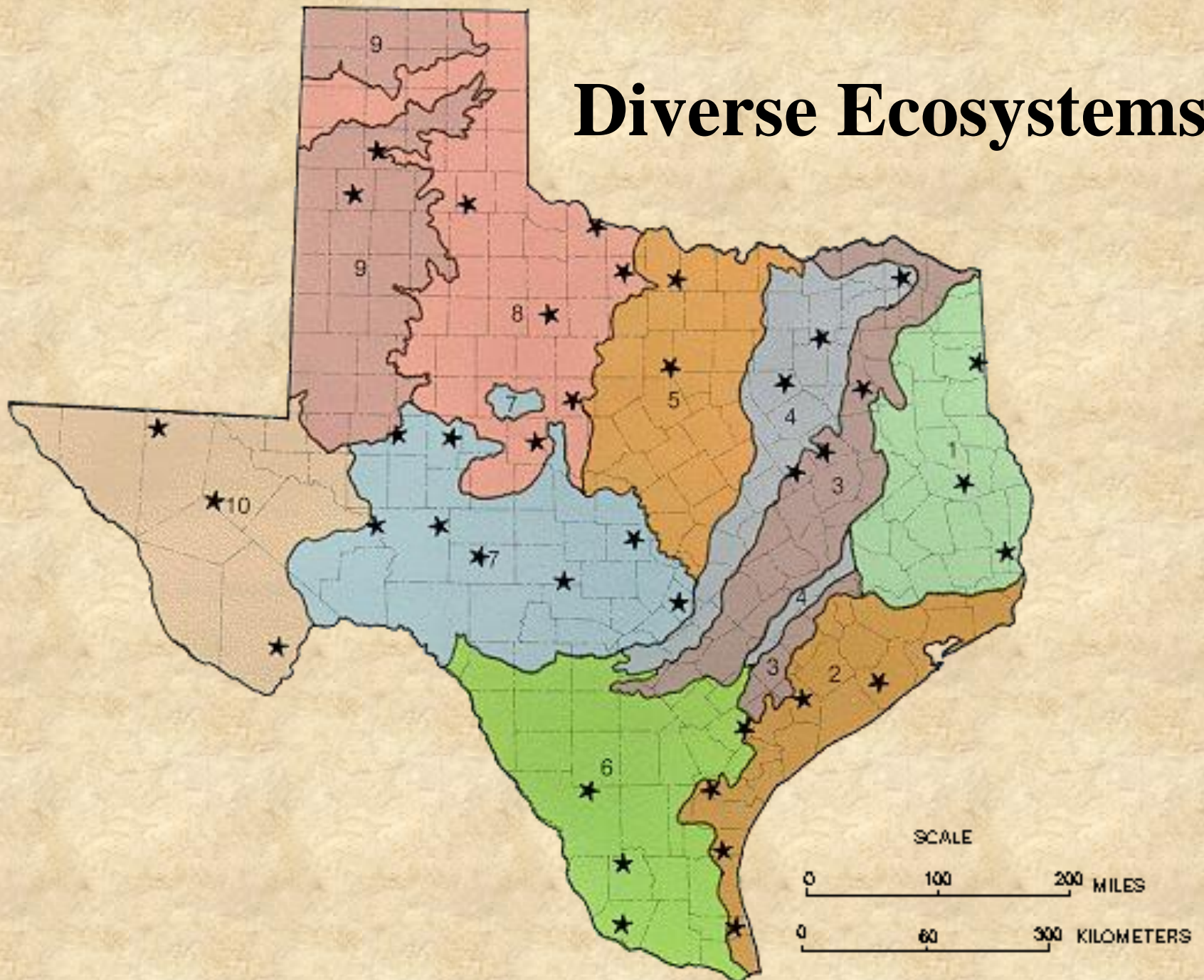




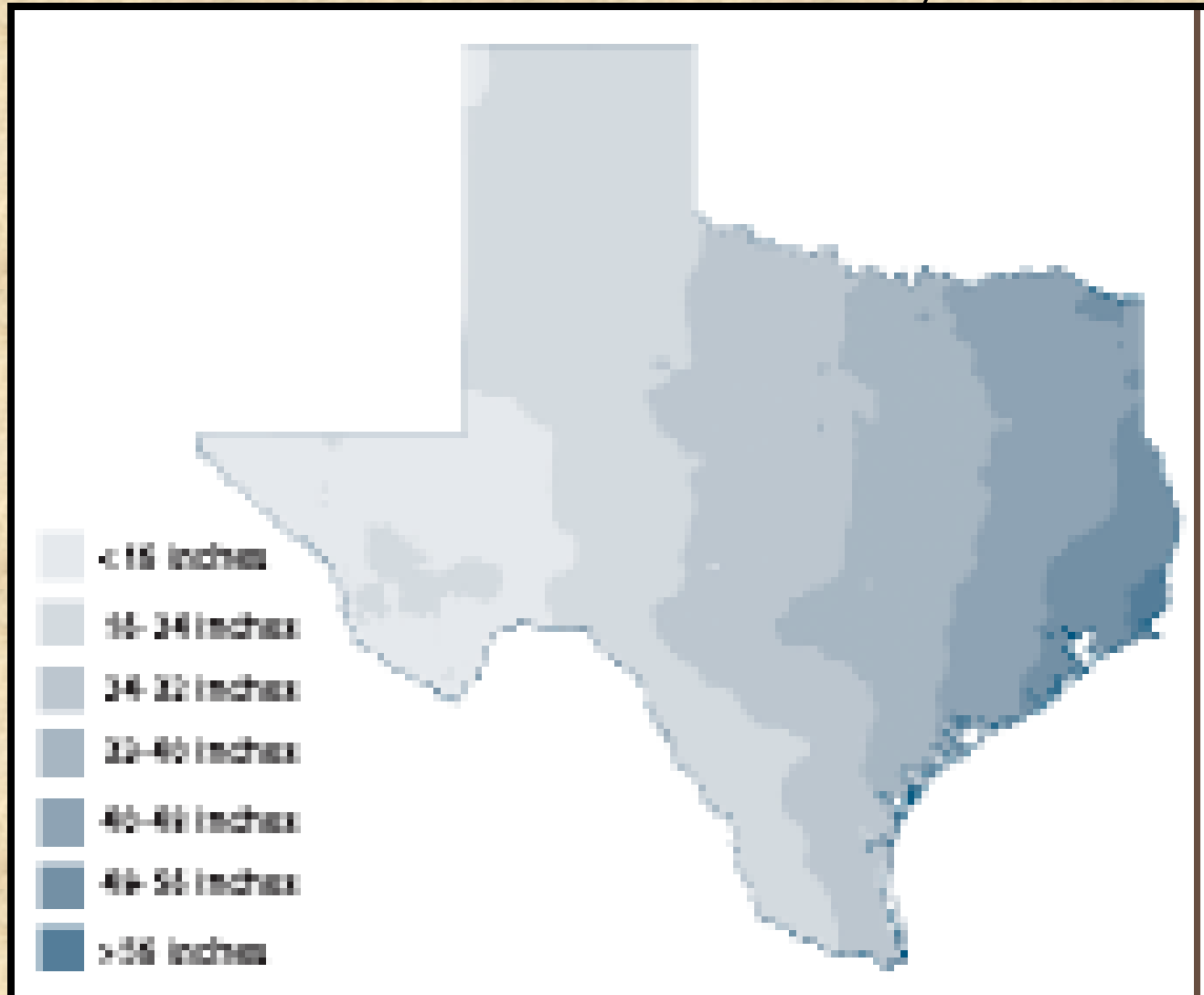
Harvesting Rainwater For Wildlife



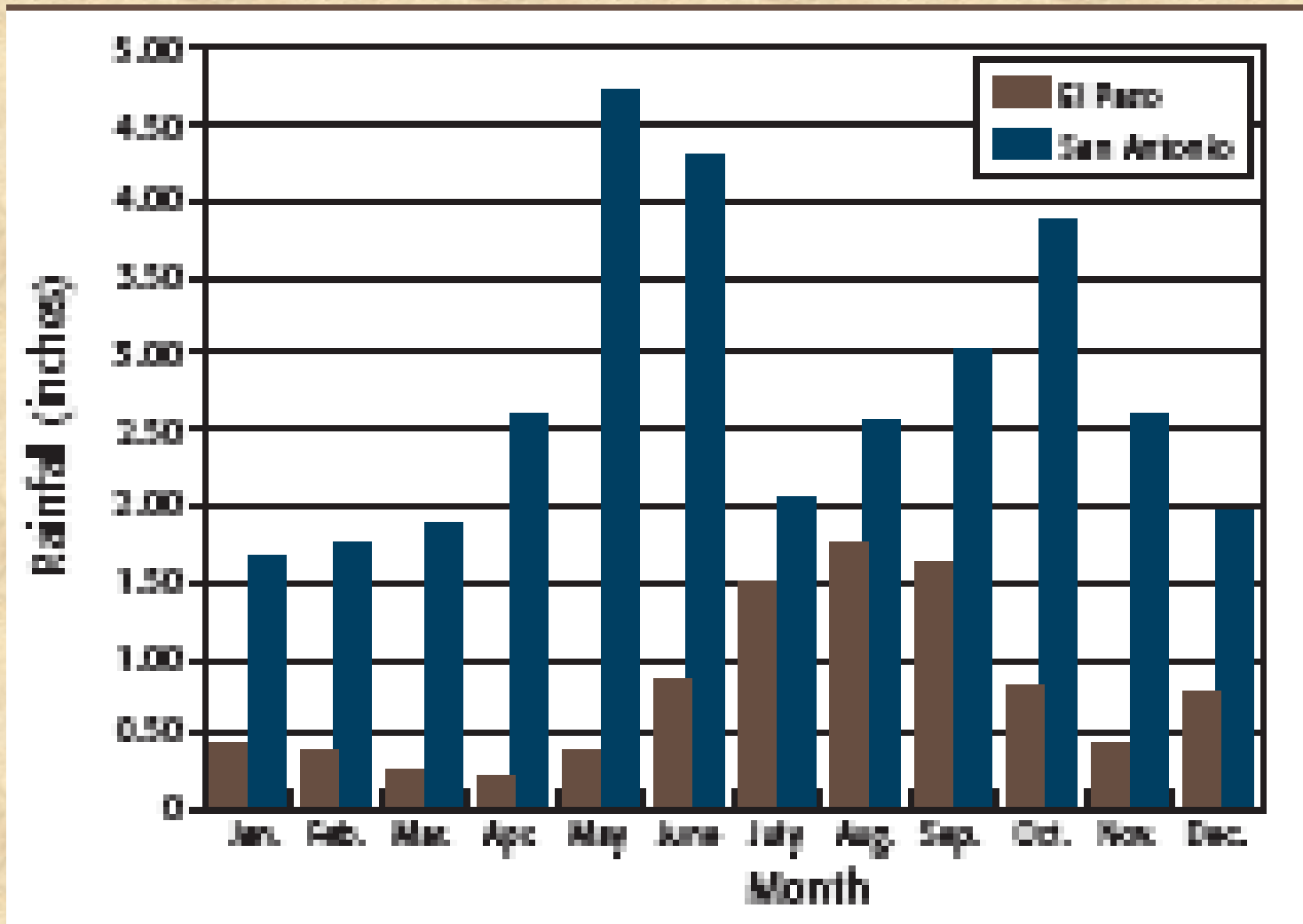
Diverse Ecosystems



Annual Rainfall is Less Than 10 Inches in El Paso And Increase From West To East Where Almost 60 Inches Fall Annually in Port Arthur



Rainfall Patterns Vary Across The State As Well





Food

Shelter

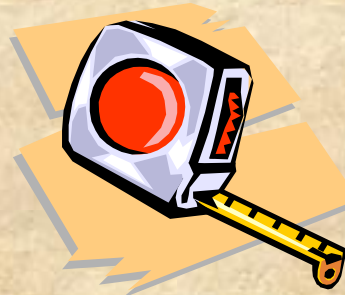


Habitat



Water

Space



Game Species



Non-game Species





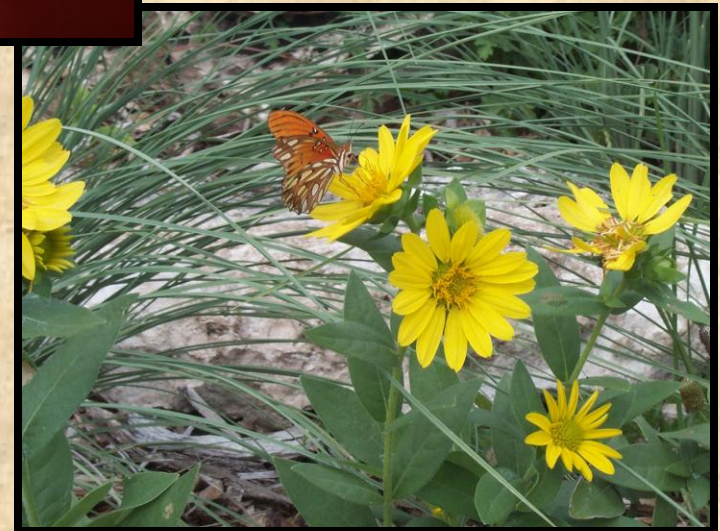
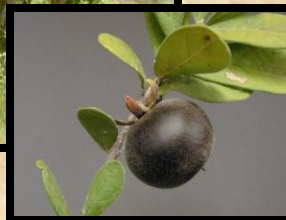
**Exotic Species
Are In Texas.
Some Are Good
And Others Not
So Good!**



Food

Plan For Wildlife:

Select plants for food
and cover



Mast Producers



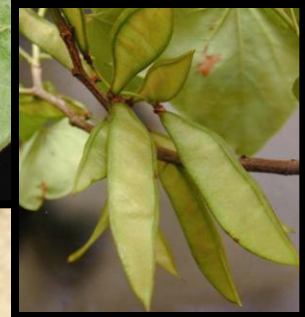
Honey Mesquite



Agarito



Texas Redbud



Nectar, Leaves and Seeds Are All Valuable Food Sources



Make Your Yard a Food Plot



Cover

- Nest boxes
- Snag development
- Establish woody plants
- Establish a native grass prairie



Water

Requirements for Wildlife, Birds and Butterflies - The Basic Ingredient For Life

Three forms of water:

1. Free form
2. Water from vegetation
3. Metabolic water



Water



Supplementing The Free Form Of Water



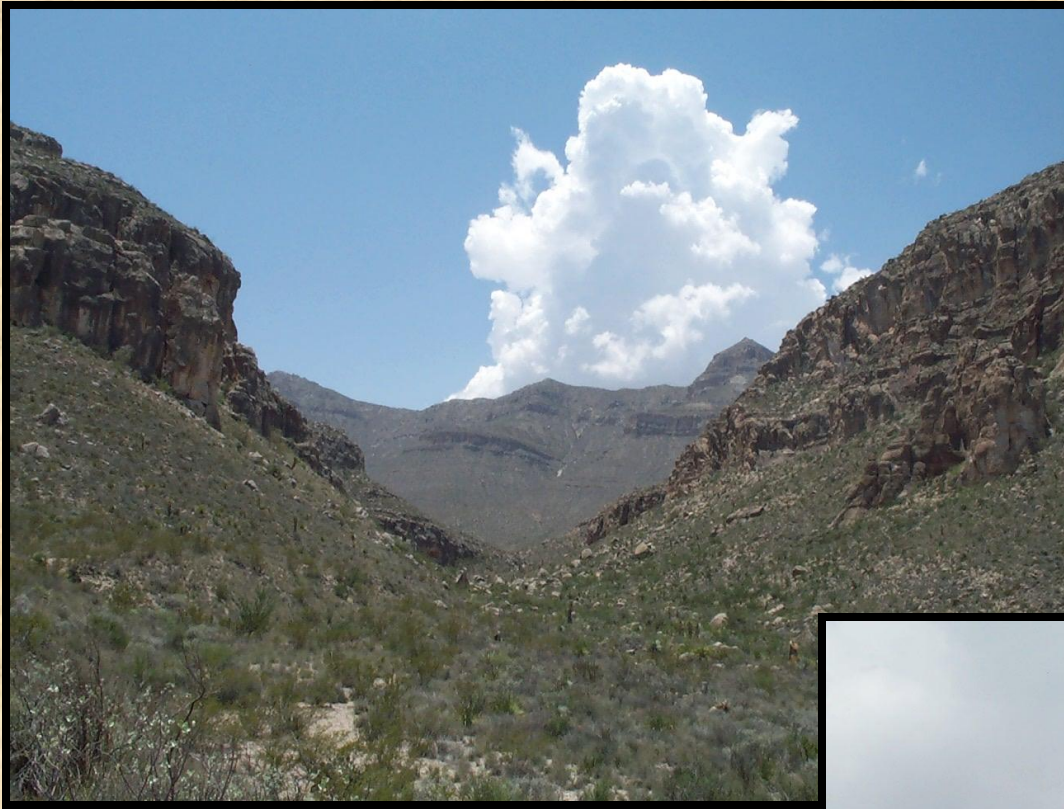
.... With
Rainwater



TPW

Recommended Water Distribution According to Animal Group

- Large Mammals 1 per 320-640 acres
- Medium Size Mammals 1 per 320 acres
- Smaller Mammals 1 per 80-160 acres
- Wild turkey/mourning dove 1 per 320-640 acres
- Quail and most song birds 1 per 80 acres



**Large Wildlife
Guzzlers Have
Been Used For
Over 40 Years in
West Texas**

- Black Gap and
Elephant Mountain
Wildlife Mgt. Areas





This Concrete Pad And
A 3,000 Gallon
Underground Collection
Tank Provides Wildlife
Easy Access To Water.





The Water Here Is Less
Exposed To The Air Which
Reduces Evaporation





6'x8' Roof With A 300
Gallon Collection Tank
And Pet Watering Pan
Provides Water For Pets,
Wildlife And Birds.





Commercial Companies are Designing Guzzlers Like This One Made With Fiberglass. This one is Designed To Be Buried With Only The Top Catchment Roof and Front Exposed.



Plow Disks and Drip Irrigation Emitters Make Great Bird and Wildlife Water Guzzlers



A Simple Water Guzzler: 4' x 8' roof , A 50 Gallon Barrel and A Pet Watering Pan. The Frame Could Be Made With Wood Or Metal.





Texas State University's Freeman Ranch Wildlife Water Guzzler – 20' x 20' Roof And Two 1500 Gal. Tanks. The Fence Keeps Livestock Out.



The Larger Tub May Attract Mosquitoes Unless Mosquito Dunks Are Used. The Cover Over The Float Prevents Raccoon From Damaging The Guzzler.

World Birding Center - Mission





The Sound Of Dripping
and Running Water
Attracts Birds and
Wildlife



The **Bird Bath** Is
Made of Rocks
Cemented Together on
Top Of A stump. The
Drip Irrigation Tubing
is Run through a **3/8"**
Copper Tubing.

- This 1,000 Gallon
Collection Tank
Provides Water For A
Pond And Bird Bath





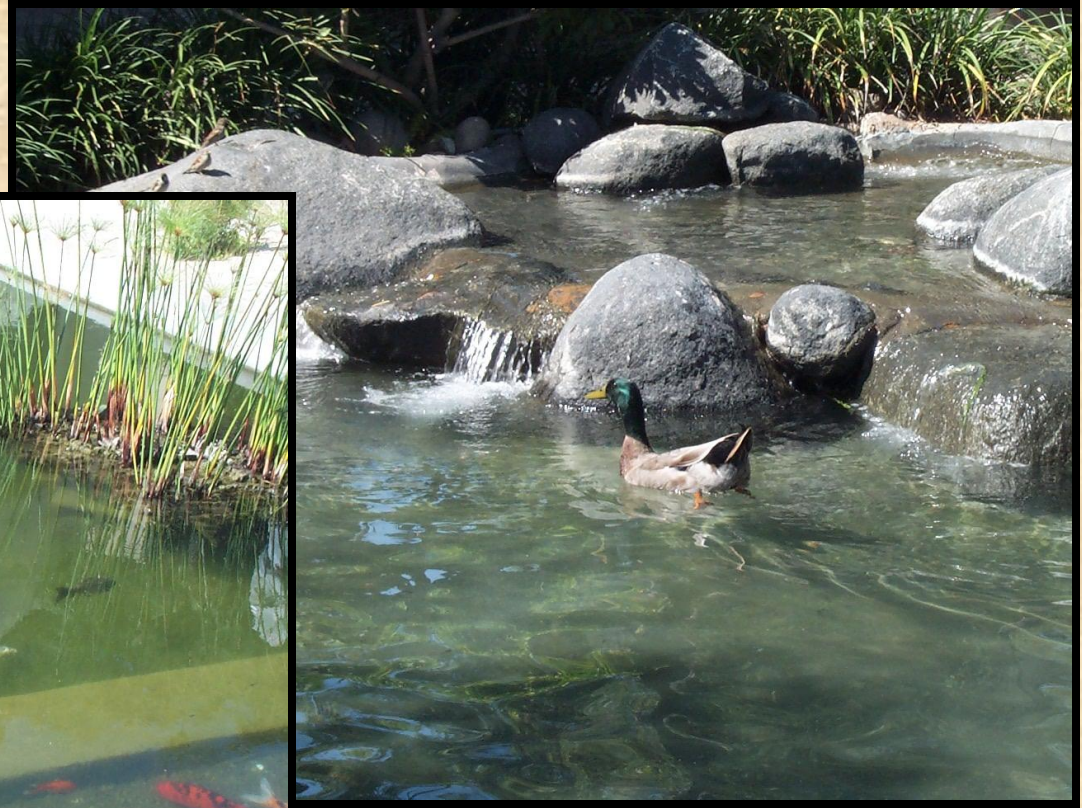
- A Very Simple Water Guzzler For Large and Small Animals and Birds. A Cedar Post Frame, Tin Roof and Gutter, Livestock Water Trough and a Livestock Watering Pan Buried to Ground Level Provides Water.



A Rain Barrel And Water Hose Can Be Connected To A Pet Watering Pan Or A Drip Irrigation Emitter To Provide Water For Birds, Pets Or Wildlife.



Rainwater Is Ideal For Ponds Too!



Water Stewards



Are Land Stewards



Tools of Management

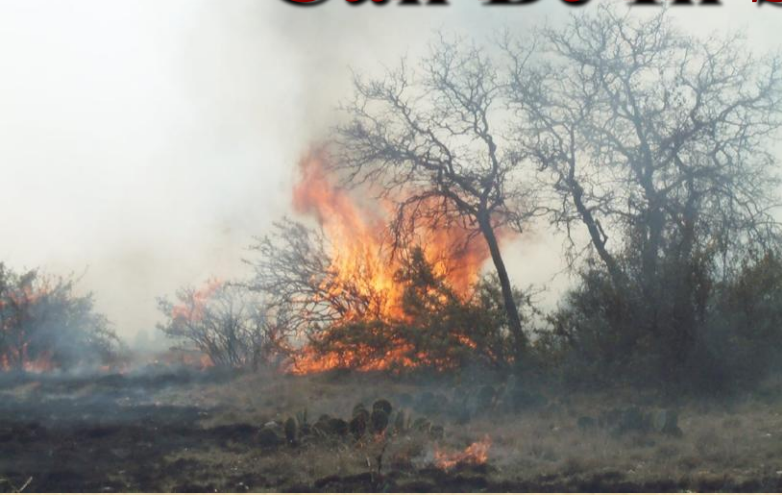
"The central thesis of game management is this: Game can be restored by the Creative use of the same tools which have heretofore destroyed it –

axe, plow, cow,
fire, and gun."

- Aldo Leopold.



Fire is a Natural Tool – And Still Can Be In Some Locations- But...



Teach The Next Generation On Using Prescribed Burn



Diversity Is Good



Diversity Provides For Wild Things





David and Margaret Bamberger

- *“The greatest use of life is to spend it for something that **will** outlast it.”*



“I’m the steward, not the owner,...

that’s what we all are -stewards. And I hope my legacy will not be that he made a lot of money or accomplished things in a business sense, but that he sustained a movement that influenced enough people to ensure that the coming generations will be able to live richer, fuller lives.”

“The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased and not impaired in value.” - Teddy Roosevelt



Where Are The Buffalo -Gone



“Where Are The Buffalo – Gone”

“The great chief in Washington sends word that he wishes to buy our land. How can you buy or sell the sky, the warmth of the land? The idea is strange to us. Yet we do not own the freshness of the air or the sparkle of the water. How can you buy them from us? Every part of this earth is sacred to my people. ...

We know that white man does not understand our ways. One portion of the land is the same to him as the next, for he is a stranger who comes in the night and takes from the land whatever he needs. The earth is not his brother but his enemy and when he has conquered it he moves on. He leaves his fathers' graves and his children's birthright is forgotten. ...

*There is no quiet place in the white man's cities.
No place to hear the leaves of spring or the rustle of
insect wings. But perhaps because I am a savage
and do not understand, the clatter only seems to
insult the ears. And what is there to life if a man
cannot hear the lovely cry of the whippoorwill or the
arguments of the frogs around the pond at night. ...*

The whites too shall pass. Perhaps sooner than other tribes. Continue to contaminate your bed and you will suffocate in your own waste. When the buffalo are all slaughtered, the wild horses all tamed, the secret corners of the forest heavy with the scent of many men, and the view of the ripe hills blotted by talking wires, where is the eagle – Gone. Where is the buffalo – Gone. And what is it to say goodbye to the swift and the hunt, the end of living and the beginning of survival.”

Chief Seattle to President Franklin Pierce, 1855.



You may be the best steward the land under
your care has had in over 100 years.

Sunrise or Sunset

