JUN 2020| ISSUE 9

Team Goal Earth
JBSA Environmental

Let's SOAR!

Stop Pollution
Obey Laws
Always Improve
Reduce Waste

POLLINATORS

SARAH OTTO

Pollinating insects, and some animals, including birds, bats, and lizards help to pollinate 75% of our flowering plants and almost as much of our crops!

So bee pollinator friendly! (Get it?)

- Plant a pollinator garden
  - Choose native plants in a variety of colors and shapes, that flower at different times of the year
  - This has the added benefit of needing less water and less chemicals, since native plants are evolved to better deal with plant disease and unwanted insects.
- Provide nesting sites
  - trees and shrubs for hummingbirds, or milkweed for monarch butterflies, for example
- provide fresh water
  - Not standing water, unless you're looking to attract mosquitoes, which are also pollinators, but you may not want a bunchjust of a less desirable sort.
- avoid or limit pesticide use

In this newsletter:

If you would like to contribute to this newsletter, please contact Sarah Otto.
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WATER IN TEXAS: IRRIGATION

JOCK FLORES

Have you ever wondered how important water has been throughout the history of Texas? Texans know the value of water as we are known for being in a constant state of either drought or deluge, depending on what part of the state we reside. Whether you are a native Texan, transplant or transient, water is a focal point for every resident.

As summertime approaches water use increases across the state. Early inhabitants of Texas were not immune to seeking relief from the Texas sun. The headwaters of the San Marcos River at Spring Lake is one of the longest persistently inhabited sites in North America. An underwater archaeological dig in Spring Lake uncovered Indian artifacts dating back over 12,000 years to the Clovis people, whom to date are the oldest known inhabitants of the western hemisphere.

The importance water carries cannot be underestimated. These early cultures and Texans in later times were keenly aware of its life or death implications. When the Spaniards arrived in Texas priority was given to obtaining a reliable water source. The area in which the King Ranch is located in South Texas was given the name “El Desierto de Los Muertos” by the Spaniards due to lack of available water. They described it as an inhospitable land incapable of supporting life. Water was essential for the survival of the Spaniards and their missions.

"Water, water everywhere, but not a drop to drink."
from
The Rhyme of the Ancient Mariner
by
Samuel Taylor Coleridge

Although, irrigation had been established in parts of the world for at least 4,000 years. In the United States possible origins included West Texas or New Mexico. Evidence hints of a pre-historic agriculture in a few West Texas localities. The Spaniards encountered Natives in New Mexico and Arizona raising crops in arid climes with collected and diverted water flowing to their planted fields. These Natives utilized brush dams which caught the flow of dry arroyos and when flushed by a thundershower watered the thirsty fields even though no rain fell on the field itself. Additionally, records left by Francisco Vazquez de Coronado and others indicate that the Indians had developed and established these irrigation systems near present day El Paso and Pecos. These locales were supplied water by both the Rio Grande and the Pecos River.

The Franciscans were the first Europeans to practice irrigation in Texas. Between 1716 and 1744 the Franciscans constructed acequias that supplied domestic water and irrigation at seven missions here in the San Antonio area. Today there is still one rock-lined acequia madre (''mother ditch'') still in use. The first crop known to be grown under irrigation in what we now call Texas was corn, which was successfully cultivated by both Indians and missionaries.

Large scale irrigation began with canals in the vicinity of Del Rio in 1868. Two years later development started on the Pecos River, in the lower Rio Grande Valley, and in the Fort Stockton area. In 1913 the Texas legislature passed the first major irrigation act, this required the establishment of the Board of Water Engineers to regulate water appropriations. A drought from 1916-1918 revived interest in irrigation from storage reservoirs and the state constitution was amended providing the formation of water-conservation districts by landowners. Irrigation increased substantially throughout the first half of the twentieth century. Irrigated land in Texas experienced rapid growth from 1950 on with groundwater from high quality sources such as the Ogallala sands, as well as the Balcones Escarpment and farms in the Trans-Pecos. In the later years, new practices were adopted for irrigation of croplands. Sprinkler systems along with surface systems that channeled water into borders, rows, and field levees (mainly used for rice production) employed efficient pipelines or lined ditches to prevent water loss. Drip irrigation also generated interest and was employed for tree crops and became standard in many orchards.

The importance of water has always been important in Texas. Its availability satisfies our agricultural and recreational needs. Water availability will continue determine these uses in the future. As summertime approaches and you are enjoying the lake, river or driving by a field being irrigated you can wonder at the advances we have made in water production and conservation. We can always be mindful of our everyday practices as we continue to be good stewards of this most precious resource.

JBSA HAZARDOUS WASTE PROGRAM

MARKUS GEORGE

Got Hazardous Waste?

- Only use containers issues by JBSA Waste Management Personnel
- Only accumulate the waste identified on the label
- Do not mix waste streams
- Don't fill to the top of the container - keep 4" of free space from the opening to allow for expansion
- Expired chemicals must be accompanied by an SDS
- All waste accumulation drums must be in good condition and clearly marked with the words "HAZARDOUS WASTE" or "UNIVERSAL WASTE"
- Full containers must be turned in within 3 days from the fill date

Batteries

Alkaline:
Disposed as regular trash

Lead-Acid:
Attempt to participate in a one-for-one exchange program, otherwise, call Waste Management Personnel to set up a turn-in appointment.

Other:
Write the words "UNIVERSAL WASTE BATTERY" with the date the battery became waste and call Waste Management Personnel to set up a turn-in appointment.

Lamps

- Contact Waste Management Personnel to obtain a properly labeled waste container.
- Write the date the first lamp placed in the container became waste

JBSA Waste Management Personnel:

SAM:	LAK:	RND:
846-0058	671-3658	652-5666
380-6235	452-1067	452-2938
	716-2606	245-0595