Llano Estacado Texas Master Naturalists Curriculum Guide

Unit 11: Plants

Unit Goals: After completing this unit, volunteers should be able to:

* Explain why it is important to be familiar with scientific plant names
* Describe the classes of plants
* Become familiar with and describe the parts of a plant
* Compare and contrast the four classes of plants
* Become familiar with leaf and flower types, placements, and arrangements to identify plants
* Explain what an invasive plant is and give some examples
1. Knowledge of plants, soils and climate conditions becomes the basis of natural resource management.
2. How many flowering plant species are in Texas ? \_\_\_\_\_\_\_\_\_\_\_\_
3. How many species are endemic (grow only in Texas)?\_\_\_\_\_\_\_\_\_
4. We use the scientific name of plants because the scientific name is the communication medium in which all information about the plant is tied or attached. Give 3 reasons to name plants using their scientific name rather than common name:

 A.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 B.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 C.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. There are 4 major classes of plants:
2. **Grasses** have jointed stems.
3. Grass leaf veins are which (circle the answer)?: Parallel Non-parallel
4. Leaves appear in \_\_\_\_\_ rows on the stem and are usually flattened.
5. **Grass-like plants**–Sedges or rushes are grass-like plants.
6. Sedge leaves appear in \_\_\_\_\_ rows on the stem and are flattened.
7. “Sedges have edges” and have \_\_\_\_\_\_\_\_\_\_\_\_\_\_stems. Rush stems are \_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_ and are usually rounded.
8. **Forbs** are broad-leafed, flowering plants that are not grasses or grass-like plants.
9. Leaves can have parallel or net veins, but \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are more common.
10. Forbs are often referred to as \_\_\_\_\_\_\_\_\_\_\_\_\_ which is misleading because \_\_\_\_\_\_\_\_\_\_\_\_ are considered “plants whose virtues have yet to be discovered.” However, forbs are often good foraging plants and necessary for pollinators.
11. **Woody plants** are which of the following (circle)? Annual Perennial
12. Woody plants can be browse or \_\_\_\_\_\_\_\_\_\_\_ plants.
13. Plant parts:



1. Describe the differences between a root and a rhizome and name a native Texas plant example for each.
2. Explain why bermuda grass can be considered an invasive plant on the Llano Estacado.
3. Draw an alternate leaf arrangement and a leaf with a serrated margin.

**Extra info on Plant Lists for Food and Medicine**

**From Valerie Morales, LETMN Member**

This section is for your information only; There is a PDF of Valerie’s presentation on the website you can review for some wonderful information: [www.txmn.org/llano/training-classes/](#_top)

Yucca: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the Asparagus family

 scientific name

Lamparas de dios-Lamps of the Lord



|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Forb, grass or grass-like? | Perennial or Annual? | Root/seeds or Rhizome to spread? | Western Native or Invasive? | Medicinal uses | Preparations e.g. tea, tincture, oil, etc. | Other notes |
|  |  |  |  |  |  |  |

Goathead: *Tribulus terrestris* in the Caltrop family



|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Forb, grass or grass-like? | Perennial or Annual? | Root/seeds or Rhizome to spread? | Western Native or Invasive? | Medicinal uses | Preparations e.g. tea, tincture, oil, etc. | Other notes |
|  |  |  |  |  |  |  |

Dandelion: . *Taraxacum officinale* in the Aster/Sunflower family



|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Forb, grass or grass-like? | Perennial or Annual? | Root/seeds or Rhizome to spread? | Western Native or Invasive? | Medicinal uses | Preparations e.g. tea, tincture, oil, etc. | Other notes |
|  |  |  |  |  |  |  |

Scarlet Globe Mallow: *Sphaeralcea coccinea* in the Mallow family

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| --- | --- | --- | --- | --- | --- | --- |
| Forb, grass or grass-like? | Perennial or Annual? | Root/seeds or Rhizome to spread? | Western Native or Invasive? | Medicinal uses | Preparations e.g. tea, tincture, oil, etc. | Other notes |
|  |  |  |  |  |  |  |

Silverleaf Nightshade: *Solanum elaeagnifolium* of the Nightshade family.



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| --- | --- | --- | --- | --- | --- | --- |
| Forb, grass or grass-like? | Perennial or Annual? | Root/seeds or Rhizome to spread? | Western Native or Invasive? | Medicinal uses | Preparations e.g. tea, tincture, oil, etc. | Other notes |
|  |  |  |  |  |  |  |

**Other Plants/Notes**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| NameForb, grass or grass-like? | Perennial or Annual? | Root/seeds or Rhizome to spread? | Western Native or Invasive? | Medicinal uses | Preparations e.g. tea, tincture, oil, etc. | Other notes |
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References: [https://www.wildflowers-and-weeds.com/](#_top)