



Landscaping for Wildlife

LaJuan D. Tucker

Park Ranger II Wildlife Austin Program
City of Austin Parks and Recreation Department



Objectives

- History of Wildlife Austin
- Define threats to wildlife habitats, specifically pollinator habitats
- Define the 4 elements of a wildlife habitat
- Landscaping principals to attract wildlife
- NWF certification and suggested plants



The History of:



Past, Present, and Future

Wildlife Austin Today...



- ◆ Wildlife Austin became certified in 2009!

Now, we are charged with keeping Austin certified.

- Have a certain number of newly certified habitats each year
- Education and outreach activities
- Maintain the website
- Mentor other communities interested in certification



Wildlife Austin Today...

◆ Our newsletter –



Garden of the Month

This month we feature the lovely natural garden of Valerie Barron.



Lots of great wildlife habitat in this garden!

Living In a WUI

Rodentia

With the January weather turning cool, there is an increased need for food and shelter in the Austin Wild land Urban Interface (WUI). In the late winter months some Austin residents report seeing more rodents scurrying to collect precious resources to ensure their survival in the coming months. As winter sets in and temperatures drop it is not unusual to see the fuzzy faces of Rodentia (rodents) burrowing, scurrying or gnawing at the Wildlife Habitats that provide food, shelter, water and a place to raise young for Austin's wildlife. It is important to remember that wildlife everywhere has inherent value but there are steps we can take to ensure that our wildlife habitats and properties attract the wildlife we intend.



Schoolyard Habitat Update



Spotlight Campus: Gus Garcia Middle School

By Anne Muller (AISD Outdoor Learning Specialist)

Students rock at Garcia Middle School! From habitat design, to moving rocks and soil around and planning and implementing the ribbon cutting ceremony- they've done it all! Garcia is one of the 2011-2012 Certified National Wildlife Federation Habitats.



Living In a WUI

Coyotes

Coyotes (*Canis latrans*) are one Austin's top predators and are often spotted in our Wildland Urban Interface (WUI). Coyotes have a large range of habitat that spreads as far south as Panama and as far north as Canada and Alaska. Prior to European settlement, their range is estimated to have been limited to the southwest and plains area of the U.S. and Canada. With the removal of wolves (*Canis lupus* and *Canis rufus*) due to decreasing wilderness lands in the United States and Mexico in the 1900's the coyote's range greatly expanded. Unlike wolf populations, which generally depend on wilderness settings and larger prey, coyotes are extremely adaptive. With urbanization, their population (and human contact) have increased. Generally seen at dusk and dawn, coyotes are long and lanky with dark brown to black coloration on the saddle and neck with lighter brown fur covering the flanks and legs.

Some land managers and scientist agree, that coyotes may be



The Future of Wildlife Austin

- ◆ Maintain Austin's certification
- ◆ Community Education—Habitat Stewards
- ◆ Habitat establishment on City property
- ◆ Habitat Establishment on School Grounds
- ◆ Community gardens
- ◆ Increased focus on pollinators



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McNeil High School



Blackshear Elementary



Why are Wildlife Habitats at Risk?

- **Habitat Fragmentation**

- The loss of habitat due to parceling and piecing off of habitat

- **Habitat Destruction**

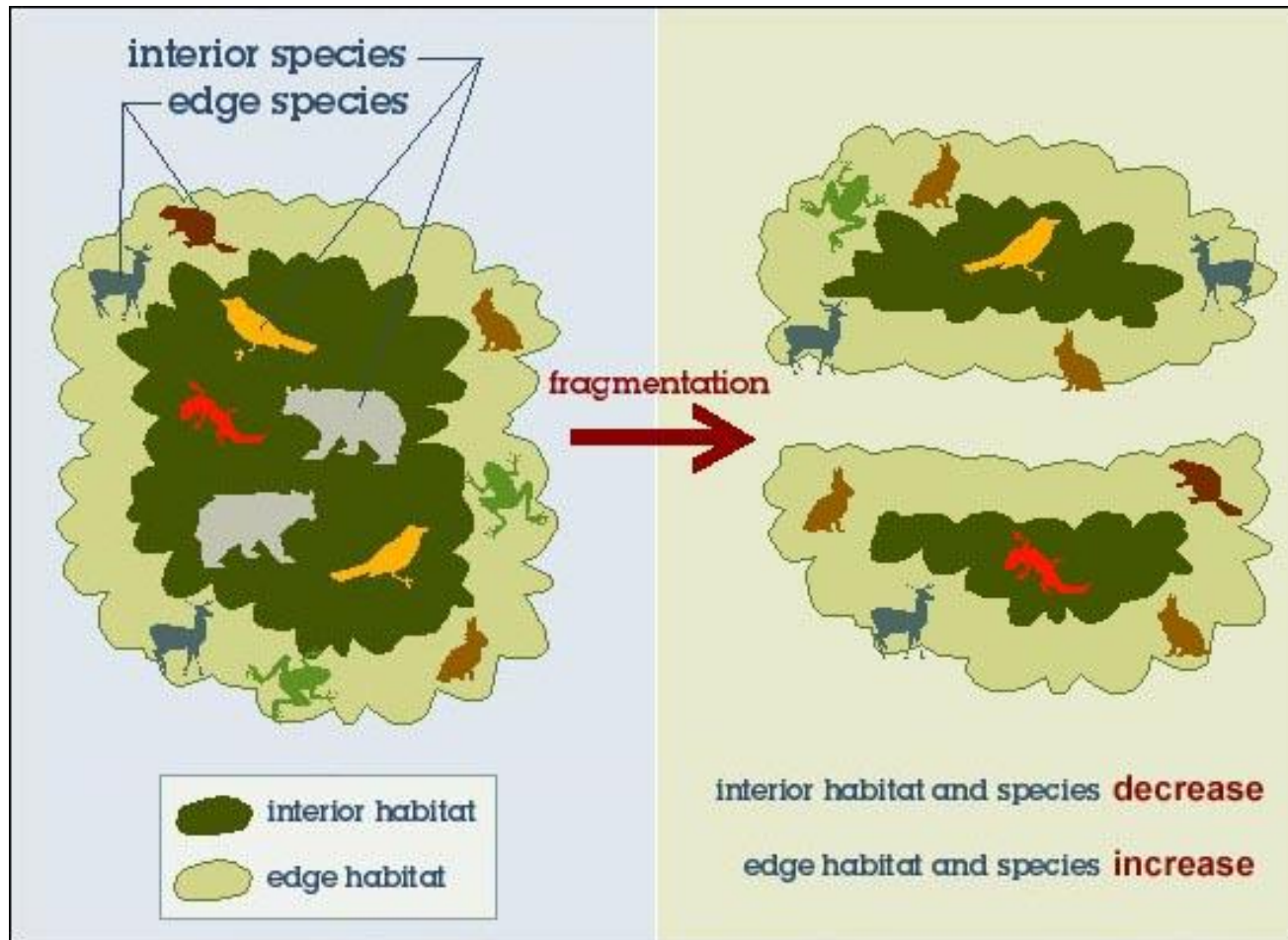
- Habitat is completely removed

- **Habitat Degradation**

- The decreased ability of a habitat to provide the basics to wildlife

Threats to Wildlife Habitat

Habitat Fragmentation



Fragmentation Cont'd



Habitat Degradation

Pollution

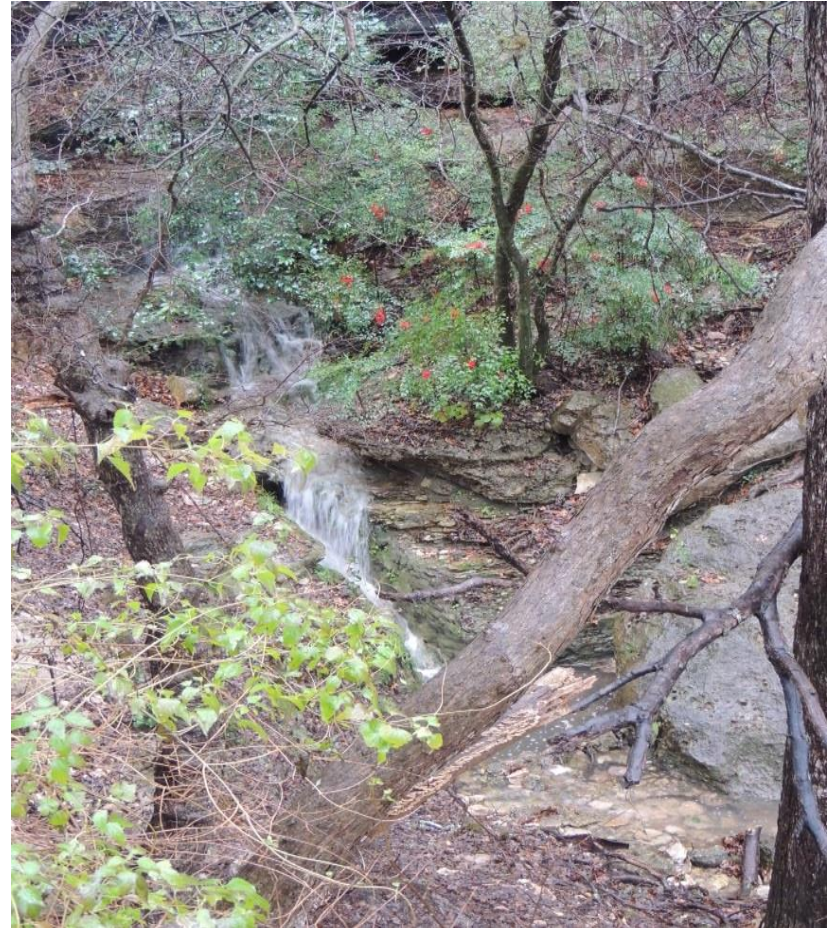


Monoculture



Degradation Cont'd

Invasive Species



Habitat Destruction



© Andrew McLachlan Photography

Loss of Pollinators!

Colony Collapse Disorder

- Our bees are disappearing...
- We don't want to have to pollinate by hand!

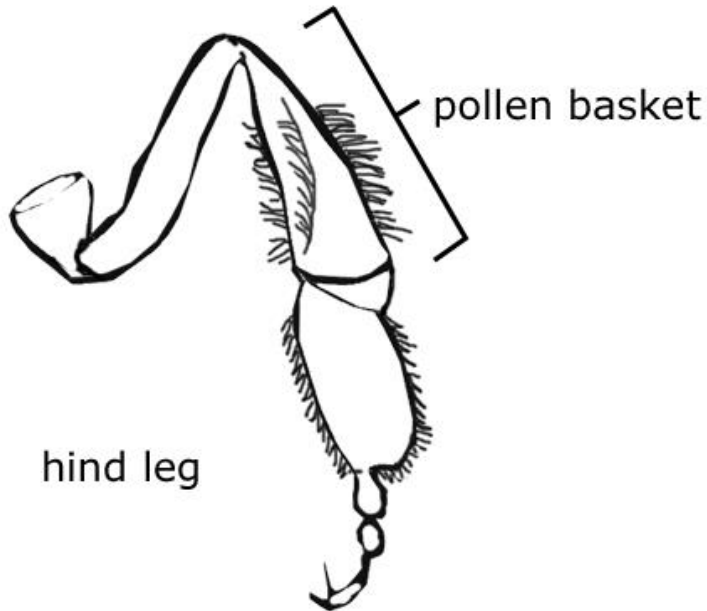
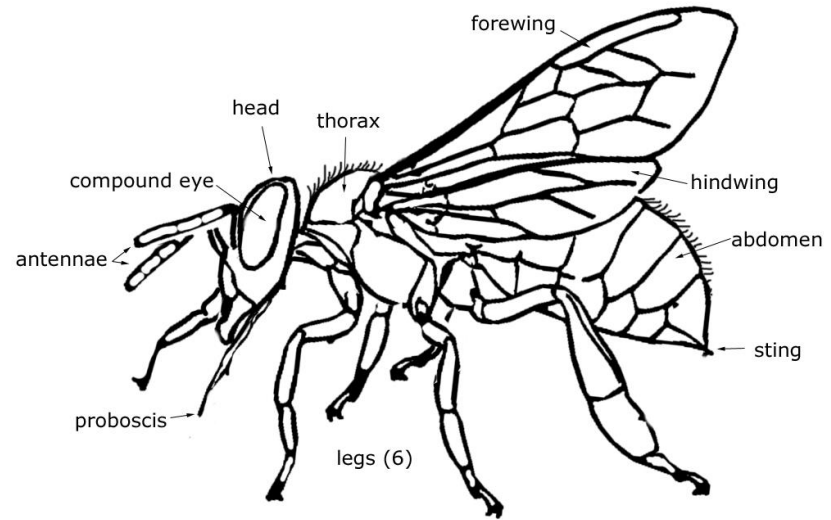


Versus...



Why are pollinators so good at their job?

Anatomy of a Honey Bee



What percentage of food that we eat are dependent upon pollinators for production?

- A--10 %
- B--50%
- C--30 %



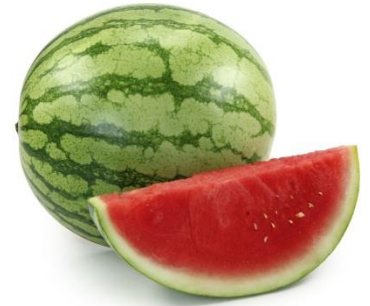
Just how important are they?

- **Fruits and Nuts:**

- **Apple, Chestnut, Macadamia, Peach**
- **Apricot, Coconut, Cacao, Nectarine**
- **Crabapple, Oil, Palm, Olive, Pear**
- **Cashew, Date, Cherry, Plum**
- **Fig, Papaya, Passion fruit, Kiwi**
- **Pomegranate, Strawberry, Raspberry, Cranberry**
- **Blackberry, Blueberry, Gooseberry, Grapes**



Still not convinced?



- **Vegetables:**

- Artichoke, Asparagus, Balsam, Pear, Beet
- Broccoli, Brussels, Sprouts, Cauliflower, Carrot
- Celery, Chicory, Cucumber, Chive
- Eggplant, Leek, Green, Pepper, Parsnip
- Pumpkin, Squash, Rutabaga, Tomato
- Turnip, Watermelon, White, Gourd, Radish



How about now?

- **Coffee, Dill, Parsley, Lavender**
- **Black Pepper, Mustard, Sunflower, Vanilla**
- **Sesame, Nutmeg, Fennel, Guava**



Coffee = life force.

Special Relationships



Landscape Principals for Wildlife

- Diversity
- Layering
- Pay attention to edges
- Native Plants

Diversity

Figure 1. A habitat with variety-or diversity-means wildlife will have more to choose from, so they are more likely to find what they need. Habitat diversity allows more animals to successfully coexist in your yard.



Low habitat diversity equals
fewer wildlife species



High habitat diversity equals
more wildlife species.

Layering

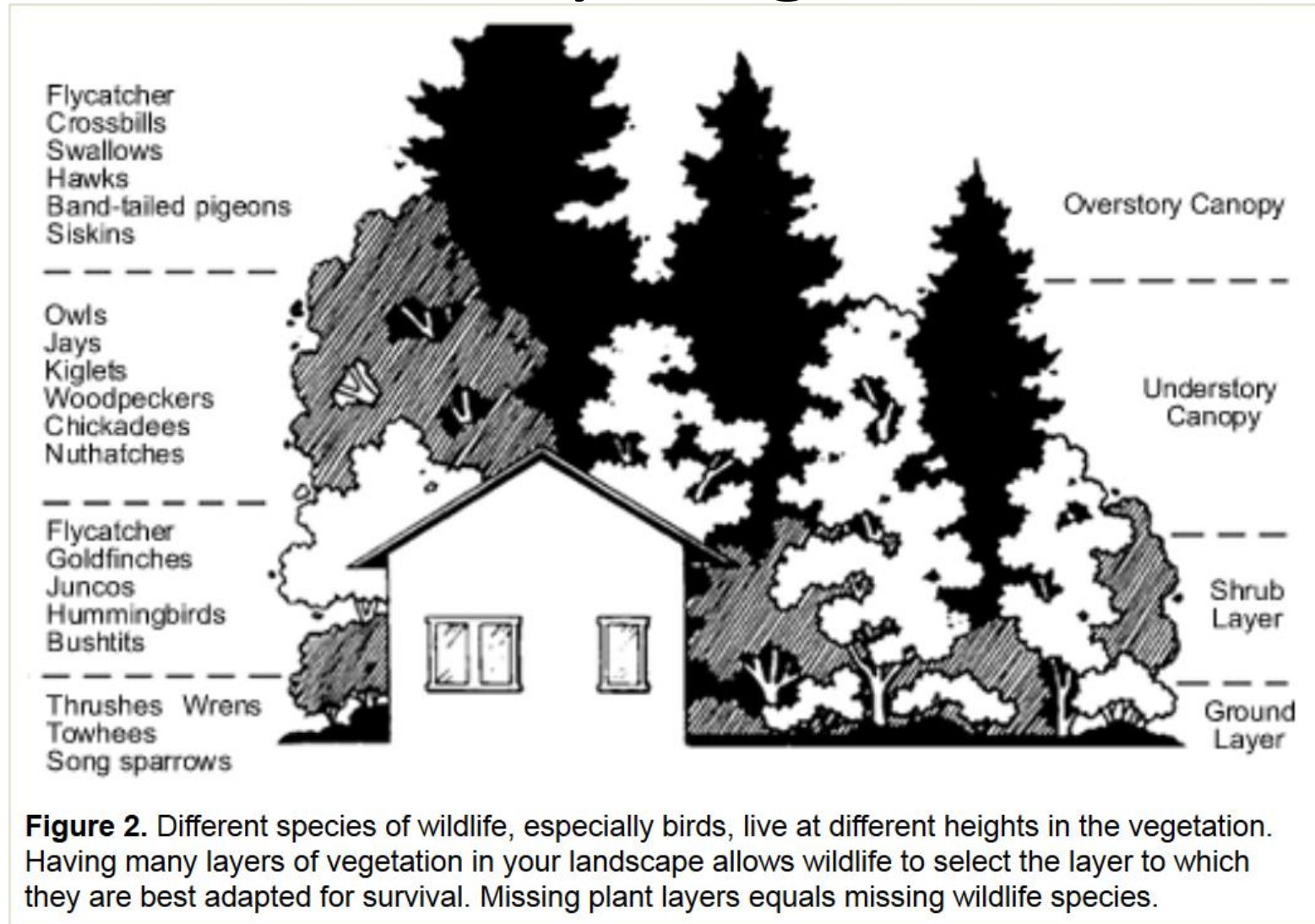
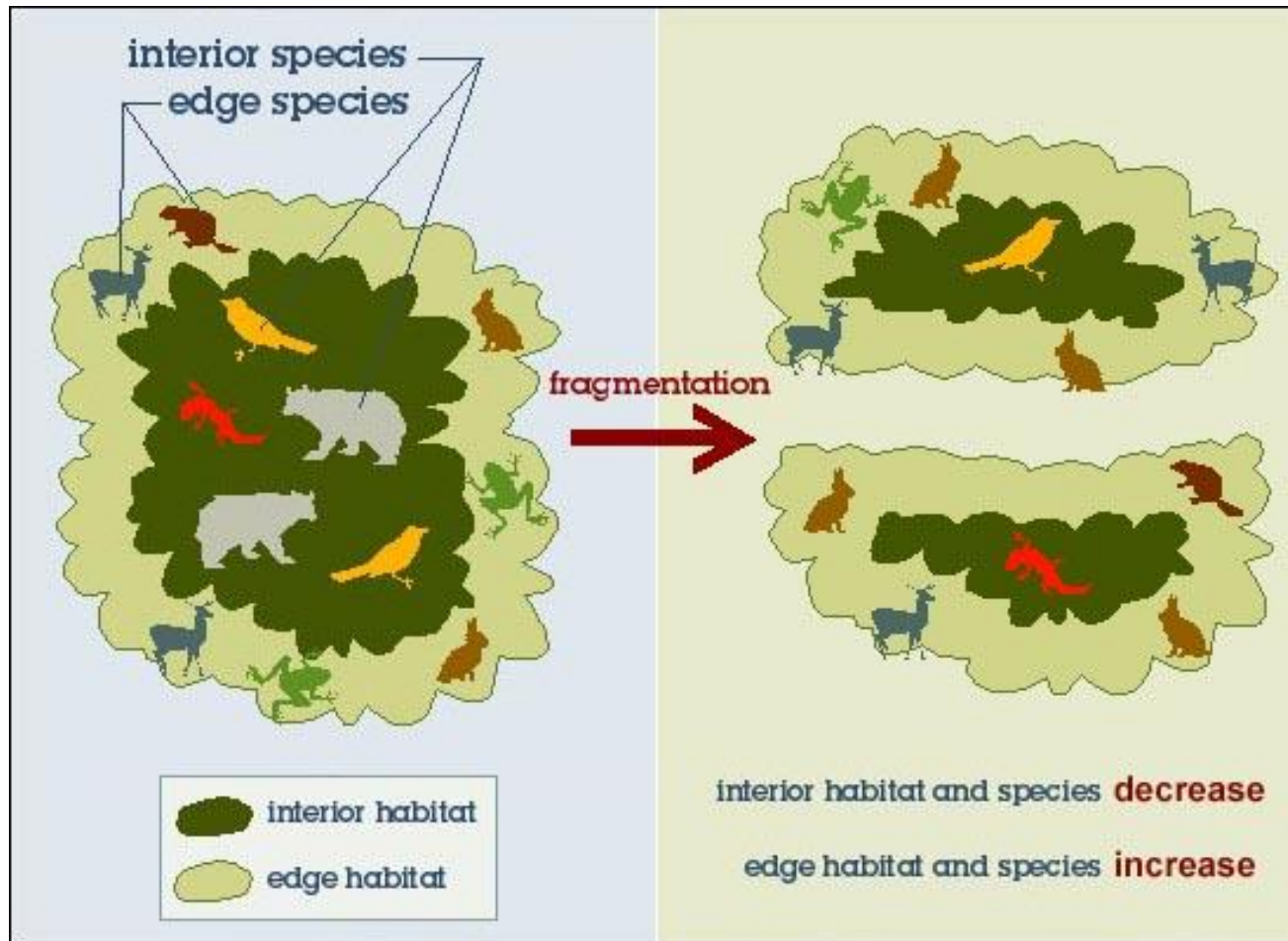


Figure 2. Different species of wildlife, especially birds, live at different heights in the vegetation. Having many layers of vegetation in your landscape allows wildlife to select the layer to which they are best adapted for survival. Missing plant layers equals missing wildlife species.

Edges



Mimic Nature's Edges

Figure 3. Edges



Edges occur where different types of habitat meet. This example shows a forest edge meeting a cleared opening.

Native Plants

- Native—plants here prior to European settlement
- Adapted—plants that arrived after European settlement but have adapted to this region.
- Invasive— plants that spread aggressively outside of its native habitat
- Exotic—opposite of native
- Exotic Invasive-- plants spread aggressively outside of its native habitat.

Myths and Myth Busters

Myth

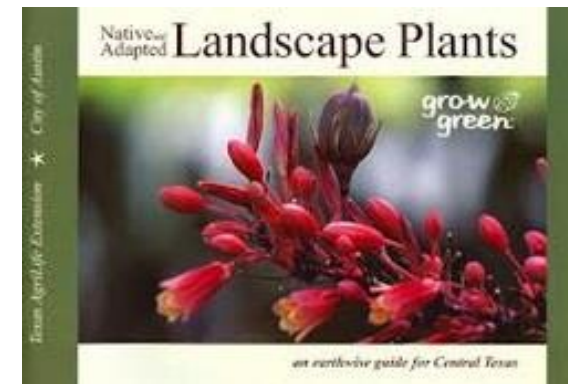
- Attract Rats/Mice
- Breed Mosquitoes/pests
- Create a fire hazard
- Produce air-borne pollen
- Lower property value

Fact

- A clean maintained landscape does not attract European mice
- Naturalistic landscapes soak up more water.
- If properly managed natural landscapes present no more fire danger
- Exotic grasses, ragweed and oaks are primary allergen producers
- Property value is a function of public perception



How to Help?



- Use Native/Adapted Plants
- Choose Plants with diverse colors
- Choose flowers with different shapes and sizes
- Select plants with varying heights and growth habits and flowering times
- Include plants that provide for butterfly larva as well as nectar and pollen producing flowering plants

...Encourage Certification

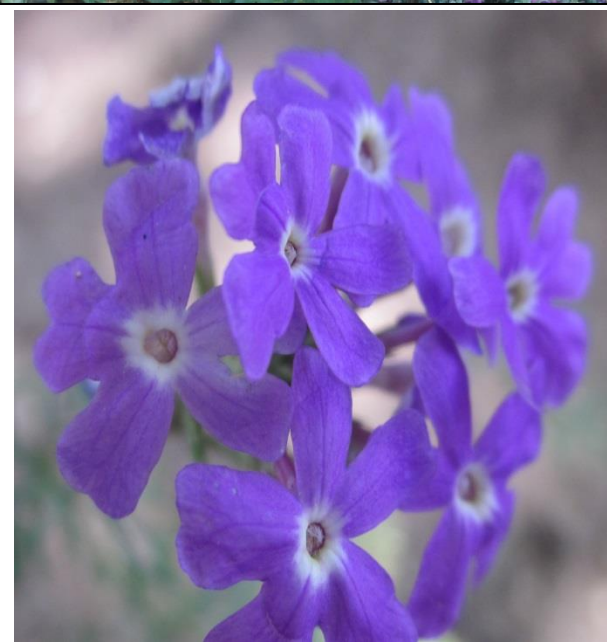


◆ According to NWF you need 5 things to get a property certified:

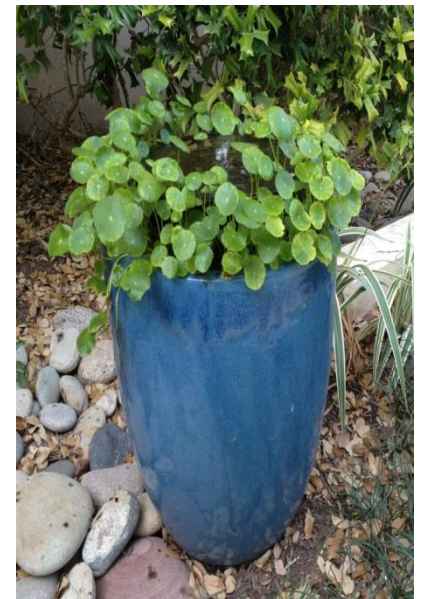
1. Food – Seeds, Nectar, Fruit (provided by native plants)
2. Water – Bird bath, Pond, Backyard Creek
3. Shelter – Thickets, Rock Piles, etc
4. Places to Raise Young – Large Trees, Host Plants, Nesting Boxes
5. Sustainable Gardening Practices – Mulching, Compost, etc



Incorporating Food



Incorporating Water



Incorporating Cover



Places to Raise Young



Sustainable Gardening Practices



Getting Certified...

HOW IT WORKS...

Certify new backyard habitats through the National Wildlife Federation certification (contact wildlife@austintexas.gov for a pre-paid application form worth \$20)

Habitat Certification Application

Use this form to certify a wildlife friendly space in your yard, school, or anywhere in your community. Do your best to answer the questions and we'll make suggestions if something is missing. If your habitat meets the requirements, you'll receive a personalized certificate suitable for framing and become a member of the National Wildlife Federation (a \$20 value), receiving our award-winning *National Wildlife* magazine. For questions call 1-800-822-9919. Pre-paid certification application expires on December 31, 2013.



Have you ever certified before? Yes No If yes, what is your habitat # _____?

If yes, have you moved _____ or is this for a second property _____?

If you are filling out this application for someone else, please write their name in the space provided below:

Name _____ Organization (if applicable) _____

Name(s) to Appear on Certificate (if different from above) _____
Maximum 30 characters, spaces included.

Address of Habitat _____

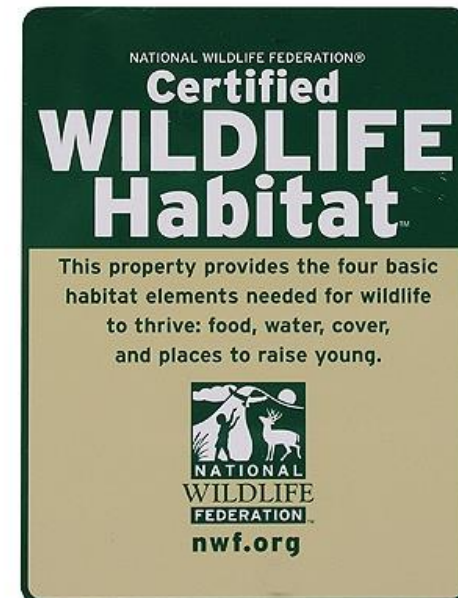
City _____ State/Province _____ Zip Code _____

Telephone _____ Email Address _____

Mailing Address (if different from above) _____

Neighborhood or Subdivision Name _____

PRE-PAID
WILDVAUS



Great wildlife plants!

- Flame leaf Sumac - *Rhus lanceolata*

- Only in rocky/limestone soils
- Beautiful fall color
- Small to medium sized tree
- Also larval host plant for two butterflies



Great wildlife plants!

- American Beautyberry – *Callicarpa americana*
 - Grows well in moister conditions
 - Good shade plant
 - Beautiful berries in late summer/fall
 - Great for wildlife!



Great wildlife plants!

- Coralberry – *Symphoricarpos orbiculatus*
 - Does well in moist soil
 - Has beautiful magenta berries in the fall and winter
 - Great option for ground cover
 - Great for birds



Great wildlife plants!

- Fall Aster – *Aster oblongifolium*
 - Grows well in more rocky soils
 - Blooms a lot!
 - Great source of nectar and very pretty



Great wildlife plants!

- Fall Obedient Plant – *Physostegia virginiana*
 - Very tolerant of most soil types
 - Great nectar source
 - Can be aggressive but easy to keep in check



Great wildlife plants!

- Big Muhly – *Muhlenbergia lindheimeri*
 - Well-behaved clump grass
 - Needs little water
 - Beautiful fluffy seed heads in the fall



Other plants to consider...

- Milkweed – *Asclepias* sp.
 - Several species to chose from
 - Generally flowers earlier but the tropical kind is still going
 - Provides food to monarch caterpillars
 - Great to have in your garden year round!

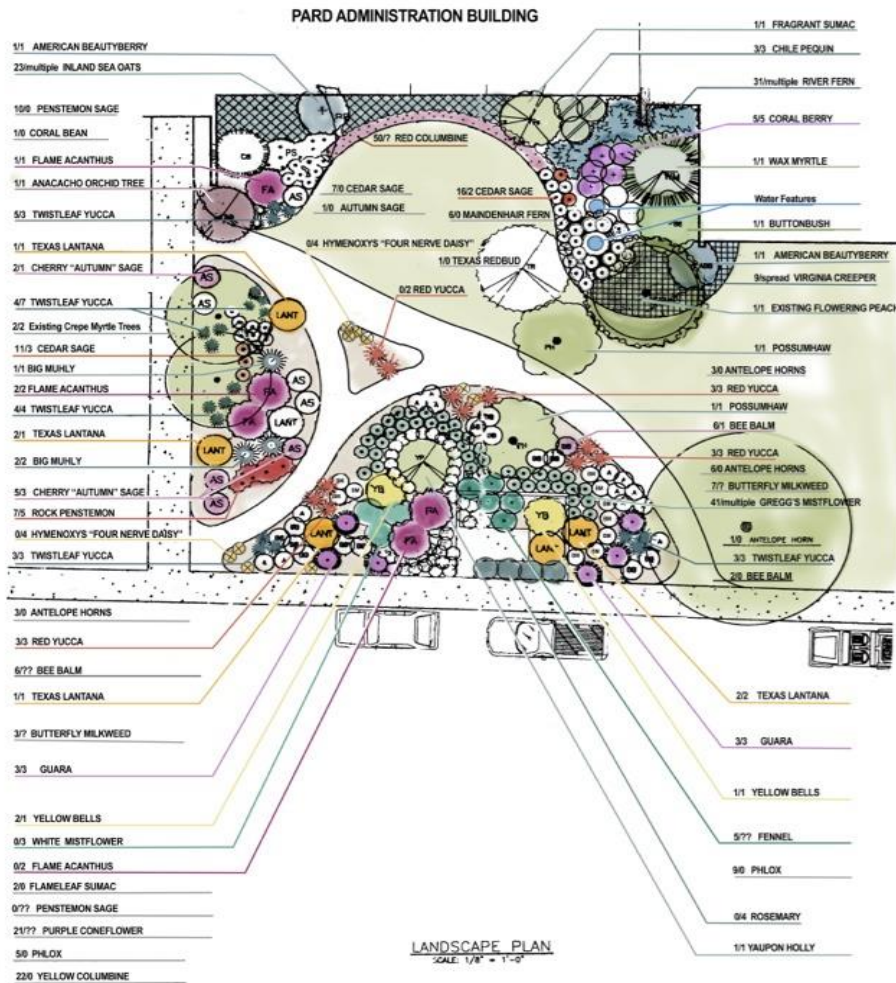


Other plants to consider...

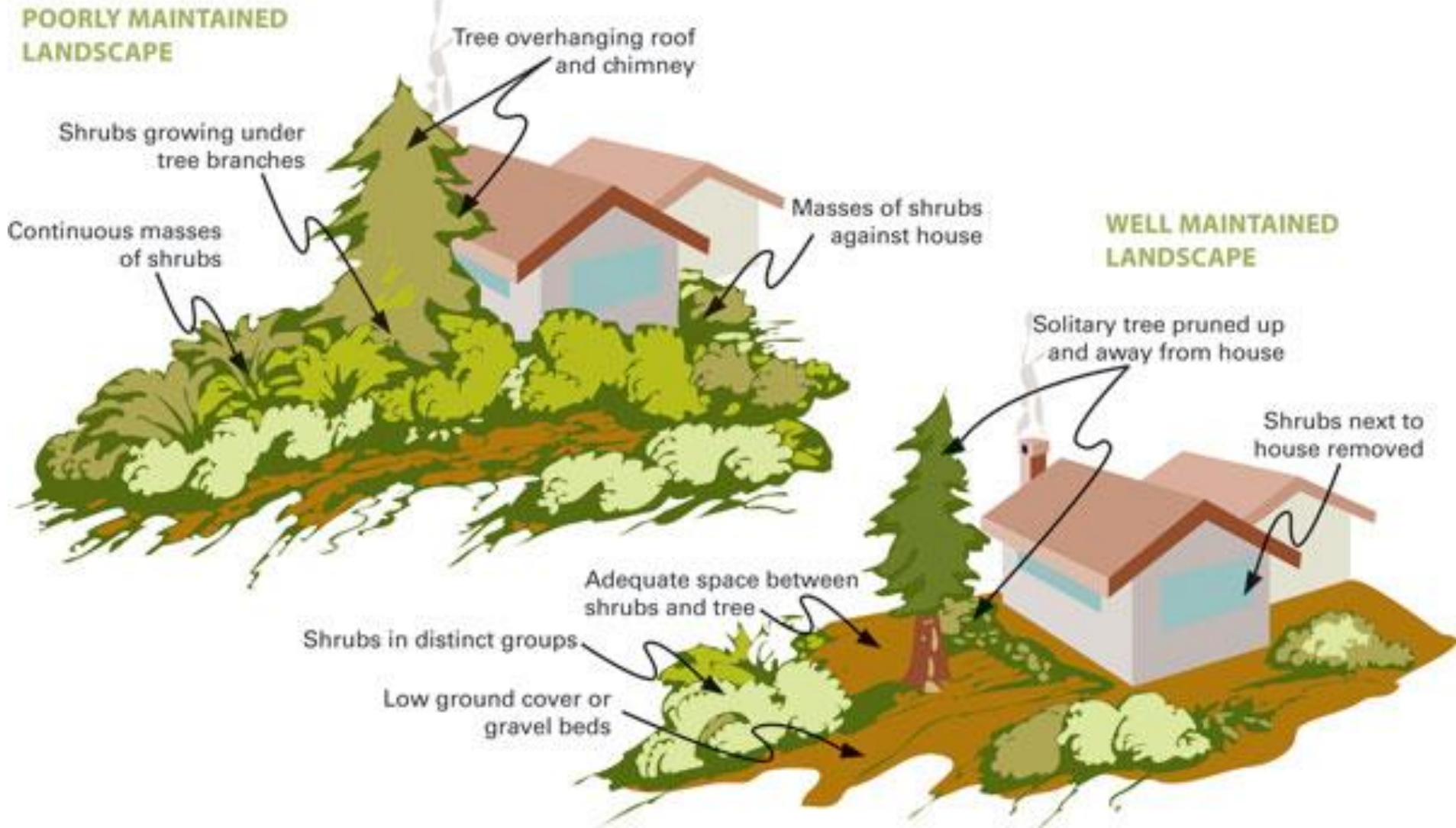
- Sunflowers – *Helianthus* sp.
 - Generally bloom earlier
 - Seed heads have great wildlife value!



Examples and Resources



If you're in the WUI... think wildfire mitigation!



Join Our Fall Habitat Stewards Training

September 2015— check our site--<http://www.austintexas.gov/department/wildlife-austin>

You'll Learn About:

- How to Create Wildlife Friendly Habitats
- Native and Invasive Plants
- Landscape Design Principles
- Water Conservation
- Riparian Restoration Techniques
- Beneficial Insects
- Community Stewardship
- Schoolyard Habitat Projects
- Native and Local Wildlife
- Invasive Plant Ecology and Management Techniques
- Riparian Habitat Restoration



Questions??

For more information visit our website:

<http://www.austintexas.gov/department/wildlife-austin>



LaJuan D. Tucker

wildlife@austintexas.gov

512-974-9454