Landscaping for Wildlife

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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:

Wildlife

Austin

Past, Present, and Future
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
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

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 adaptable. 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 for covering the flanks and legs.

Some land managers and scientists agree, that coyotes may be

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 grazing 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 need.

Schoolyard Habitat Update

Spotlight Campus: Gus Garcia Middle School

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.
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

- Interior species decrease
- Edge habitat and species increase
Fragmentation Cont’d
Habitat Degradation

Pollution

Monoculture
Degradation Cont’d

Invasive Species
Habitat Destruction
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

- forewing
- hindwing
- abdomen
- sting
- head
- thorax
- compound eye
- antennae
- proboscis
- legs (6)

pollen basket
hind leg
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.
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

- Interior species decrease
- Edge species increase

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

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

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