



Landscaping for Wildlife in the Wildland Urban Interface

Meredith Gray

Conservation Program Coordinator

Wildlife Austin Program

City of Austin Parks and Recreation Department



Guess What? We're #1 for Wildlife!

NWF Honors America's Top 10 Cities for Wildlife

"America's most wildlife-friendly cities are located in every corner of our nation."

03-09-2015 // Miles Grant

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Which American cities are going above and beyond the call of duty to protect America's wildlife? The National Wildlife Federation is honoring the **Top 10 Cities for Wildlife** whose citizens have the strongest commitment to wildlife as part of our celebration of National Wildlife Week 2015.

"America's most wildlife-friendly cities are located in every corner of our nation from sea to shining sea," said **Collin O'Mara**, president and chief executive officer of the National Wildlife Federation. "The common thread between these cities is that citizens are coming together for a common purpose - to create a community where people and wildlife can thrive."

The National Wildlife Federation ranked America's largest cities based on three important criteria for wildlife – the percentage of parkland in each city, citizen action to create wildlife habitat, and school adoption of outdoor learning in wildlife gardens. The top cities are found in every region, from Seattle's temperate rainforest to Albuquerque's arid desert:

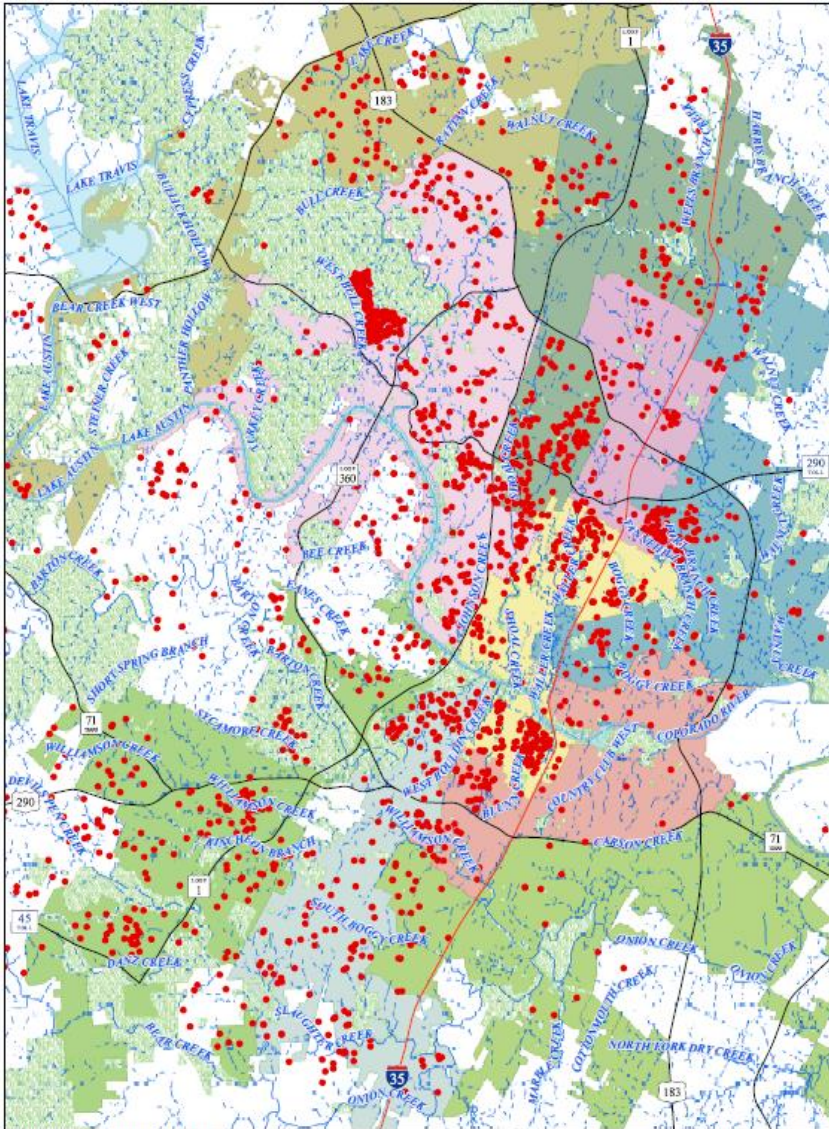
1. **Austin, Texas** – Austin is a clear-cut choice as America's best city for wildlife, boasting the most Certified Wildlife Habitats (2,154), most Certified Wildlife Habitats per capita, and most Schoolyard Habitats (67). Famous for its Congress Avenue Bridge that's home to 1.5 million bats, the city of Austin is certified as a Community Wildlife Habitat. Its residents not only want to Keep Austin Weird – they're the best in America at keeping their city wild.
2. **Portland, Oregon** – The Rose City boasts America's most Schoolyard Habitats per capita. With more than 8,200 acres of natural parkland certified **salmon safe** and a commitment to provide nature areas within a half-mile of every Portlandian, the dream of a wildlife-friendly city is alive in Portland.
3. **Atlanta, Georgia** – The City in a Forest ranks highly across the board, coming in #3 in total Schoolyard Habitats (54), #2 in Schoolyard Habitats per capita, and #2 in Certified Wildlife Habitats per capita.
4. **Baltimore, Maryland** – Charm City's commitment to conservation education shines through with the second-most Eco-Schools in America (73), and a #3 ranking in Schoolyard Habitats per capita. Baltimore's 5,700 acres of parkland include the Gwynns Falls/Leakin Park, the second-largest urban wilderness in the U.S.
5. **Washington, District of Columbia** – Ranked third in parkland as a percent of city area, DC's efforts to protect and preserve parkland have helped restore America's previously-endangered bald eagles and are now luring osprey back to the Anacostia River.



Photos: Mountain Lion: CA Dept of Fish and Game | LA: Dave Reichert

Certified NWF Habitats

- 106 new Certified Wildlife Habitats in 2014
- 2154 Certified Wildlife Habitats in Austin total!



Certified Wildlife Habitats



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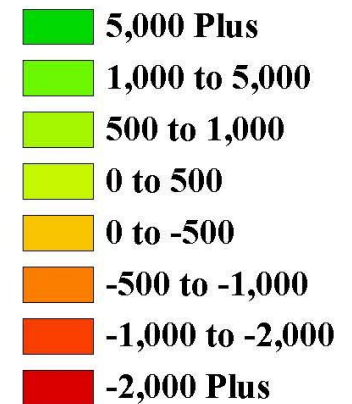
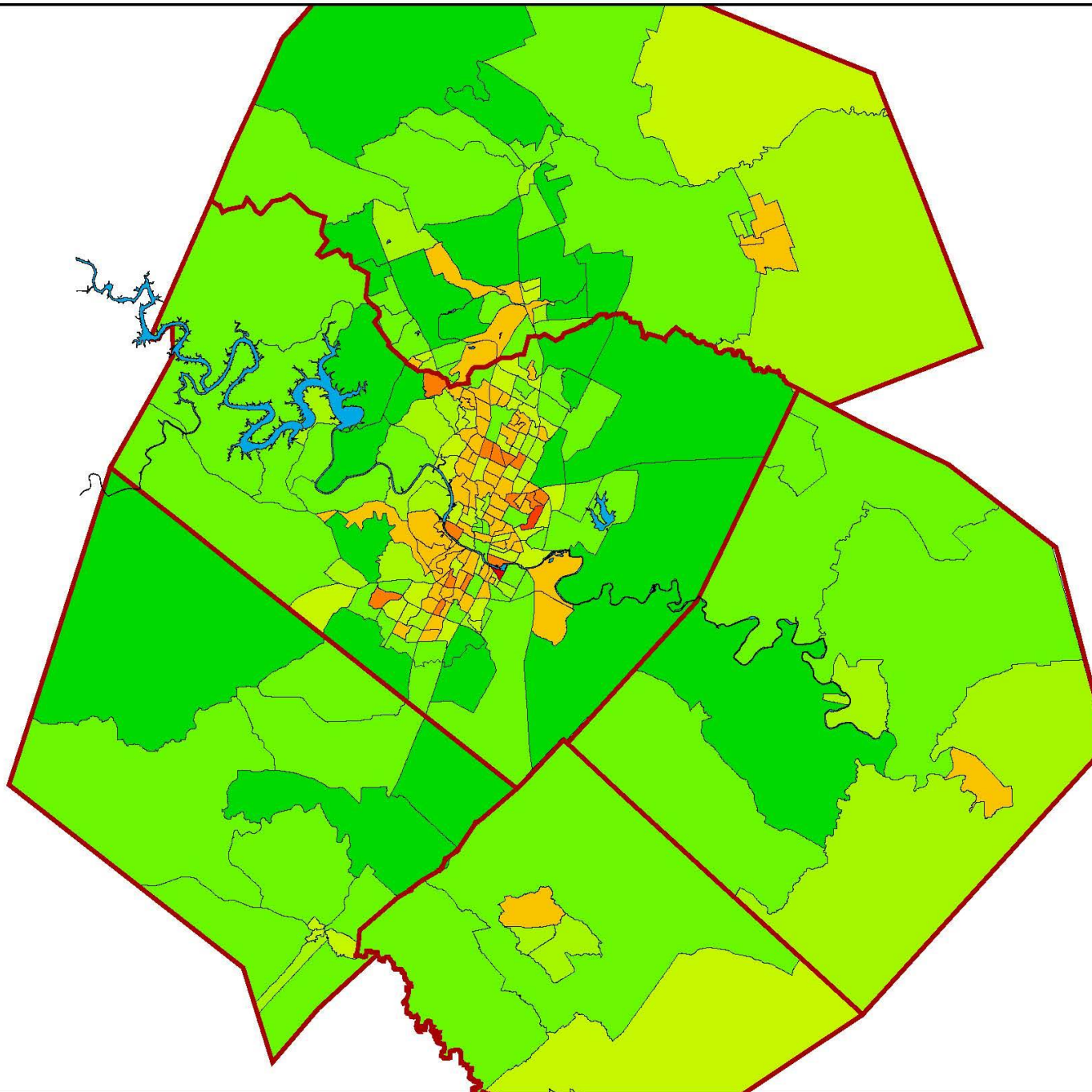


Population Growth and Decline: 2000 to 2010

Austin--Round Rock MSA

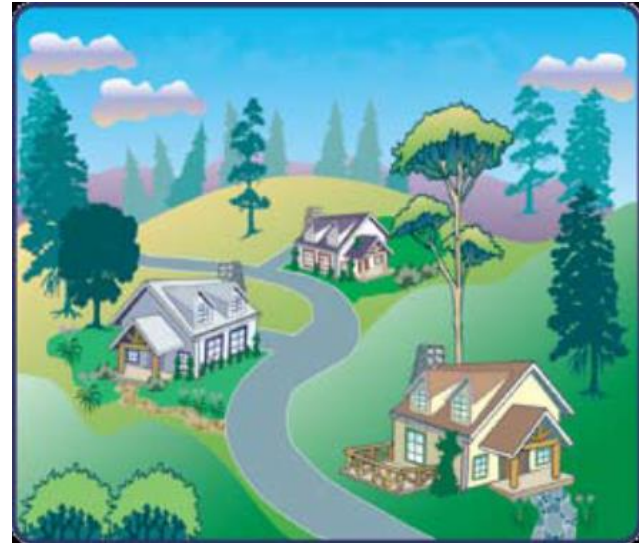
Decennial data from the US Census Bureau

Change in a Census Tract's Total Population from 2000 to 2010 at the 2000 tract-level

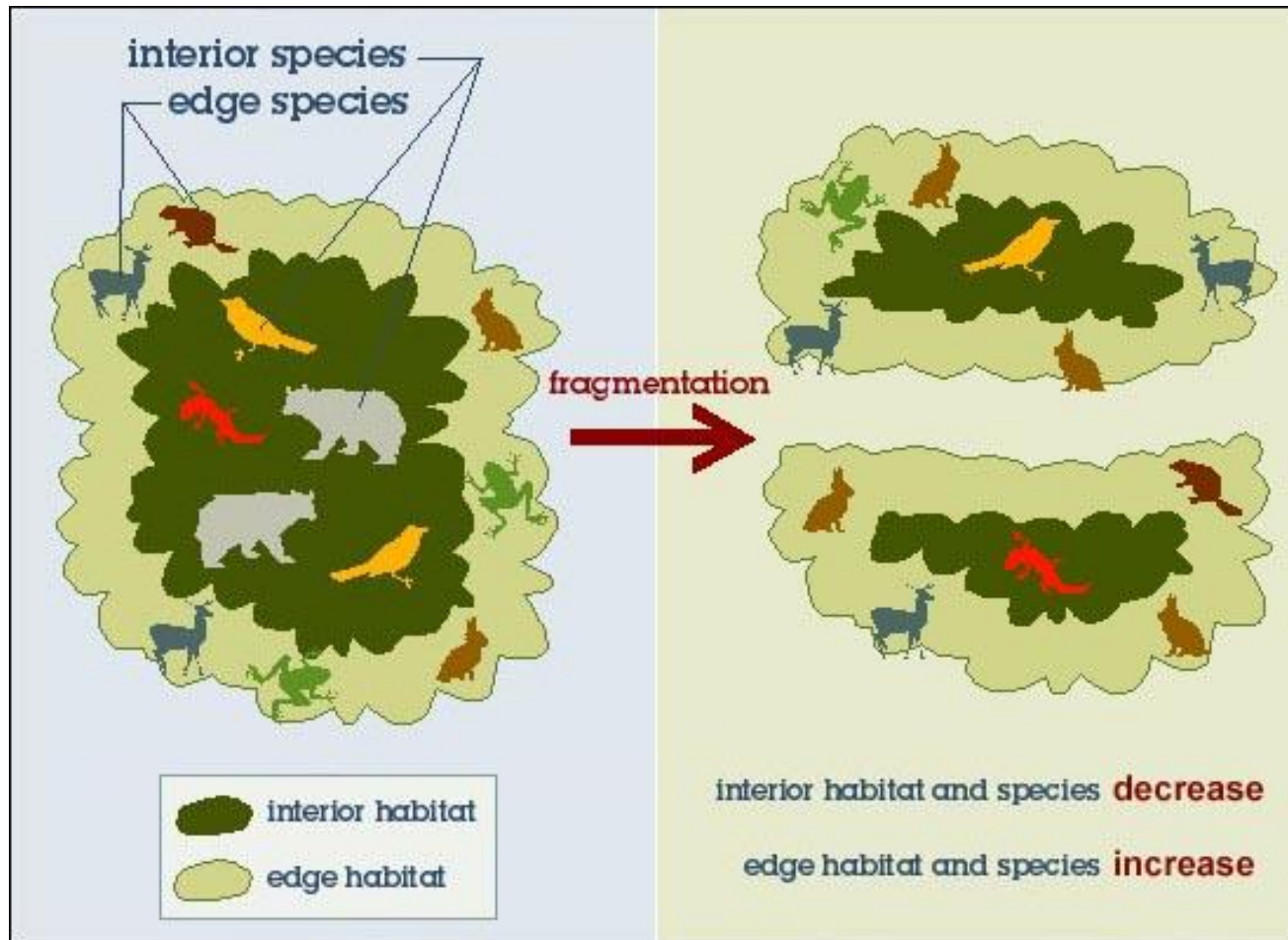


OVERVIEW

- Much of the population growth is flowing into traditionally natural areas
 - This has created the wildland/urban interface
 - This encroachment into forests, grasslands, and farms have put lives and properties at risk



Habitat Fragmentation



What Does This Mean?



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



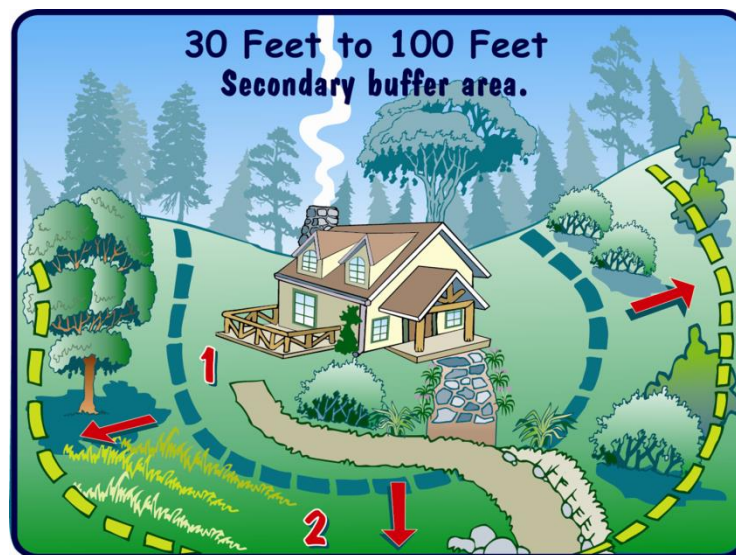
Your Home Ignition Zone



- Within 30 feet from the home:
 - This area should be well-irrigated, pruned, and fertilized
 - Make use of drought resistant native plants



- Within 30 to 100 feet from the home:
 - Establish vegetation consisting of plants that are low growing, well-irrigated, and less flammable
 - Tree can exist in this area, with a distance of 10 feet between crowns



- Beyond 100 feet from the home:
 - Vegetation should be thinned out and heavy accumulations of debris (dead wood or branches) should be removed
 - Canopies of tall trees should not be touching



- Fires start and burn rapidly in fuels like grasses
 - This provides a path for trees to burn
- Topography is an important consideration for landscaping
 - Slope is important to a wildfire's spread
- Regional weather patterns, such as wind, are important to keep in mind
- Wildfires are cyclic in nature, so the local fire history is important when landscaping



DESIGN AND INSTALLATION

Elements of Landscaping

- Function- most important factor
 - The function of the landscaping and how it will serve the individual should be a primary concern, and well as proper maintenance
- Fit with nature and locale
 - The landscaping needs to fit in with nature and the environment
- Financial considerations
 - The landscaping needs to be affordable to the owner
 - Most importantly, maintenance must be kept up with for the lifetime of the home
- Fun, aesthetics, and beauty
 - The landscape needs to look appealing
 - Balancing nature, human needs, and safety



DESIGN AND INSTALLATION

- Landscaping design is one of the most important factors in a home's survival
- Consider these fire safety issues:
 - Location of the home on the lot
 - If the home is located on a steep slope
- Information on the terrain, native vegetation, winds, seasonal weather, and the history of wildfires will contribute to the design and installation
- Firewise landscapes use metal fencing materials to reduce flammability. Grow vines on a metal fence to create a "Green Fence" which could help stop a wildfire.

Site Analysis of Property and Structures-



Plant Selection

- Characteristics of fire resistant plants are:
 - Low amount of duff
 - High water retention/moisture content (such as vines)
 - High salt retention
 - Large leaves
 - Lack of aromatic oils
 - Low fuel volume
 - Height and spread that fits in the area



Fire Resistance in Plants

Fire Resistant Ground Covers	
Common Name	Botanical Name
Ajuga *	<i>Ajuga reptans</i>
Basket-of-gold	<i>Aurinia saxatilis</i>
Caucasica sage	<i>Artemisia caucasica</i>
Creeping phlox	<i>Phlox subulata</i>
Creeping thyme	<i>Thymus praecox</i>
Giant flowered soapwort	<i>Saponaria x lempergii</i>
Green mat penstemon	<i>Penstemon davidsonii</i>
Ground cover rose	<i>Rosa hybrid</i>
Hardy plumbago *	<i>Ceratostigma plumbaginoides</i>
Hens & chicks	<i>Echeveria spp.</i>
Hummelo lamb's ear	<i>Stachys monieri 'Hummelo'</i>
Japanese pachysandra *	<i>Pachysandra terminalis</i>
Lamb's ear	<i>Stachys byzantina</i>
Lily-of-the-valley *	<i>Convallaria majalis</i>
Mat penstemon	<i>Penstemon caespitosus</i>
Mother of thyme	<i>Thymus serpyllum</i>
Pink iceplant	<i>Delosperma cooperi</i>
Poppy mallow	<i>Callirhoe involucrata</i>
Pussytoes	<i>Antennaria spp.</i>
Rock soapwort	<i>Saponaria ocyroides</i>
Rockcress	<i>Arabis spp.</i>
Silver edged horehound	<i>Marrubium rotundifolium</i>
Snow-in-summer	<i>Cerastium tomentosum</i>
Turkish speedwell *	<i>Veronica ilwanensis</i>
Need some shade *	

- All plants are flammable, but some plants are more fire resistant than others.
- It is best to avoid plants such as sage, pine and juniper which contain volatile oils or resins and are extremely flammable.
- Plants should also be drought tolerant (think NATIVE!), and have deep roots

Placement and Grouping

- Plants should be widely spaced in the zone 50-200 feet from the house
- Vegetation within 30 feet of the house should be less than 18 inches high and watered regularly
- Use barriers like driveways, walks, and masonry walls to retard fires
 - Stone “fire breaks”
 - No continuous wooden fence
 - (no “wick” for the fire)



Placement and Grouping

- Native flowers and shrubs can be placed in the zone 30 feet from the house and should be well spaced and maintained
 - Feeders for squirrels, hummingbirds, and butterflies are a good substitute
- Larger native trees can be placed outside the 30 foot zone and should be trimmed regularly so the canopies do not touch
 - Any dead trees and downed limbs should be disposed of properly

MAINTENANCE

- Proper maintenance is key to keeping landscaping Firewise
- Pruning, watering, and plant health are the most important elements
- Remember these important points about maintenance:
 - Brush and cuttings should be properly disposed of
 - Clean under decks and porches
 - Fertilizing is also important for maintaining healthy landscapes
- Shrubs should be well placed to break up the fire ladder
- Remove and mow dry grass and weeds

MAINTENANCE

Before Fire Season

- Remove pine needles and leaves from the roof, gutters, and the ground
- Prune trees 6 to 10 feet from the ground
- Remove any dead wood
- Dispose of yard clippings and debris

During Fire Season

- Mow regularly and dispose of clippings
- Store and use flammable liquids properly
- Use fertilizers properly





A wildlife friendly habitat should include food, water, shelter, and a place to raise their young.

CREATE A WILDLIFE FRIENDLY HABITAT

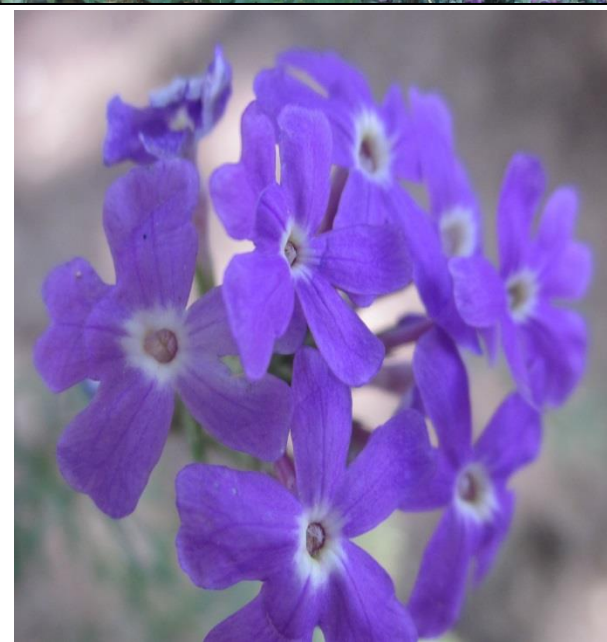
...Encourage Certification



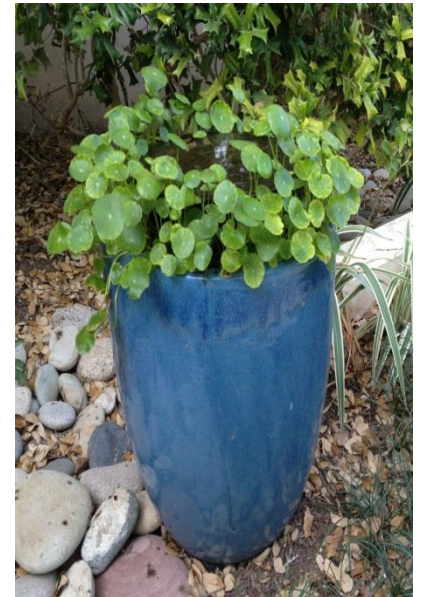
- ◆ According to NWF you need 5 things to get a property certified:
 1. Food – Seeds, Nectar, Fruit (provided by native plants)
 2. Water – Bird bath, Pond, Backyard Creek
 3. Shelter – Thickets, Rock Piles, etc
 4. Places to Raise Young – Large Trees, Host Plants, Nesting Boxes
 5. Sustainable Gardening Practices – Mulching, Compost, etc.



Incorporating Native Food Sources



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 _____

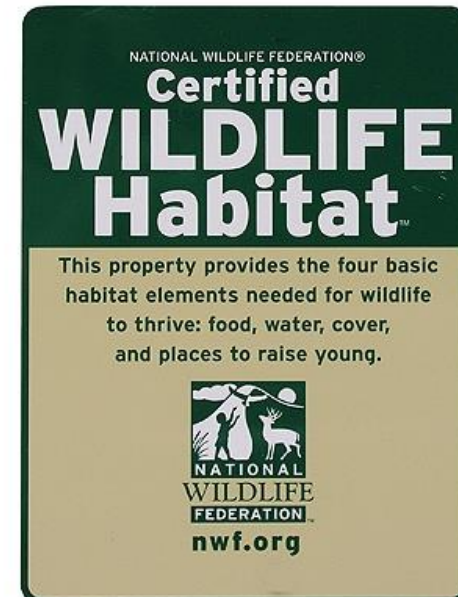
City _____ State/Province _____ Zip Code _____

Telephone _____ Email Address _____

Mailing Address (if different from above) _____

Neighborhood or Subdivision Name _____

PRE-PAID
WILDVAUS



Landscape Principles for Wildlife

- Encourage Diversity
- Use Layers
- Pay Attention to Edges
- Use 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.

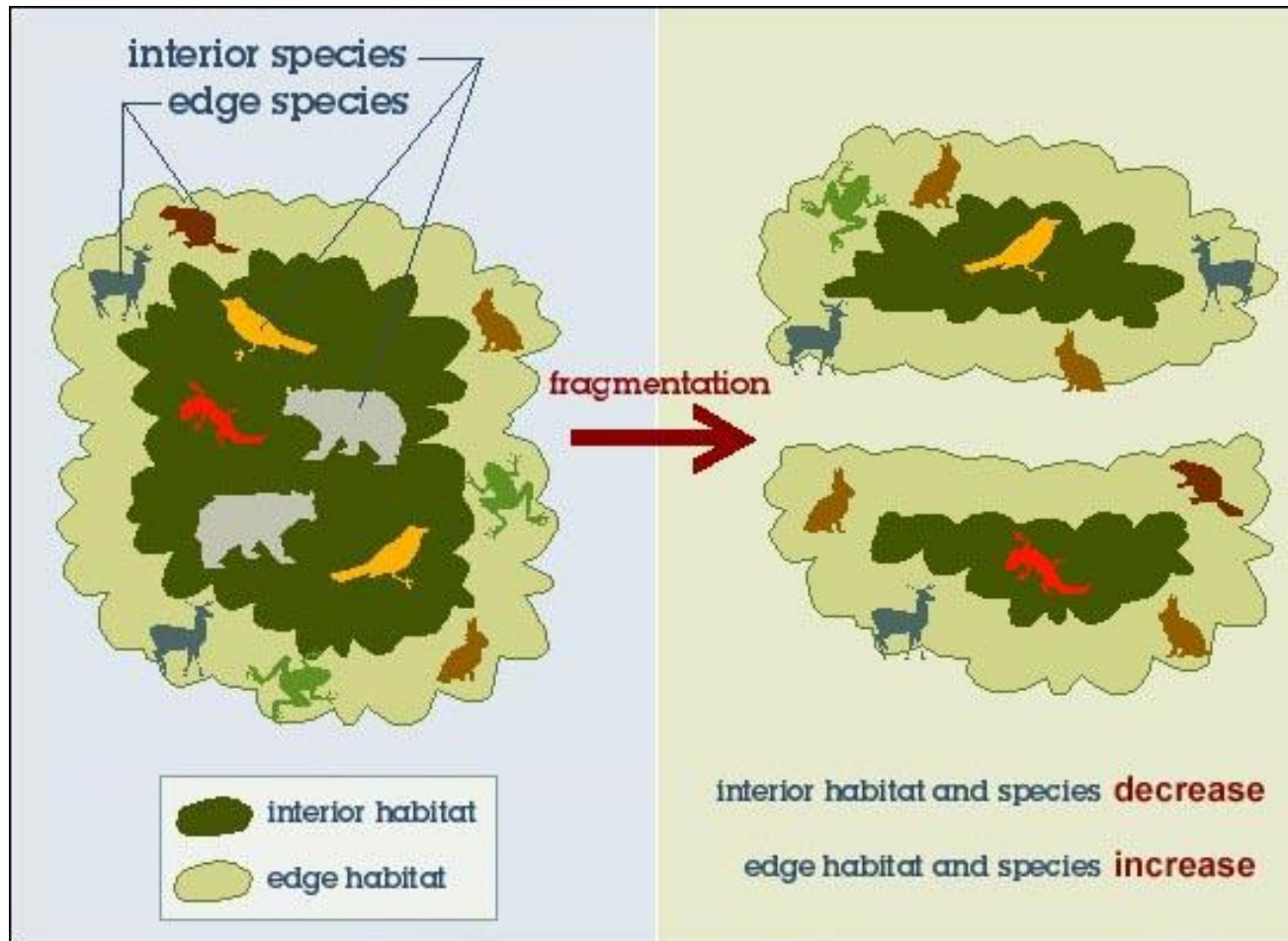


Low habitat diversity equals
fewer wildlife species



High habitat diversity equals
more wildlife species.

Edges



Layering and Edges

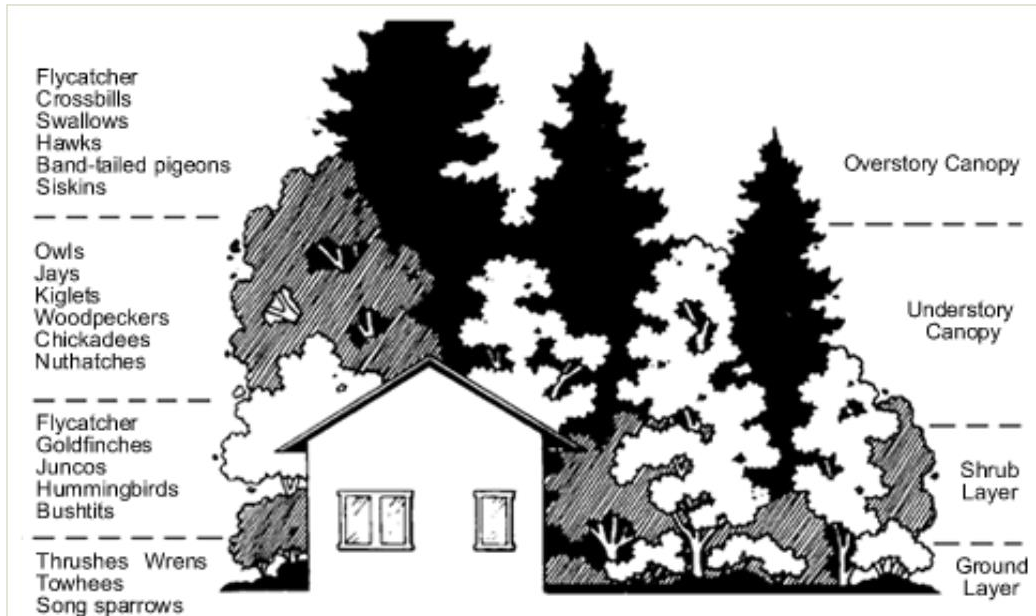


Figure 2. Different species of wildlife, especially birds, live at different heights in the vegetation. Having many layers of vegetation in your landscape allows wildlife to select the layer to which they are best adapted for survival. Missing plant layers equals missing wildlife species.

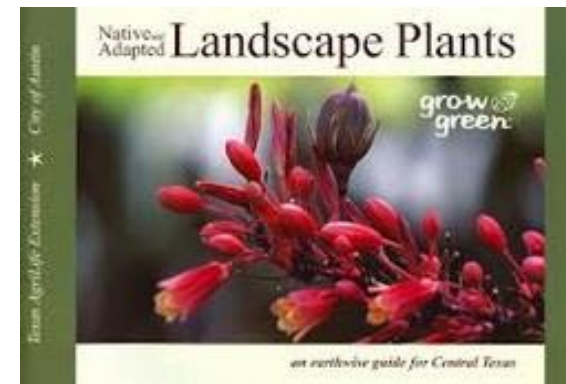


Figure 3. Edges

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



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

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.

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 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!

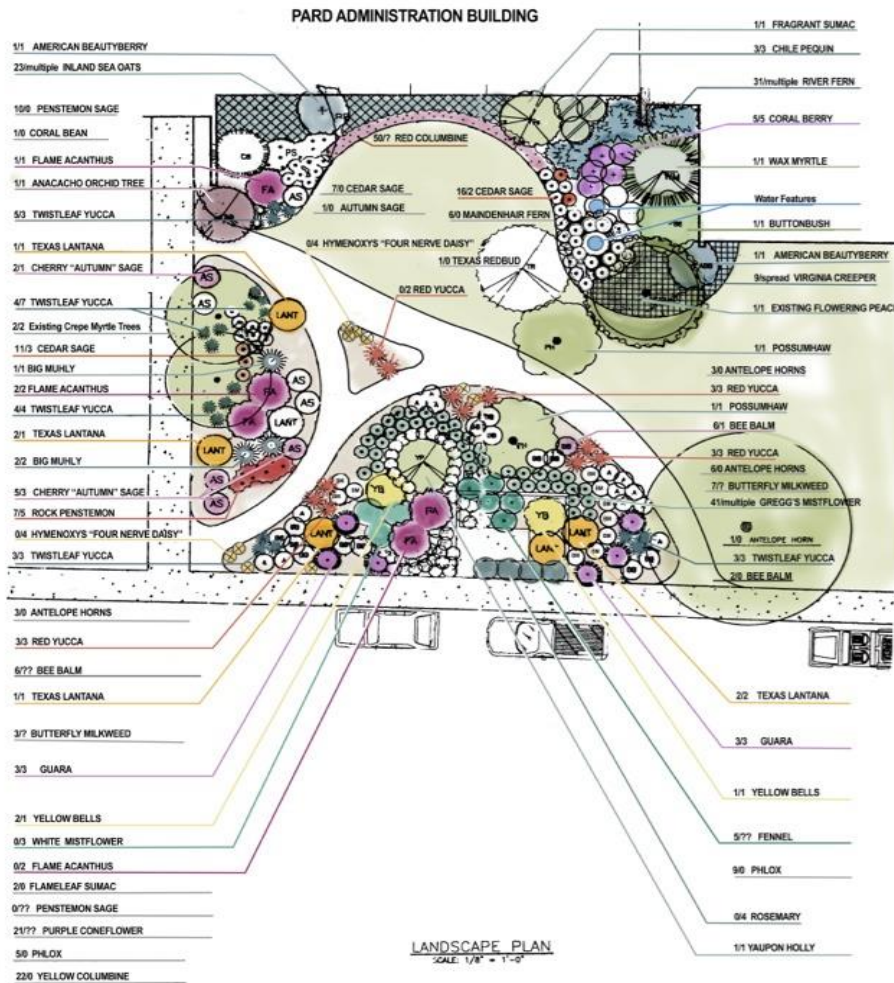


Other plants to consider...

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



Examples and Resources



Join Our Fall Habitat Steward / Urban Forest Steward Training

September 12th -October 17th - and the first class is free!

<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
- Riparian Habitat Restoration
- Tree Care and Tree Diseases
- Tree ID and Common Tree Pests
- *Cost: \$59 for Habitat Steward Track, \$99 for Urban Forest Steward Track, \$125 for both!*



Questions??

For more information visit our website:

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



Meredith Gray/LaJuan D. Tucker

wildlife@austintexas.gov

512-974-9454