Planning for the Future: Sustainable Landscaping

Denise Delaney

Grow Green Landscape Professional Training
Lady Bird Johnson Wildflower Center
February 7, 2019
Sustainable Landscaping

Also known as:

- Xeriscape
- Nativescape
- Waterwise
- Wildscape
- Smartscape
- Earth-wise
Environmental Challenges

- Rainfall
- Temperatures
- Soil
- Urban Heat Island
- Impervious Cover
- Water Quality
Rainfall Amount & Pattern

Austin: 32”
Seattle: 36”

Marfa: <8”
Houston: >52”
Soil

Austin area soils are notorious for being shallow, poor, and hard to manage.
Urban Heat Island

More hard surfaces and less vegetation keep cities in the RED
Impervious Cover
Water Quality

Storm water erosion damage
and run off pollutants
Solutions

- Develop Good Designs
- Keep Water on the Land
- Rainwater Harvesting
- Consider Soil Options
- Use the Right Plant in the Right Place
- Create Cool Spaces
- Reduce Lawn Areas
- Practice Responsible Turf Care
- Avoid Weed and Feed
- Plant & Care for Trees
- Conserve Water
- Follow Integrated Pest Management
- Design wildlife habitats
- Support a Healthy Food Supply
Develop Good Designs

- Site and soil conditions
- Extended living area
- Cost: initial and maintenance
- Time commitment
- Resources
Keep Water on the Land

Includes rain gardens, berms, terraces, swales, & porous pavement
Rainwater Harvesting

Rainwater Harvesting System Components

- **Rain Catchment Area:** Footprint of rainwater collector
- **Gutters & Downspouts:** Collect and route water to tank; screens bar leaves and other debris
- **Pressure Tank:** Maintains operation pressure, allowing pump to run intermittently
- **Overflow:**
- **Water Storage:** Tank or cistern
- **Pump:** Pressurizes system
- **Water Treatment:** May include filters, UV light, and/or chemical additives

**Cost**

**Roof Wash System:** Diverts first few gallons of rainfall and traps debris; can be manual or automatic

To House
Consider Soil Options

1. Work with what you have
2. Amend existing soil
3. Use raised beds
Soil Additives

- **Composted Organic Matter**
  - Helps sandy soil hold moisture and nutrients
  - Helps clay soils drain better and be aerated

- **Expanded Shale**
  - Improves drainage
  - Does not break down
Use the Right Plant in the Right Place
Create Cool Spaces

- Green Strategies
  - Trees and plants
  - Green roof
  - Green walls

- Light Strategies
  - Reflective roofs
  - Permeable pavement
  - Shade structures
Responsible Turf Care

- Consider reducing turf areas
- Aerate and topdress lawns with compost instead of fertilizing
- If fertilizing do so when turf is actively growing
- Use slow-release, organic fertilizers
- Do not fertilize right before a rain
Avoid Weed & Feed

- Timing of these combined ingredients is not compatible
- Chemicals can be tracking into the house on shoes, hands, or paws
- Active ingredients can harm trees and shrubs
- Excess nutrients and active ingredients enter our waterways
- Best weed defense is a healthy lawn
Tree Benefits

- Offer greater comfort and energy-savings
- Increase home value
- Reduce air pollution
- Reduce noise pollution
- Improve neighbor relations

5% - 20% more valuable
Plant and Protect Trees

Plant windbreak conifer trees on the west and northwest to provide mild-to-late afternoon shade in most locations. In winter these windbreak trees protect your home from cold north winds.

Shade east and west windows with deciduous trees, but prune lower branches to prevent blocking the view. In winter, after leaf fall, warming sunlight comes through.

Plant shade trees over patios, driveways, and air conditioning units to cool areas around your home.
Integrated Pest Management

➢ Implement sound landscape management practices to keep plants healthy reduces pests and the need for pesticides
➢ Use the least impactful solution

http://www.austintexas.gov/ipm
Water Conservation Information

(512) 974-2199
www.austinwaterwise.org
Information on the landscape rebate program, irrigation audits, variances, finding a City certified licensed irrigator and other water conservation tips
Support Wildlife Habitats

Food, water, safe shelter, place to raise young

www.keepaustinwild.com

Federal, state, and local programs

www.nwf.org/gardenforwildlife

Wildlife Austin

Texas Wildscapes
Healthy Food and Water Supply

http://www.austintexas.gov/department/sustainable-urban-agriculture
Questions?

THANK YOU!

Speaker Contact Information
Denise Delaney
(512) 974-2581
Denise,Delaney@austintexas.gov