

Xeriscape From The Ground Up with Jim Tolstrup

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Northern Colorado is in a bio-region known as the short grass prairie on the high and dry western edge of the Great Plains. This region is essentially a desert environment with a scant 10 -14 inches of precipitation per year.

Human Impact on Environment

- 98% of the lower 48 states has been altered for human use.
- 43,480 sq miles of pavement
- 62,500 Sq miles of suburban lawns
- Source: *Bringing Nature Home* - Douglas W. Tallamy

Chemicals

- 78 million households in the U.S. use home and garden pesticides.
- More pesticide and fertilizer is applied to turf grass (3.2-9.8 lbs) than any other crop in agriculture (2.7 lbs per acre). Nitrogen finds its way into waterways.
- On average lawns receive twice the amount of herbicides/pesticide per square foot as any other crop in the U.S.
- It is estimated that seven million birds die each year from ingesting granular pesticide applications on American lawns.
- As many as 5 million people are poisoned by pesticides world-wide each year the majority of which are young children.

Lawnmowers

- Polluting at 100x the rate of the average car, lawn mowers and other small engines are responsible for 3% of the world's Co2 emissions.
- 800 million gallons of gas are used each year to power lawn mowers
- On average mowing grass for one hour produces as much pollution as driving 650 miles

Water consumption

- One square foot of lawn requires 20 gallons of water per year
- 60% of the residential water usage in the Western U.S. goes to landscaping
- Every year billions of gallons of water are used to support landscaping in Fort Collins alone.

Wildlife

Surveys by the Audubon Society reveal that bird populations in Colorado have declined 60% within the last 40 years as a result of suburban sprawl. Honey bees and other insects have experienced a similar decline within the same time-frame

A sustainable society is one which satisfies its needs without diminishing the prospects of future generations

What is a “Sustainable” landscape

- Minimal maintenance cost
- Carbon neutral (or better)
- Healthy for humans and animals
- Promotes native biodiversity
- Bioregional
- Conserves natural resources
- Aesthetically pleasing
- Does not promote oppressive social hierarchy

To save the planet we have to stop growing?

“Let’s reframe ‘growth’ for all that enhances life and go for more of it...lets use “growth” to describe that which aligns with nature’s rules to promote greater health, happiness, social and ecological vitality, resiliency and the dispersal of social power” Francis Moore Lappe

7 Principles of Xeriscape

1. Good Landscape Planning and Design
2. Low Water Use Plants
3. Appropriate Turf Areas
4. Efficient Irrigation
5. Soil Improvements
6. Use of Mulches
7. Appropriate Maintenance

1. Good Landscape Planning and Design

- Become familiar well acquainted with the site
- Identify desired activities/spaces
Aspect, elevation and micro-climates where would plants grow naturally on this site?
- Opportunities to harvest water from the topography (nothing is flat)
- Group plants with similar requirements together
- Xeriscape does not have to disregard what has been learned over hundreds of years of landscape architecture (a garden is not just a bunch of plants)

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