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watersmartinnovations.com
You can’t play soccer in a perennial bed...
The case for turf in a sustainable landscape

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But first, a public service announcement...

Megan Washington
(TED.com)
Urban landscapes provide ecosystem services.

Environmental, health, & social benefits.
Connecting people

Day on the Quad at Utah State University
Turfgrass literally touches millions of lives daily in physical and social ways.
And yet...

“The grasses are the least noticed of the flowering plants. They seem to be taken for granted like air and sunlight, and the general run of people never give them a thought.”

Hitchcock, 1931
Wallace Stegner

“Lawns, for instance, those marvelous green naps so lovely to roll on, so cool to bare feet, so sweet smelling when just mown.

...But when we arrived, I had never seen a lawn, or imagined one. Front yards in my experience had been weeds and bare dirt

...On the farm the yard had been an alkali flat...Here, the miracle of turf impressed me for the first time with the sheer comfort of the earth.”

From “Marking the Sparrow’s Fall”, 1998
Grass is meant to be used
Not this...
I hate these signs...
Growth and urbanization will increase need for human-managed landscapes...

...and the demands applied to them.
Dilemma for some native landscapes and low-maintenance turf

- People enjoy grasslands and native plants for beauty and diversity
- ...and sometimes want a natural look
- May want only native species
- but...
But...

- They want it relatively short,
- ...don’t want the critters,
- ...or a fire hazard,
- They want it to look tidy,
- ...tolerate traffic.
- ...and they don’t want to irrigate,
- It has to grow where it's wanted
- “Canyon plants are prettier than basin plants”
- ...
Unique and challenging conditions for growth

• Soil
  – Disturbed, variable, compacted...
  – Microclimates—often hotter

• Dense population
  – Traffic

• Expectations for the area

• ...Not a natural environment
One of the few plants that can handle trampling and recover
and deal with horrible soil conditions

Places any farmer in their right mind wouldn’t try to grow a crop, but we expect the grass and other plants to be perfect!
Easy, inexpensive

- Simple to maintain and provides stable, beneficial conditions.
- Inexpensive
Special plants for special conditions,
but many misconceptions about what turf needs to survive and thrive

“Grass grows in spite of us”

Dr. D.B. White
Species

- Many species can be grown as turf
- But few can tolerate significant traffic
- Density
- Color during growing season

Western wheatgrass (Pascopyrum smithii)
Cool season Grasses
• Kentucky bluegrass, perennial ryegrass, tall fescue, fine fescue...
• Long season of growth and recovery (March to November)
• Thrives in spring and fall “sleep” in summer

Warm season grasses
• Buffalograss, Blue grama, zoysiagrass, bermudagrass...
• Short season of growth and recovery (April/May to Sept/Oct)
• Dormant spring and fall Thrives in summer
Turfgrasses are not aquatic plants... So why do they get watered so much!

- Tolerant of overwatering.
- “Insurance”
- Irrigation systems...
- Forcing growth
- *It’s a people problem, not a grass problem*

- Drier is often better
Nothing better for the soil than a perennial grass cover.

- Turfgrasses included
- Build organic matter—second to none
- Extensive microorganism populations
- Stop erosion

www.nrcs.usda.gov/
A definition of sustainable turfgrass management
(Royal and Ancient Golf Club)

• “optimizing the function of turfgrass in urban settings in harmony with the conservation of the natural environment under economically sound and socially responsible management.”
Conclusion

• Turfgrass is important in urban areas.
• Adapted to and provides benefits in unique & demanding conditions.
• Can be very environmentally friendly.
  – Many lawn areas are over-managed.
• Plant and landscape choice requires agronomic and social implications.
PLEASE KEEP **ON** THE GRASS. LIE DOWN. ROLL AROUND IN IT. FORGET ALL YOUR RESPONSIBILITIES. HAVE AN ICE CREAM...