

KENTUCKY BLUEGRASS FRIEND OR FOE?

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Who has a Kentucky Bluegrass lawn at home?

Who maintains their own lawn?

Who thinks lawns are ridiculous?

Who thinks Kentucky Bluegrass doesn't belong in Colorado?

Where does Kentucky Bluegrass come from?

- Kentucky?
- Originated in Europe, Western Asia, and Northern Africa
- Brought to the New World by Spanish settlers

For what purpose did people bring Kentucky Bluegrass from the Old World to the New World?

- Elitists?
- Dependable pasture
- *Poa pratensis*
 - *Poa* is Greek for fodder
 - *pratensis* is Latin for meadow

“If you want Kentucky Bluegrass go to Kentucky”



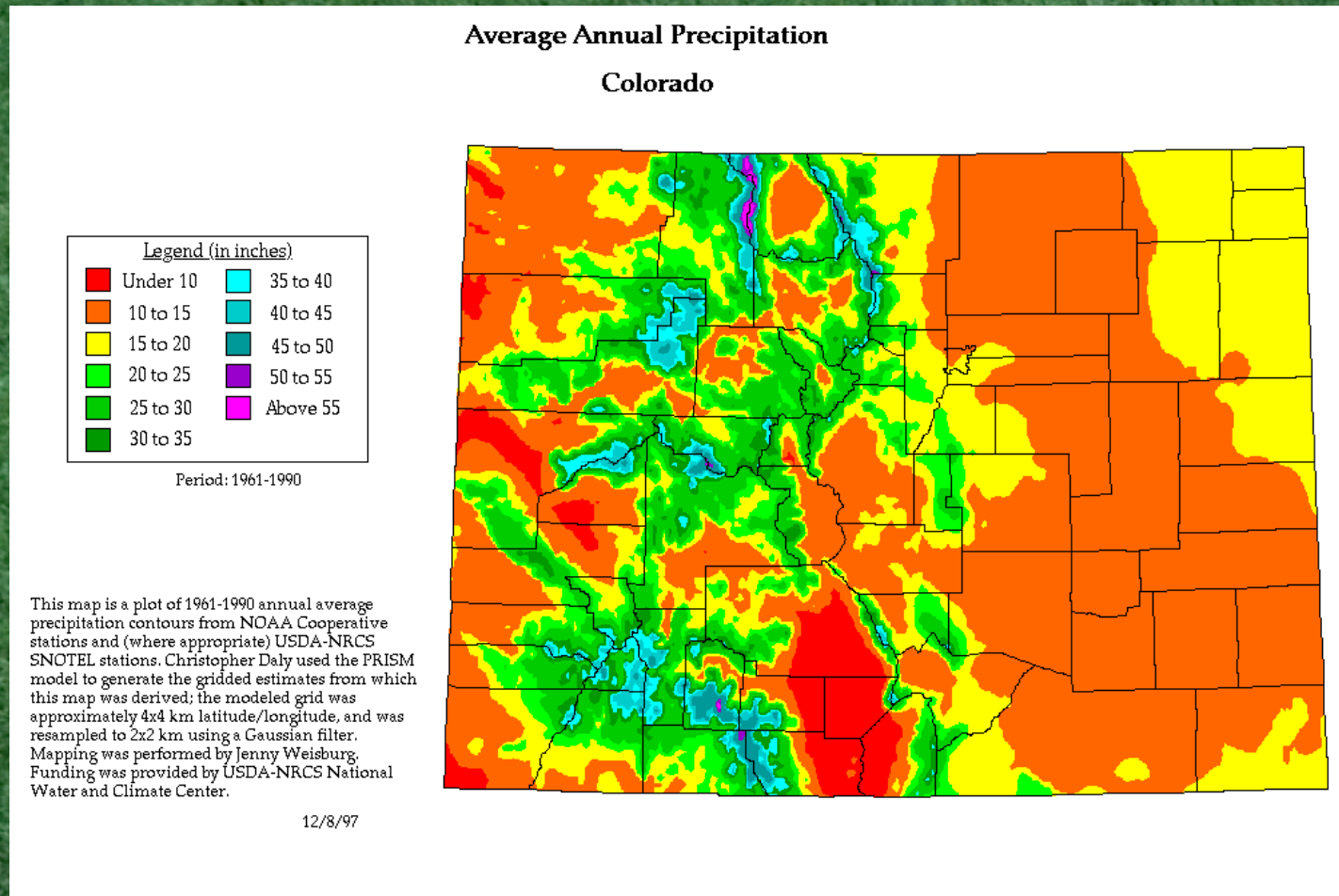
“Three feet from the sun”



SHORT- GRASS PRAIRIE

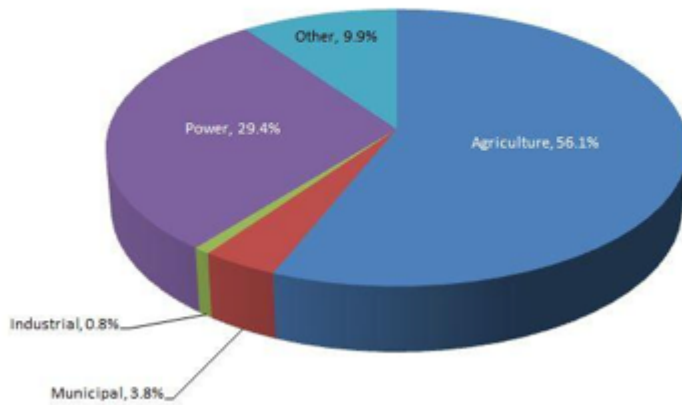


Average Annual Precipitation in Colorado



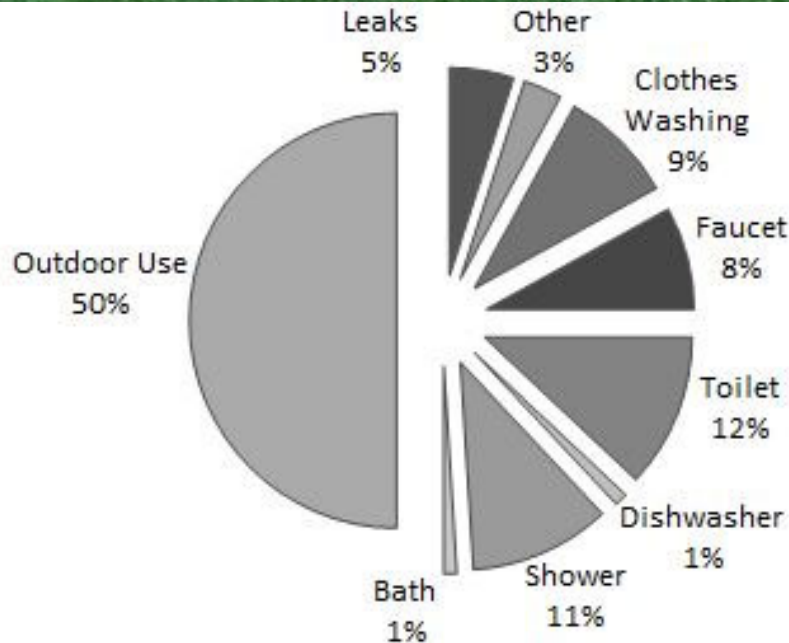
- Denver receives an average of 14.16" of precipitation per year, much in the form of snow
- Up to 70% of water flowing in the Upper Colorado River Basin originates from snowmelt

Colorado: Water Use



Colorado Water Use

- 50% of urban consumption is devoted to landscaping in Colorado and much of the West, accounting for approximately 1.9% of total water use
- The amount of water we use in urban landscapes is minimal when compared to the needs of agriculture and energy
- Agriculture is responsible for about 85% of consumptive water use in Colorado



How many inches of precipitation are necessary to sustain Kentucky Bluegrass?

- One inch per week?
- Mowing height
- Location
- Survives Colorado

Green grass is NOT synonymous with healthy grass



We don't live in a *time* of technology,
we live in a *place* of technology



GRASS AND PEOPLE



GRASS AND NATURE



~~FOOD NOT LAWNS~~
LAWNS ARE FOOD



Benefits of Livestock

Fertilizer
Mowing
Weed mitigation
Food
Energy
Fabric
Labor
Pest control
Companionship
Warmth
Transportation
Wealth
Biodiversity
Security
Shelter
Pharmaceuticals

What is the recommended mowing height for Kentucky Bluegrass?

- 1/3 rule
- Water
- Fertilizer
- No mow
- Livestock

ROTATIONAL GRAZING



How many pounds of Nitrogen per 1,000 square feet per year are necessary to sustain Kentucky Bluegrass?

- Mowing height
- Precipitation
- Soil
- Location
- Survives Colorado
- Livestock

ANIMAL MANURE

NPK Values of Animal Manures

	N Nitrogen %	P Phosphorus %	K Potassium (Potash) %
Cow Manure	0.6	0.4	0.5
Horse Manure	0.7	0.3	0.6
Pig Manure	0.8	0.7	0.5
Chicken Manure	1.1	0.8	0.5
Sheep Manure	0.7	0.3	0.9
Rabbit Manure	2.4	1.4	0.6

CHICKENS



- Fresh chicken manure contains 0.9% to 1.5% nitrogen, 0.4% to 0.5% phosphorus, 0.8% potassium, and all 13 of the other nutrients essential for plant growth
- One chicken may produce 8-11 lbs. of manure per month

Assuming chickens produce 9 lbs. of manure/month containing 1% nitrogen, how many chickens are necessary to supply 5 acres of turf with 3 lbs. of nitrogen/1,000 square ft. for a year?

– About 218 chickens

Assuming 1 chicken produces 100 eggs in 6 months, how much money could be earned in a year from 218 chickens with the average cost for eggs in Denver at \$3.41/dozen?

– About \$12,389

Assuming you send 75% of your flock of 218 chickens to slaughter in November, how much money could be earned at a price of \$7.50 per chicken?

– About \$1,226

Canada Goose

- Goose manure is about 77% water and has a fertilizing value of about 2-4-2 when dried
- A single goose may defecate 1.5 lbs. of fresh feces each day

How many geese are necessary to supply 1 lb. of nitrogen in an area of 1,000 square feet per day?

- About 142 geese

How many days would it take 142 geese to supply 1 lb. of nitrogen per 1,000 square feet over 1 acre of turf?

- About 44 days



Practical Solutions to Solvable Problems

- Understand your environment
- Right plant for the right situation
- Become familiar with your crops
- Irrigation efficiency
- Join City Council
- Community activism
- Change covenant

MONOCROPS HAPPEN



Or, do they?



OUTDOOR CANVAS



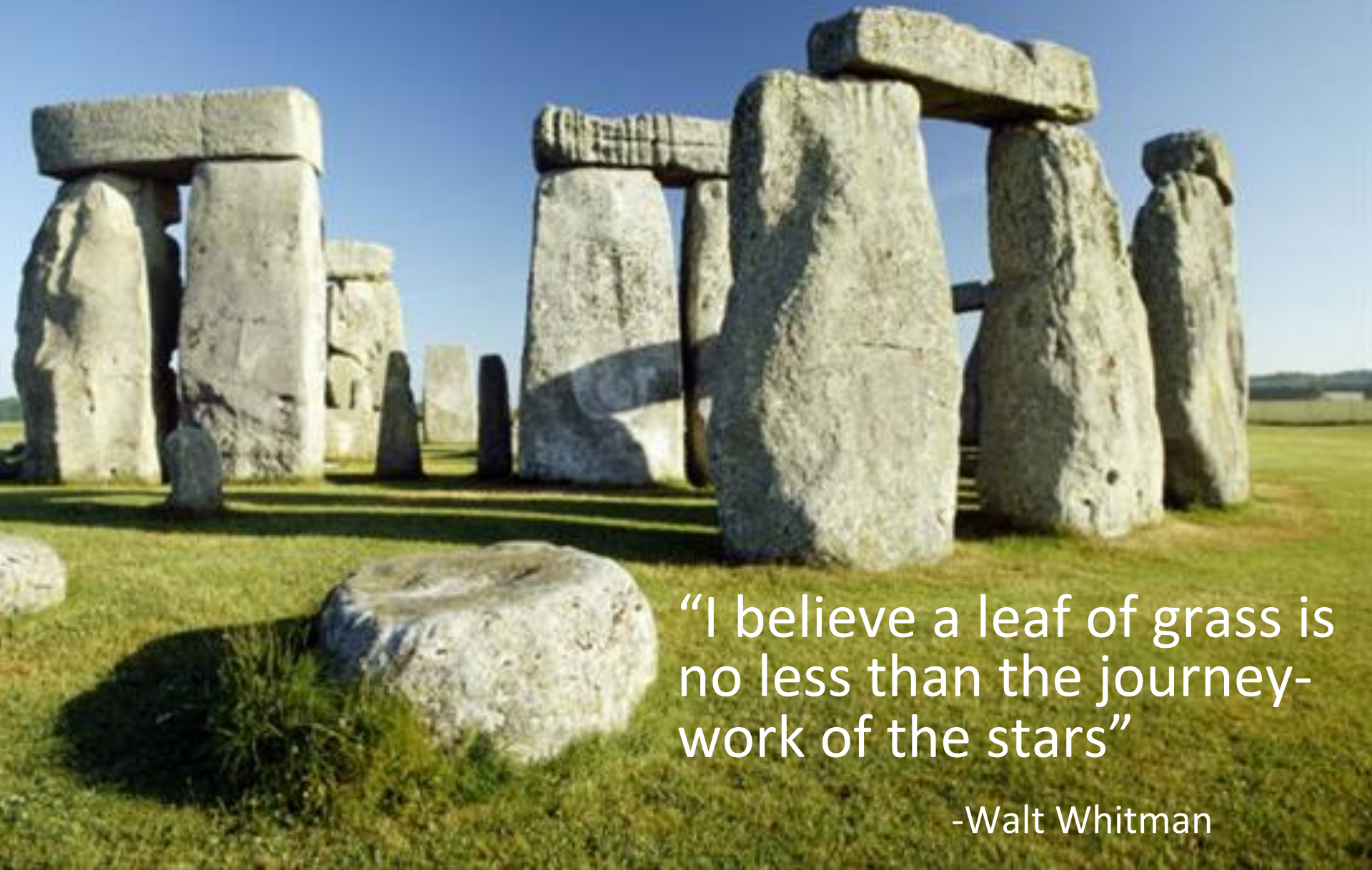
GRASSY GUILDS



PLAY TIME



GRASS AND THE COSMOS



“I believe a leaf of grass is
no less than the journey-
work of the stars”

-Walt Whitman

Thank You

