Drought Survival

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Outline

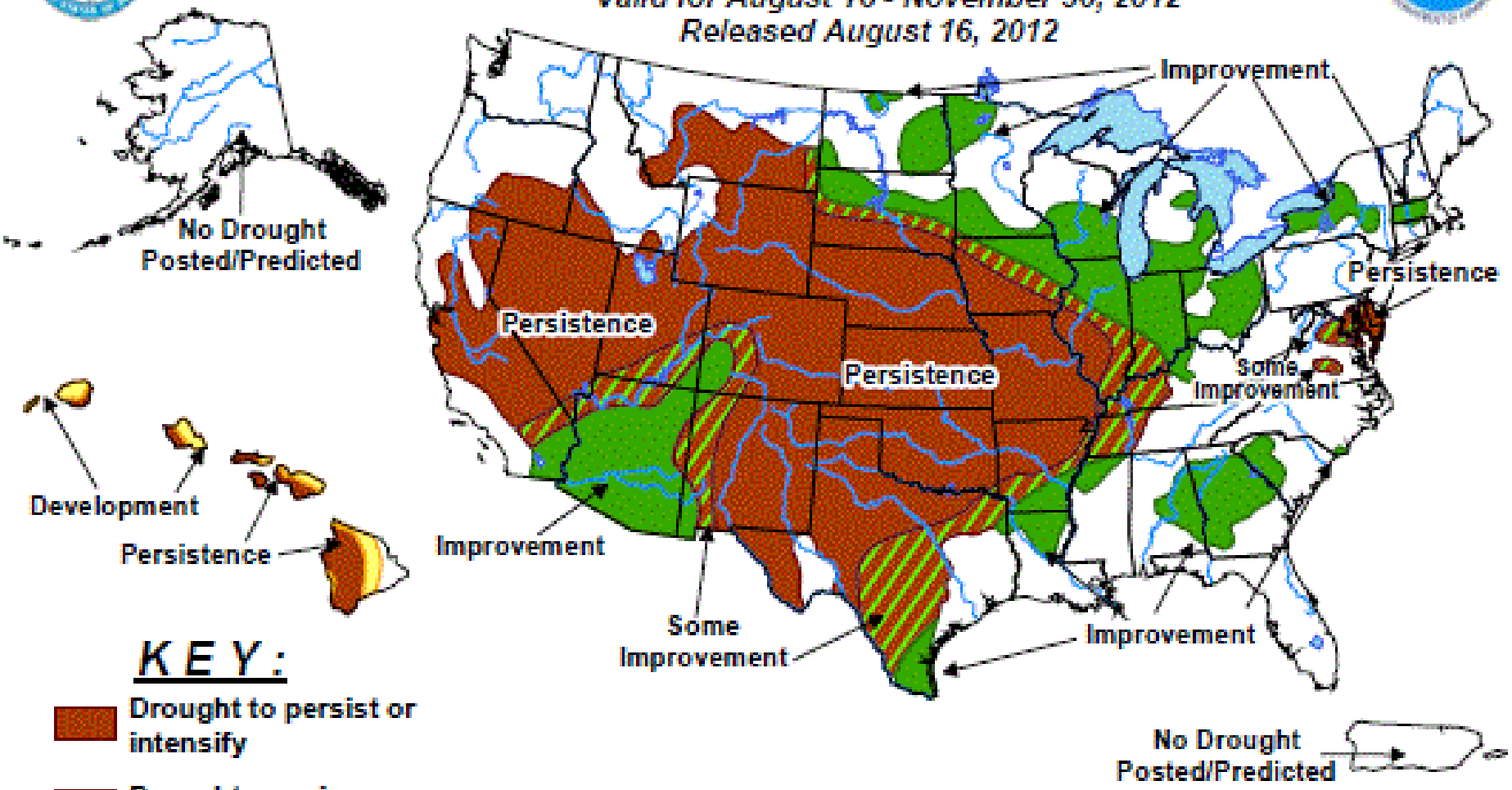
- Current conditions
- Short term survival
- Long term survival

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for August 16 - November 30, 2012

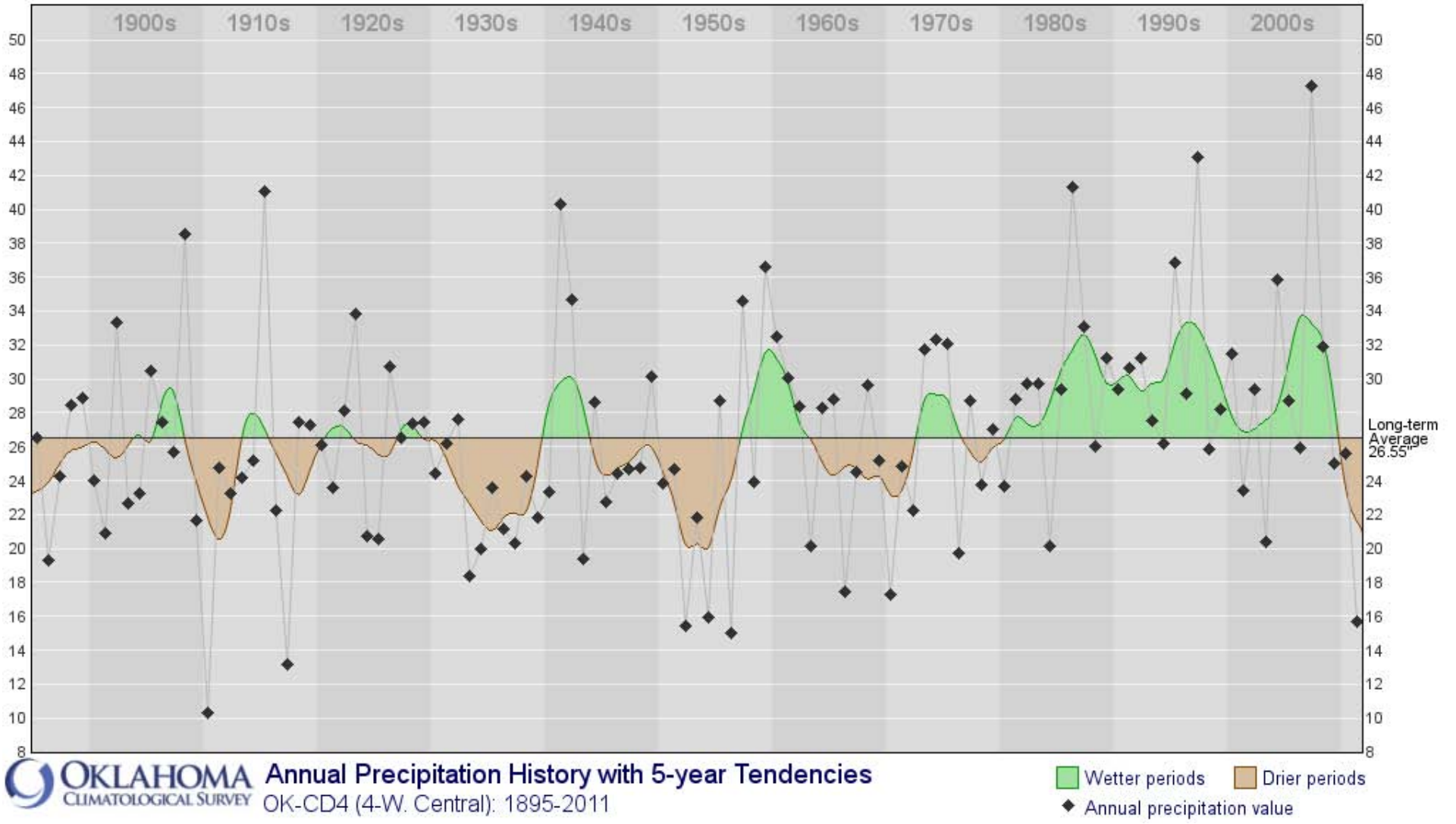
Released August 16, 2012



KEY:

- Drought to persist or intensify
- Drought ongoing, some improvement
- Drought likely to improve, impacts ease
- Drought development likely

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green Improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.



OKLAHOMA CLIMATOLOGICAL SURVEY

Annual Precipitation History with 5-year Tendencies

OK-CD4 (4-W. Central): 1895-2011

Wetter periods Drier periods

Annual precipitation value

Oklahoma Climatological Survey

http://climate.ok.gov

Oklahoma Mesonet

http://www.mesonet.org

National Climatic Data Center

http://www.ncdc.noaa.gov/oa/ncdc.html

National Drought Mitigation Center

www.drought.unl.edu

NOAA

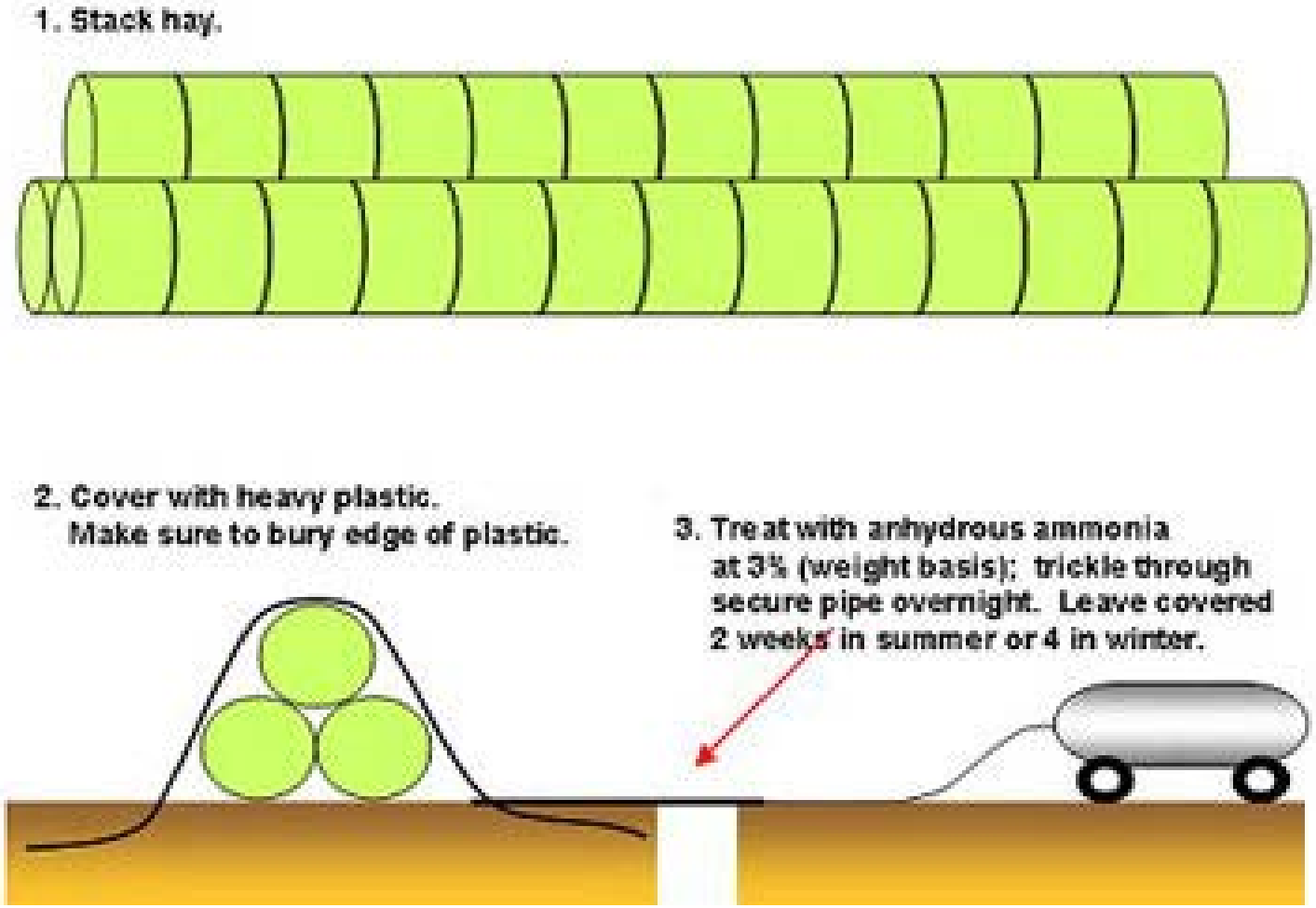
www.noaa.gov

- 51% of corn crop rated poor or very poor
- 48% of grain sorghum rated poor or very poor
- 38% of soybean rated poor or very poor
- 59% of pastures rated poor or very poor

Short term survival

- 2.5% BW/day (25-35 lbs/hd/day)
- 750-1,050 lbs/month
- 9,000-12,600 lbs/year
- 13,846-19,384 lbs offered/year

Strategy - ammoniate low quality forages



University of Missouri AGW1003

Strategy - Reduce feed waste


0 Hours

72 Hours

5.3% bale waste


0 Hours

24 Hours

20.5% bale waste


0 Hours

72 Hours

21% bale waste


0 Hours

48 Hours

13% bale waste

Hay value = $125/T

Bale 1 Cone feeder

Bale weight – 870

Consumption time – 8 days

Weight outside ring – 30 lbs

Value of outside waste - $1.87

Bale 1 Ring

Bale weight – 655

Consumption time – 2 days

Weight outside ring – 232 lbs

Value of outside waste - $14.38

Bale 2 Cone Feeder

Bale weight – 870

Consumption time – 3 days

Weight outside ring – 25 lbs

Value of outside waste - $1.56

Bale 2 Ring

Bale weight – 870

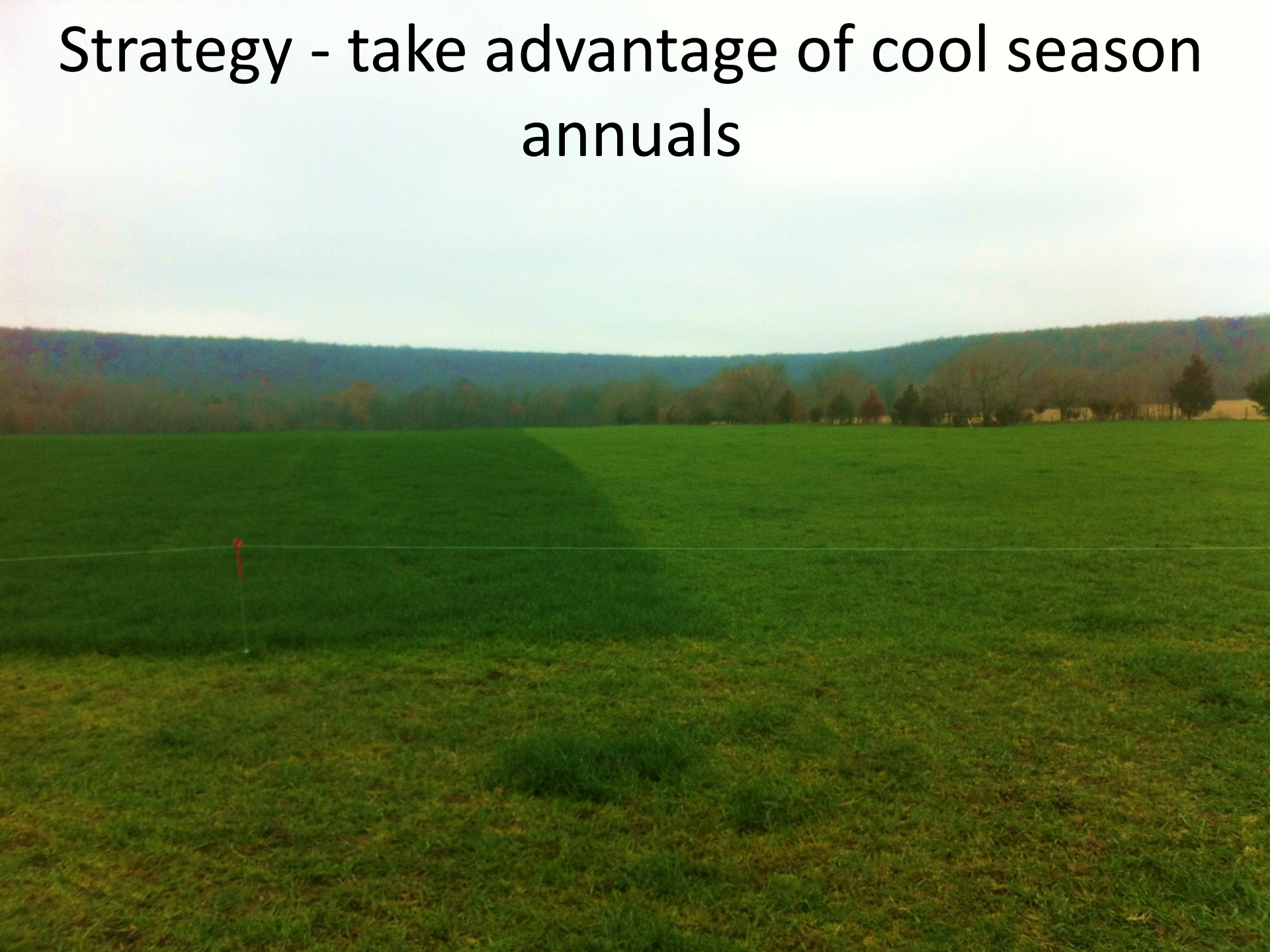
Consumption time – 5 days

Weight outside ring – 464 lbs

Value of outside waste - $29.00

> 40% Waste

Strategy - take advantage of cool season annuals



Strategy – appropriately stock cool season annuals

Annual ryegrass - bermudagrass

Strategy - stockpile

Strategy - use fence to your advantage

Long term survival

Long term management and sustainability begins with carrying capacity

"The damage resulting on the ranges of Texas from the 5-year drought period, 1949-54, can be correlated with land management and the type of soil. In general, ranges that were properly managed before and during the drought came through in fair to good condition; overstocked ranges were severely damaged and subsequent recovery has been very limited. **Thus ranchmen have evidence of the need for carrying out proper management practices year after year, not only to meet drought periods, but to build for an economic unit by capitalizing on the years of favorable moisture. Thus the old rule still prevails that close grazing does not pay."**

Young, V.A., 1956. The effect of the 1949-1954 drought on the ranges of Texas. J. Range Mgt. Vol. 9, pp. 139-142.

Financial and production performance for TX/OK/NM cow-calf producers

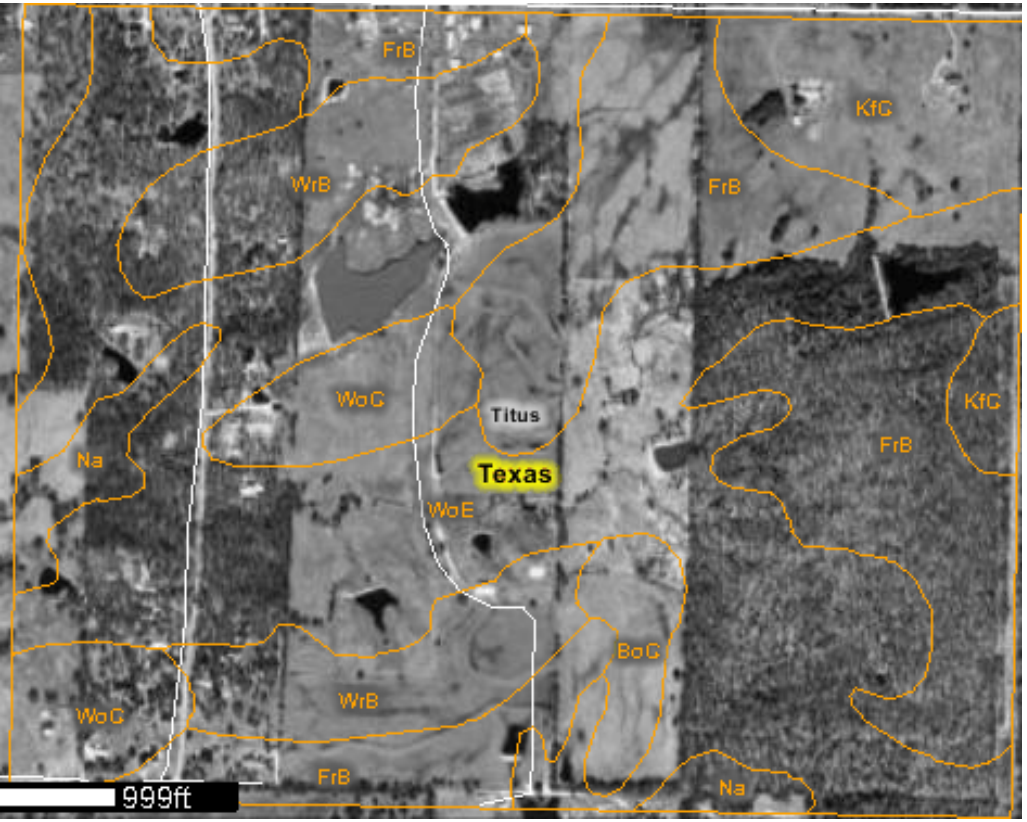
SPA Performance Measure	Top 25%	Low 25%	Average
Total feed cost ($/cow)	$136	$220	$168
Costs ($/cow)	$320	$556	$409
Break-even economics cost of weaned calf production ($/cwt)	80	159	109
Total investment per breeding cow	$2,097	3,112	2,437
Pregnancy percentage	86.7	82.0	84.0
Weaning weight	540	502	523
Pounds weaned per exposed female	457	409	432

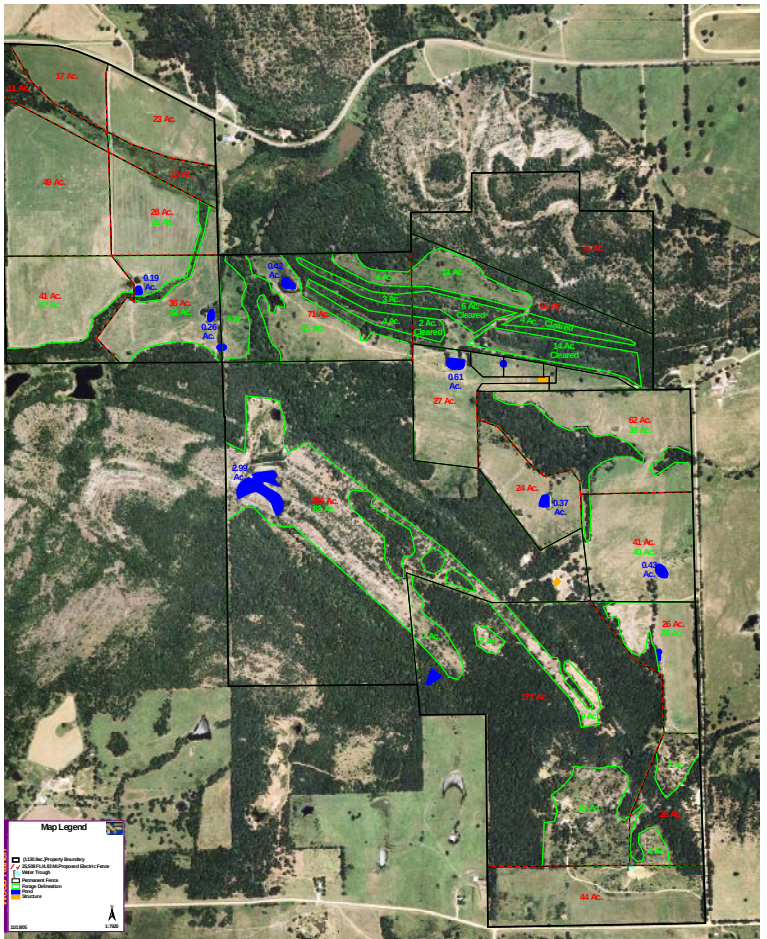
Oklahoma Cooperative Extension Service Fact Sheet F-231

http://agecoext.tamu.edu/programs/management/beef-cattle-spa.html

Grazeable acres and productivity

http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm





Damage greater on sandy soils than clay

Damager higher on bunch grasses than sod forming grasses

General guide for pasture and range recovery

Drought impacts roots as well

Adjust stocking rates

Soil test

Fertilize appropriately

- Apply fertilizer
  - Aid water use efficiency
  - Speed forage recovery
  - P aid root growth & N use efficiency
  - Apply timely

Control weed pressure


Rest

Assess what you have

Assessing what you have

- Greater than 60% stand loss – add seed or consider re-establishment

Introduced warm season bunchgrass recovery

1. Allow seed drop
2. Graze as standing hay
3. Add a companion species? Maybe/maybe not

Methods to improve fair to good condition range

1. Evaluate your goals
2. Delay spring grazing until boot stage
3. Defer during growing season (rest)
4. Rest, Rest, Rest

Methods to improve poor condition range

1. Evaluate goals
2. Total rest if practical
3. Total reseeding
4. Establish seed source “islands”
7. Patience, patience

The most common question asked concerning renovation -

Do I add seed?

Considerations for adding seed

- Greater than 60% stand loss
- Are you willing to manage for success?
  - Warm season perennial seedlings are wimps!
  - More potential for success with cool season perennials
- Can good seed soil contact be obtained?
  - Proper rates
  - Proper depth
  - Proper time
- Can competition be removed or reduced?
- Apply fertility

Starting over

1. What are your goals?
2. Consider your soils
3. Strongly consider your management

Gearing up for 2012-13 forage production

- Close the gates
- Make sure stocking rate is correct
- Manage top growth in a manner appropriate for the species

Forage forecast 2012-2013

- 2012 has done little to aid warm season perennial grass recovery
- Give opportunities for warm season grasses to rest prior to frost.
- Cool season annuals can still be good. Get them off prior to transition period.
- Weed population early and aggressive.
- Adjust stocking rates accordingly.

Thanks!