

SPEED BUMP





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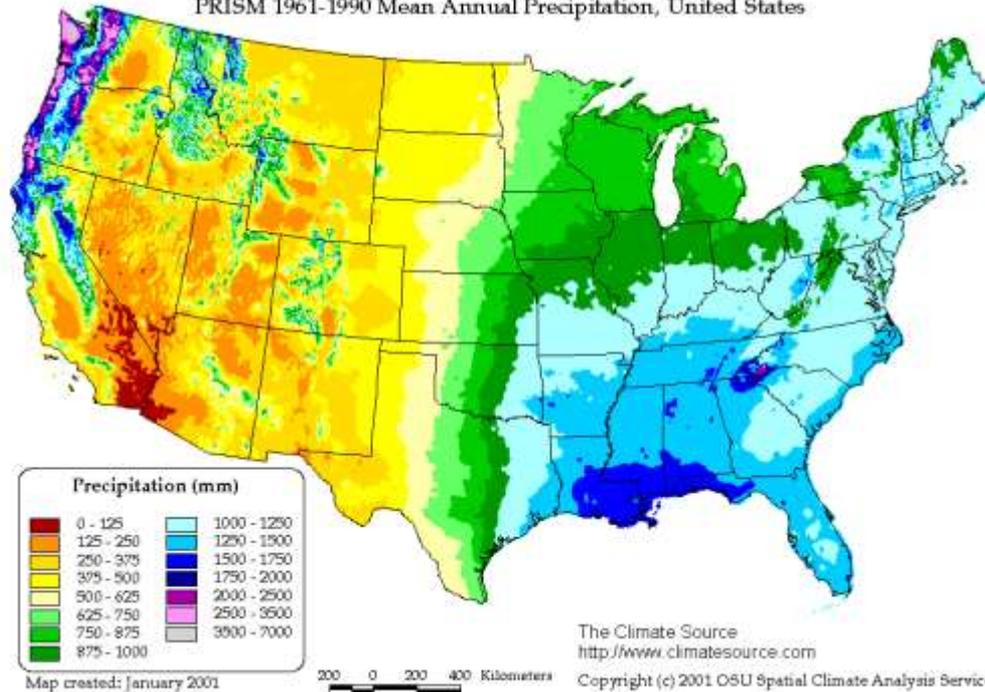




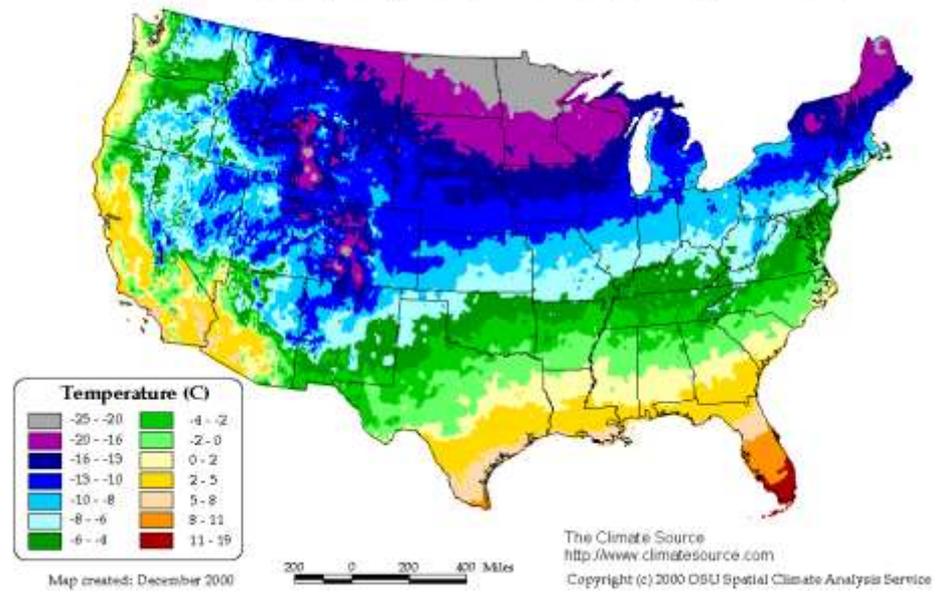
The Great Plains

Perimeter of the Plains

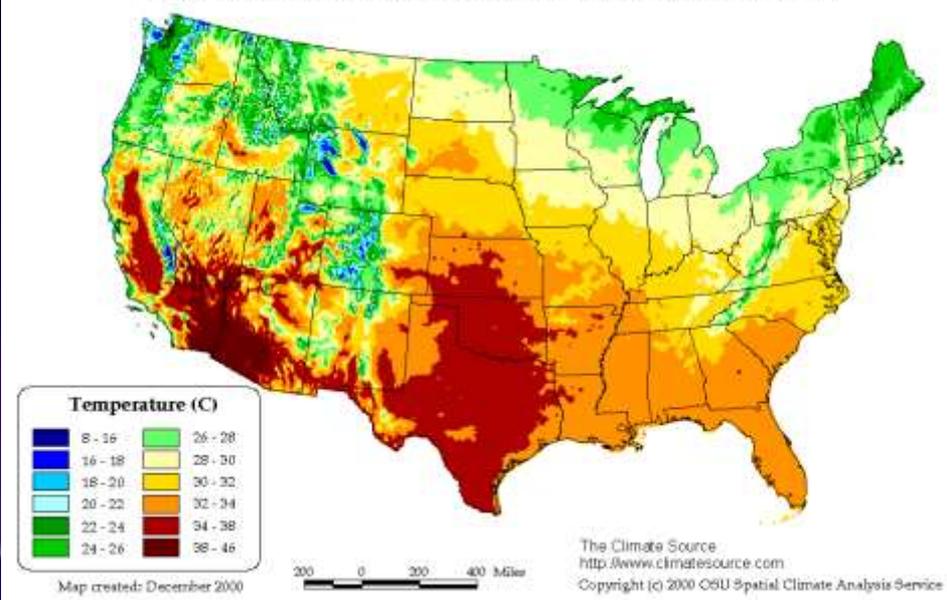
PRISM 1961-1990 Mean Annual Precipitation, United States



PRISM 1961-1990 January Mean Minimum Temperature, United States

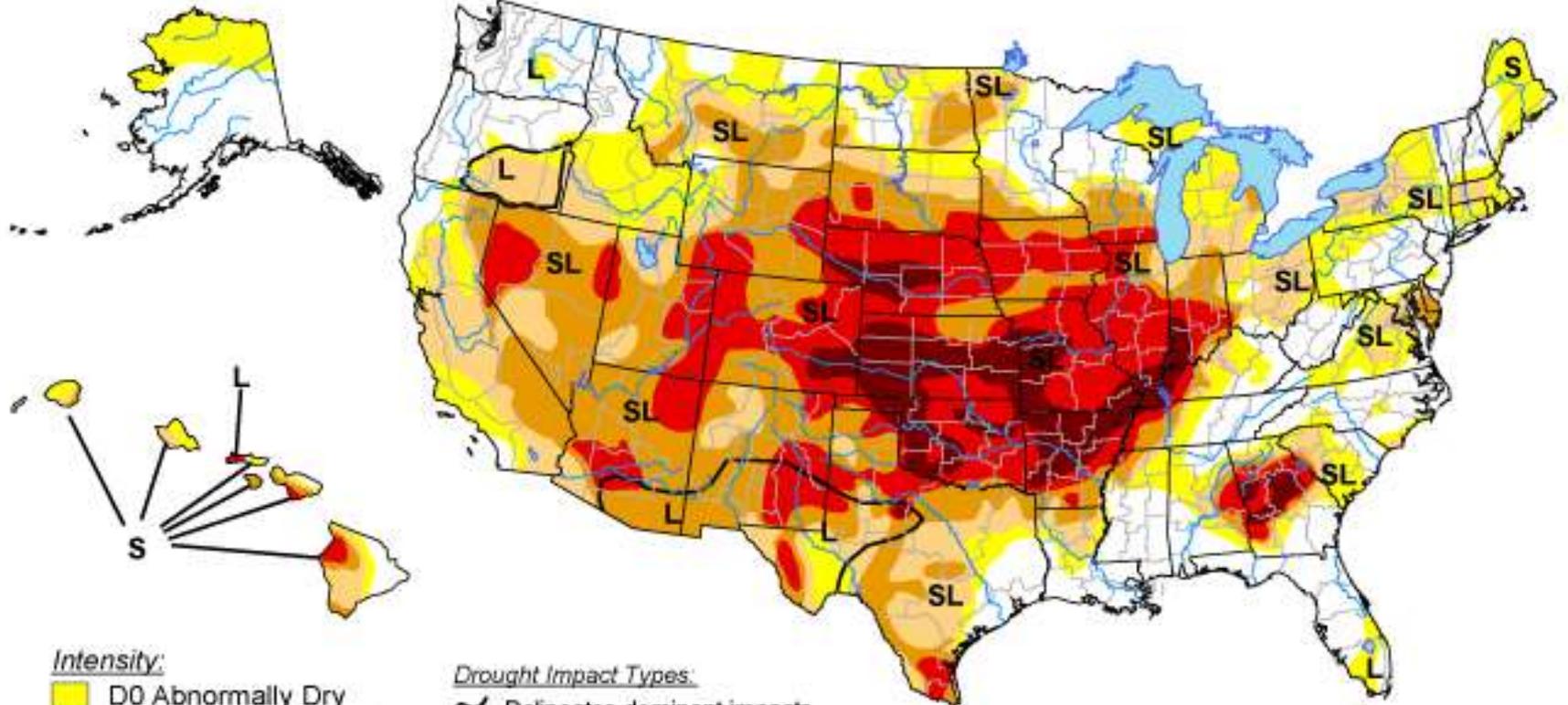


PRISM 1961-1990 July Mean Maximum Temperature, United States



U.S. Drought Monitor

August 14, 2012
Valid 7 a.m. EDT



Intensity:

-  D0 Abnormally Dry
-  D1 Drought - Moderate
-  D2 Drought - Severe
-  D3 Drought - Extreme
-  D4 Drought - Exceptional

Drought Impact Types:

-  Delineates dominant impacts
- S = Short-Term, typically <6 months
(e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months
(e.g. hydrology, ecology)

The Drought Monitor focuses on broad-scale conditions.
Local conditions may vary. See accompanying text summary
for forecast statements.

<http://droughtmonitor.unl.edu/>



Released Thursday, August 16, 2012

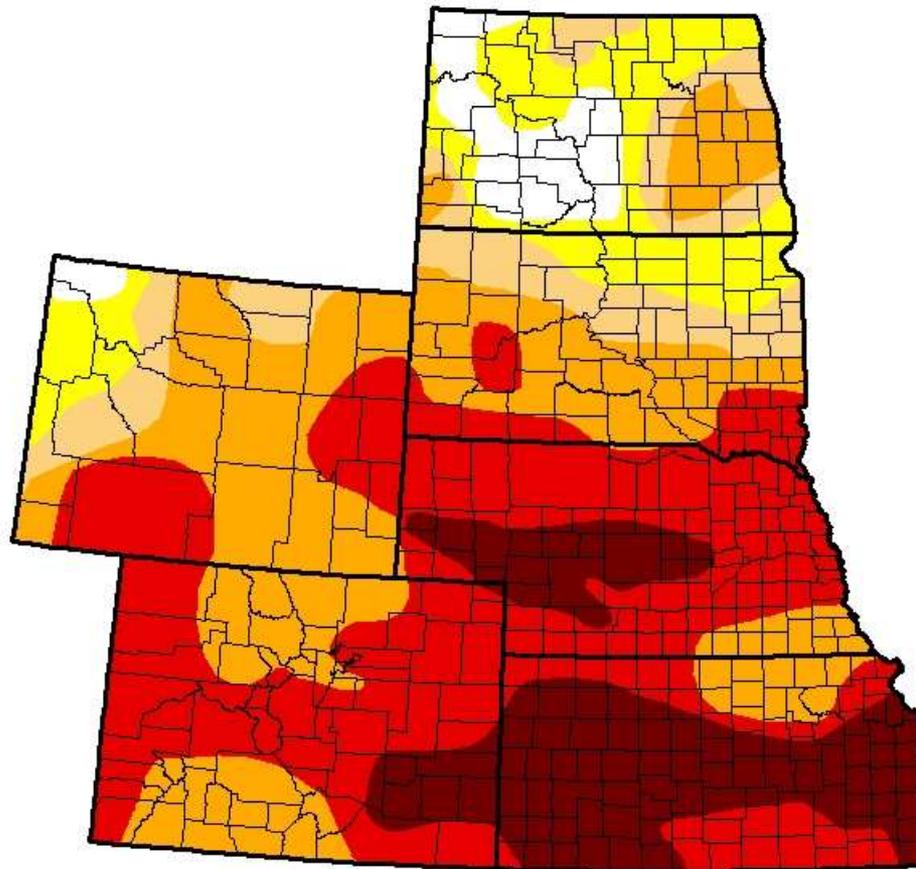
Author: Michael Brewer/Liz Love-Brotak, NOAA/NESDIS/NCDC

U.S. Drought Monitor High Plains

August 14, 2012
(Released Thursday, Aug. 16, 2012)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	4.48	95.52	86.05	76.97	49.64	15.52
Last Week <i>8/7/2012</i>	2.36	97.64	87.16	77.20	49.30	7.92
3 Months Ago <i>5/15/2012</i>	49.95	50.05	18.61	6.22	0.00	0.00
Start of Calendar Year <i>1/8/2012</i>	57.62	42.38	18.12	6.33	2.07	0.04
Start of Water Year <i>9/27/2011</i>	70.09	29.91	17.44	11.97	6.22	2.96
One Year Ago <i>8/16/2011</i>	57.85	42.15	9.54	0.51	0.00	0.00



Intensity:



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Author:
Michael Brewer
NCDC/NOAA



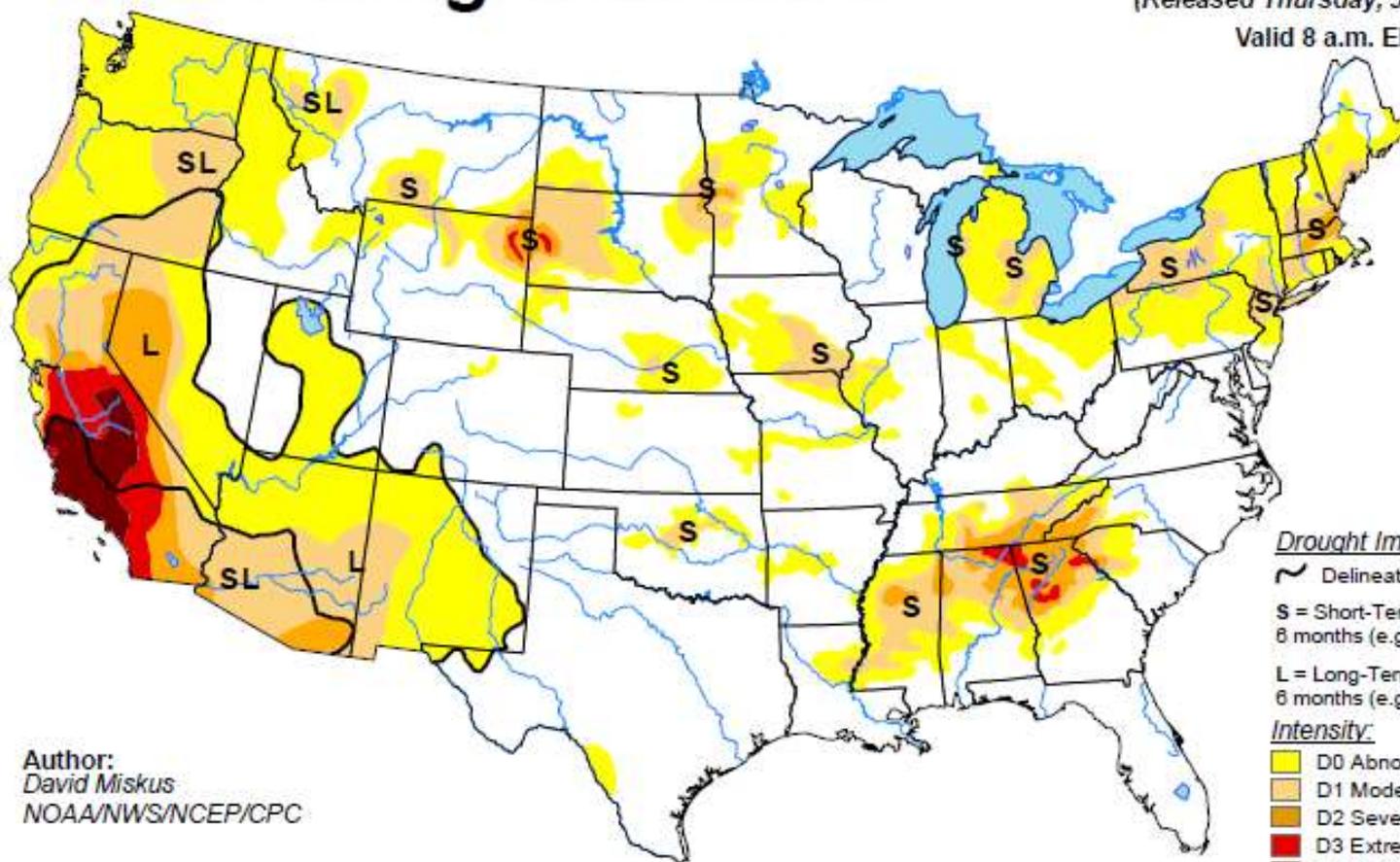
<http://droughtmonitor.unl.edu/>

U.S. Drought Monitor

July 5, 2016

(Released Thursday, Jul. 7, 2016)

Valid 8 a.m. EDT



Author:
David Miskus
NOAA/NWS/NCEP/CPC

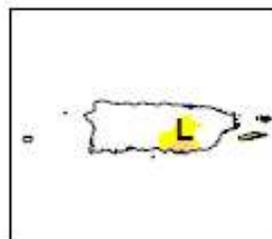
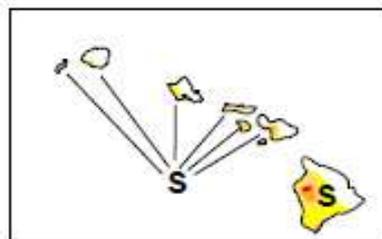
Drought Impact Types:

- Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

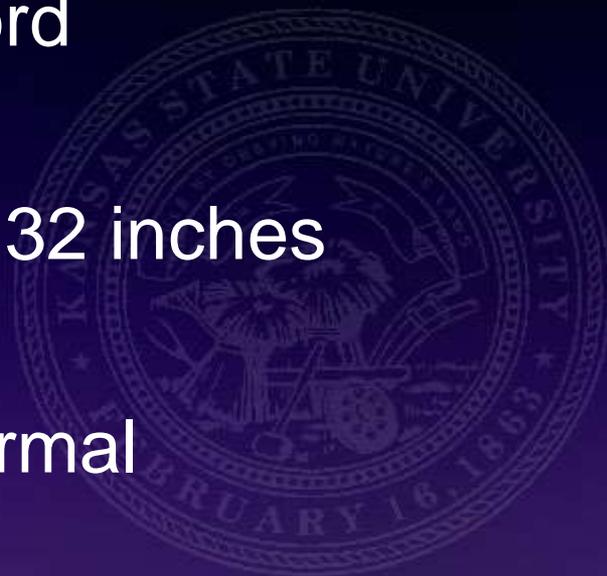
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



<http://droughtmonitor.unl.edu/>

- Summers of 2011 & 2012
 - Ave 62 days above 90 degrees (12 above 100)
 - 2011 had 92 days above 90°F (53 above 100)
 - Hottest summer in Wichita recorded history
 - 2012 had 95 days above 90°F (36 above 100)
 - Warmest calendar year on record
 - Average annual precipitation is 32 inches
 - 26 in (2011) & 25 in (2012)
 - 2-year total was 13 in below normal



What about **HEAT**

- Additional stress
- Increases the plants demand for water
- Increases transpiration
- Makes Drought worse
- Plants have trouble cooling themselves





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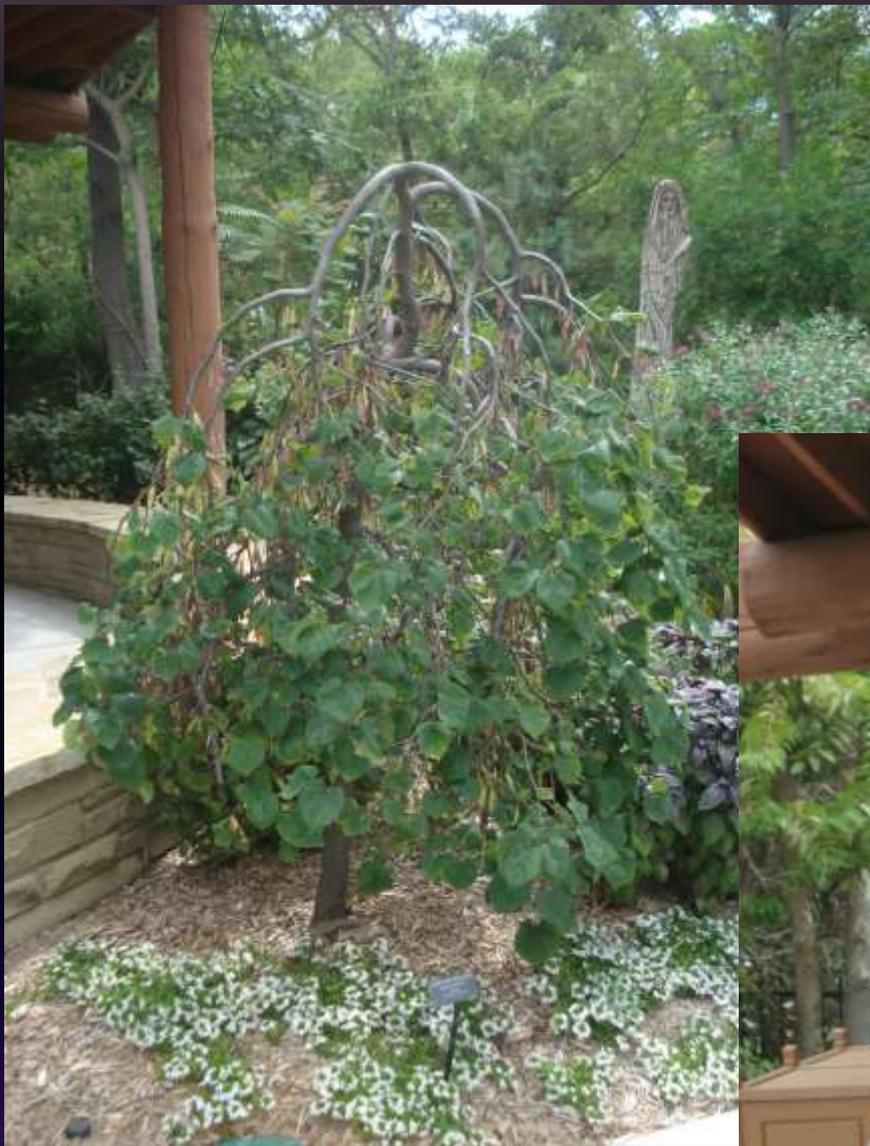


Thuja 'Green Giant'



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Nursery Plants Sold in 1998

1. Red Maple (1.7 mil)
2. Japanese Maple (1.2 mil)
3. Ash (1.2 mil)
4. Birch (1.1 mil)
5. Norway Maple (1.0 mil)
6. Poplar (1.0 mil)



Nursery Plants Sold in 2009

1. Ash (4.3 mil)
2. Japanese Maple (2.7 mil)
3. Red Maple (1.8 mil)
4. Poplar (1.6 mil)
5. Birch (1.3 mil)
6. Willow (1.1 mil)



Shade Trees Sold in 2014

1. Red Maple (2.1 mil)
2. Japanese Maple (1.6 mil)
3. Birch (0.9 mil)
4. Willow (0.5 mil)
5. Sweetgum (0.5 mil)
6. Sugar Maple (0.5 mil)
 - 'Oak' (3.3 mil)
 - Maple, other (1.3 mil)



THE DEATH SPIRAL

Poorly grown Autumn Blaze

Shipped & Held at Big
Box Store

Planted July 4th weekend in
new subdivision

Watered Daily &
String Trimmer

Sunscald and bark cracking

Borers and Pathogens

Record heat & drought of
2011 -2012

Tree Dies – SURPRISE!

Call Jason and ask what to
spray to save tree









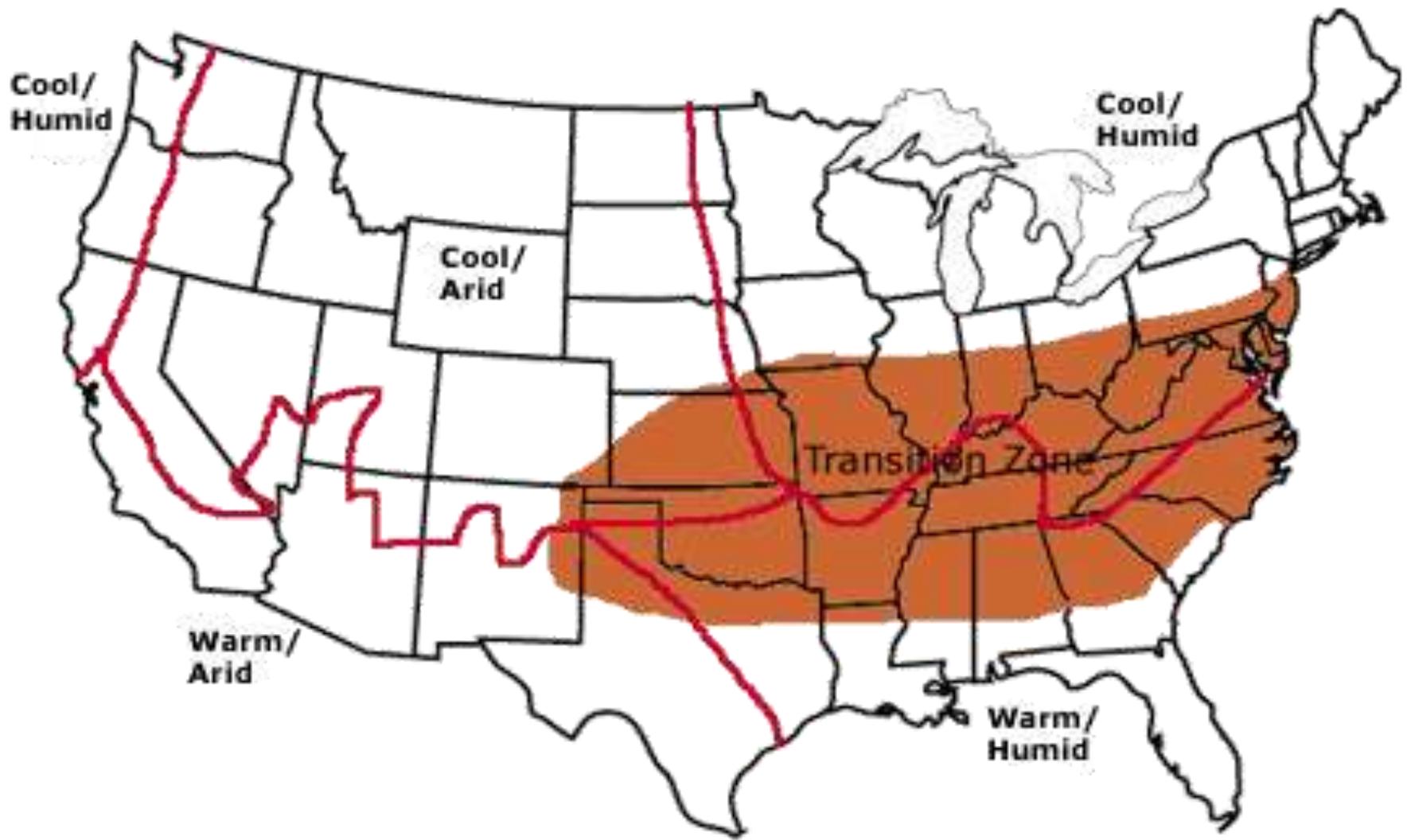
Use Information

Red Maples	% FHAB Infested
Burgundy Belle	37.5
October Glory	20.0
Northwood	18.6
Red Sunset	15.8
Sun Valley	15.0
Somerset	15.0
Brandywine	10.0
Autumn Flame	0.0

Sugar Maples	% Infested
Green Mountain	20.0
Crescendo	11.8
Commemoration	11.8
Legacy	0.0
Freeman Maples	
Autumn Fantasy	10.0
Sienna Glen	5.0
Autumn Blaze	0.0
Misc. Maples	
A. truncatum	10.5
A. campestre	0.0

THE OTHER COAST







Arizona Cypress



Incense Cedar



Caddo Maple



Shantung Maple





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**Acer saccharum
'Green Mountain'**



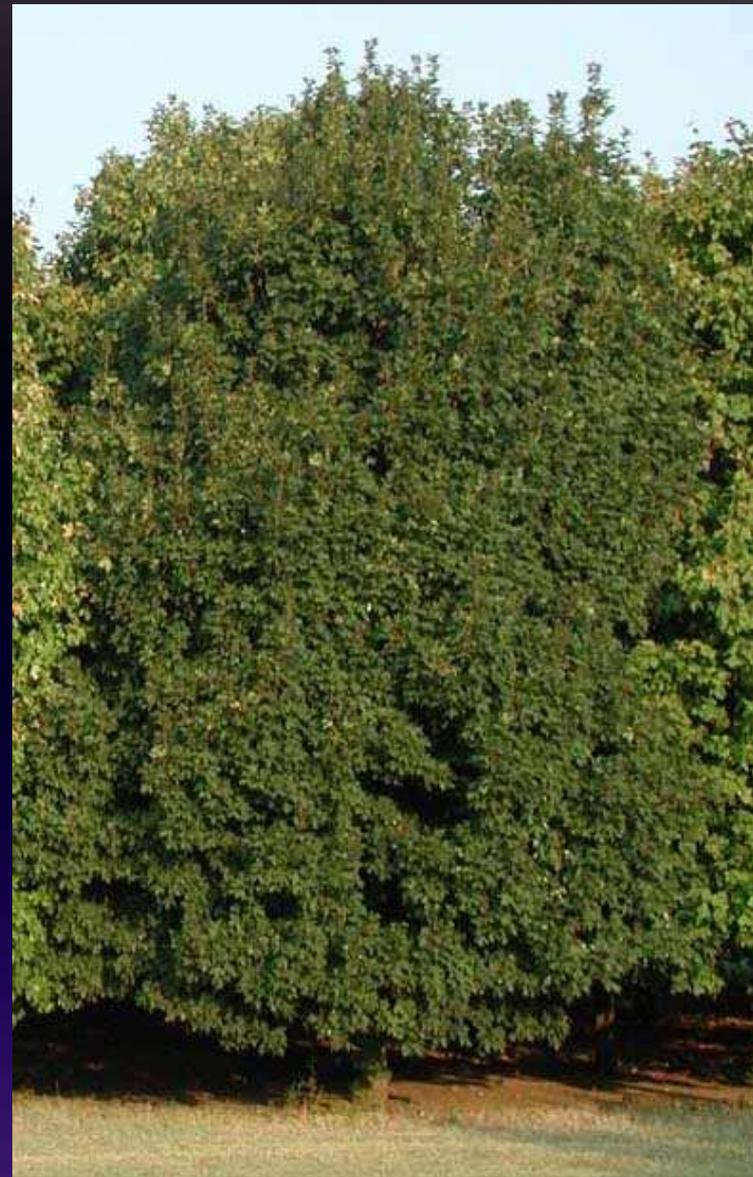


**Acer saccharum
'Fairview'**

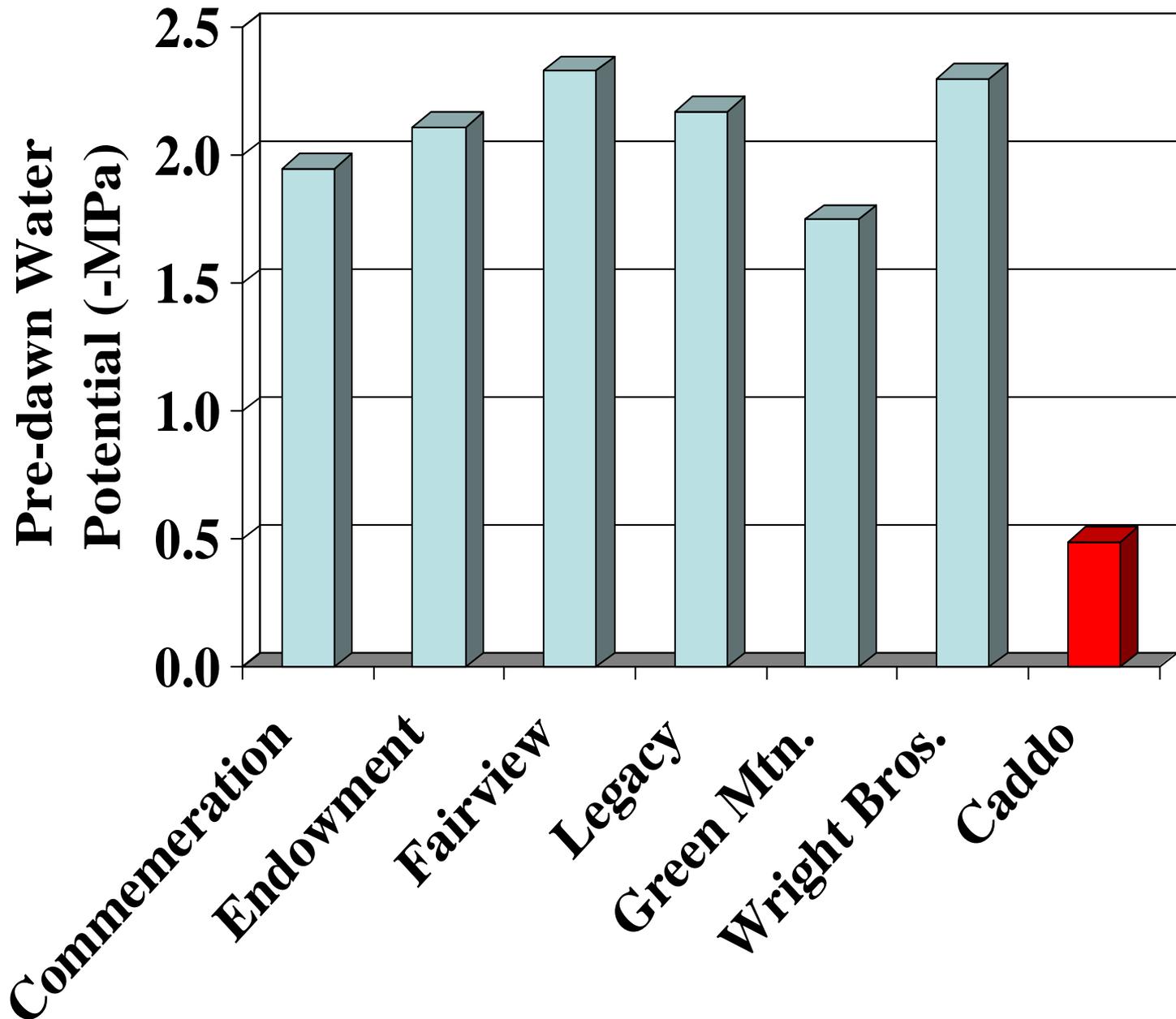




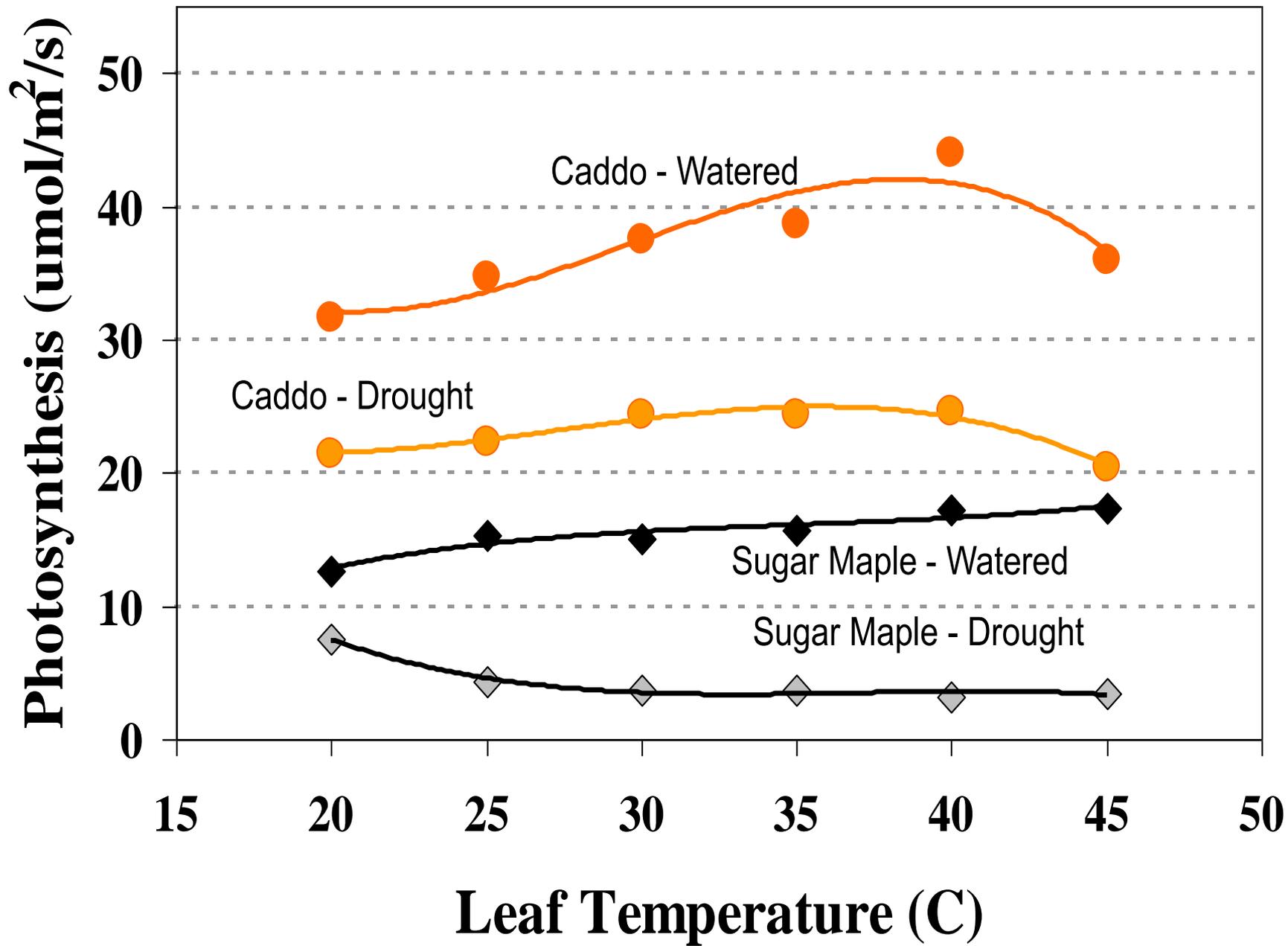
Acer saccharum
(Caddo Maple)













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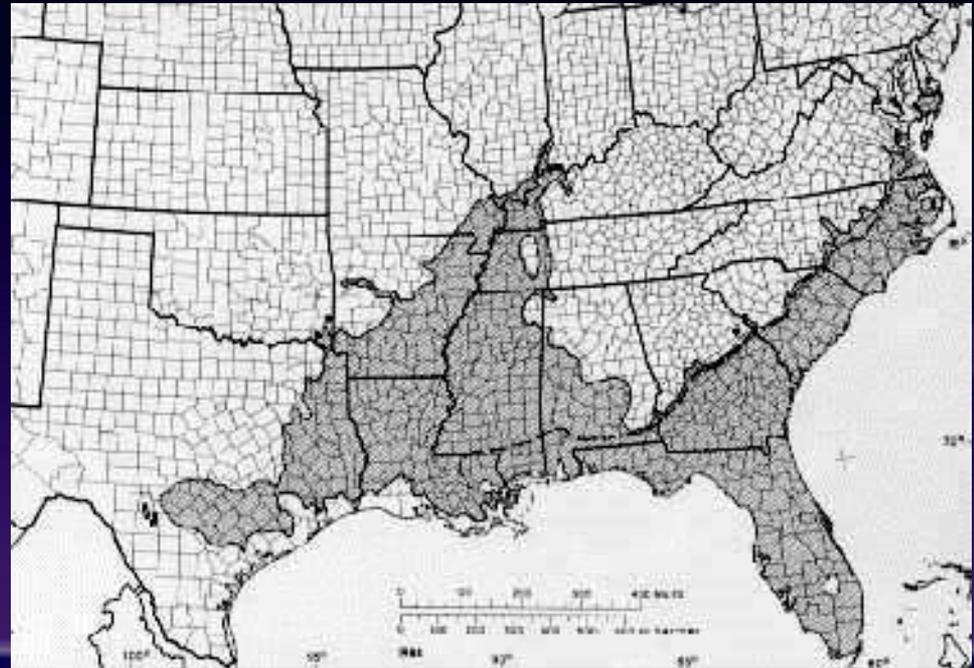


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Baldcypress

(Taxodium distichum)







- Chinese Pistache
- Male
- Seedless



National Elm Trial

- 18 cultivars distributed to cooperators
- Bare root liners
- American Elms & Eurasian hybrids
- Planted and maintained according to local expertise
- 10-yr project
- Data collected annually



Ulmus 'Accolade'





Kansas Favorites



- Accolade Elm
 - 100% Survival
 - Ave 1.6 ft growth/yr (lower end)
 - 0.7 in caliper/yr
 - Dark green leaves
 - Controlled growth habit
 - Morton Arboretum



Kansas Favorites



- New Harmony Elm
 - 100% Survival
 - 2.5 ft growth/yr
 - 0.6 in caliper/yr
 - Lighter green leaves
 - Narrow growth habit
 - Better branching
 - Minor lacebug
 - USDA





Kansas Favorites

- Princeton Elm
 - 100% Survival
 - 2.6 ft growth/yr (3rd)
 - 0.8 in caliper/yr
 - Very attractive as a young tree
 - Branch angles a concern



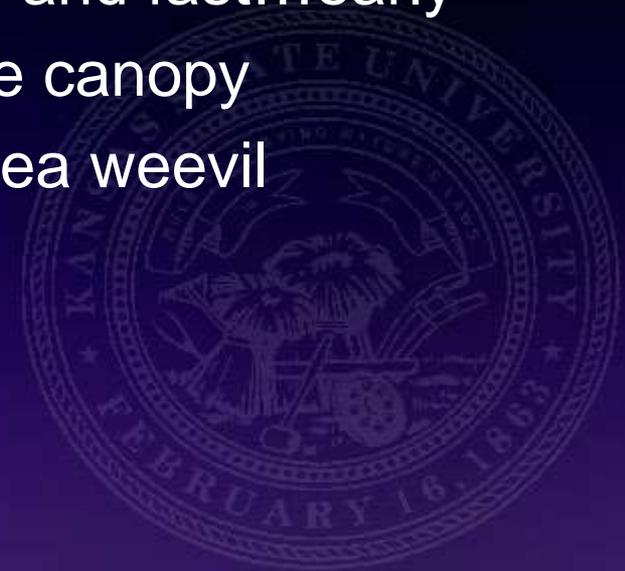
Kansas Favorites

- Danada Charm Elm
 - 100% Survival
 - 2.4 ft growth/yr (4th)
 - 0.7 in caliper/yr
 - Morton Arboretum
 - Fast growing
 - Dark green leaves



Kansas Favorites

- New Horizon Elm
 - 100% Survival
 - 3.2 ft growth/yr (1st)
 - 1.2 in caliper/yr (1st)
 - University of Wisconsin
 - Large and fast...early
 - Dense canopy
 - Elm flea weevil



Kentucky Coffeetree

(*Gymnocladus dioica*)





Why do people carve their initials in the tree?

So that future generations can know who all the morons were.

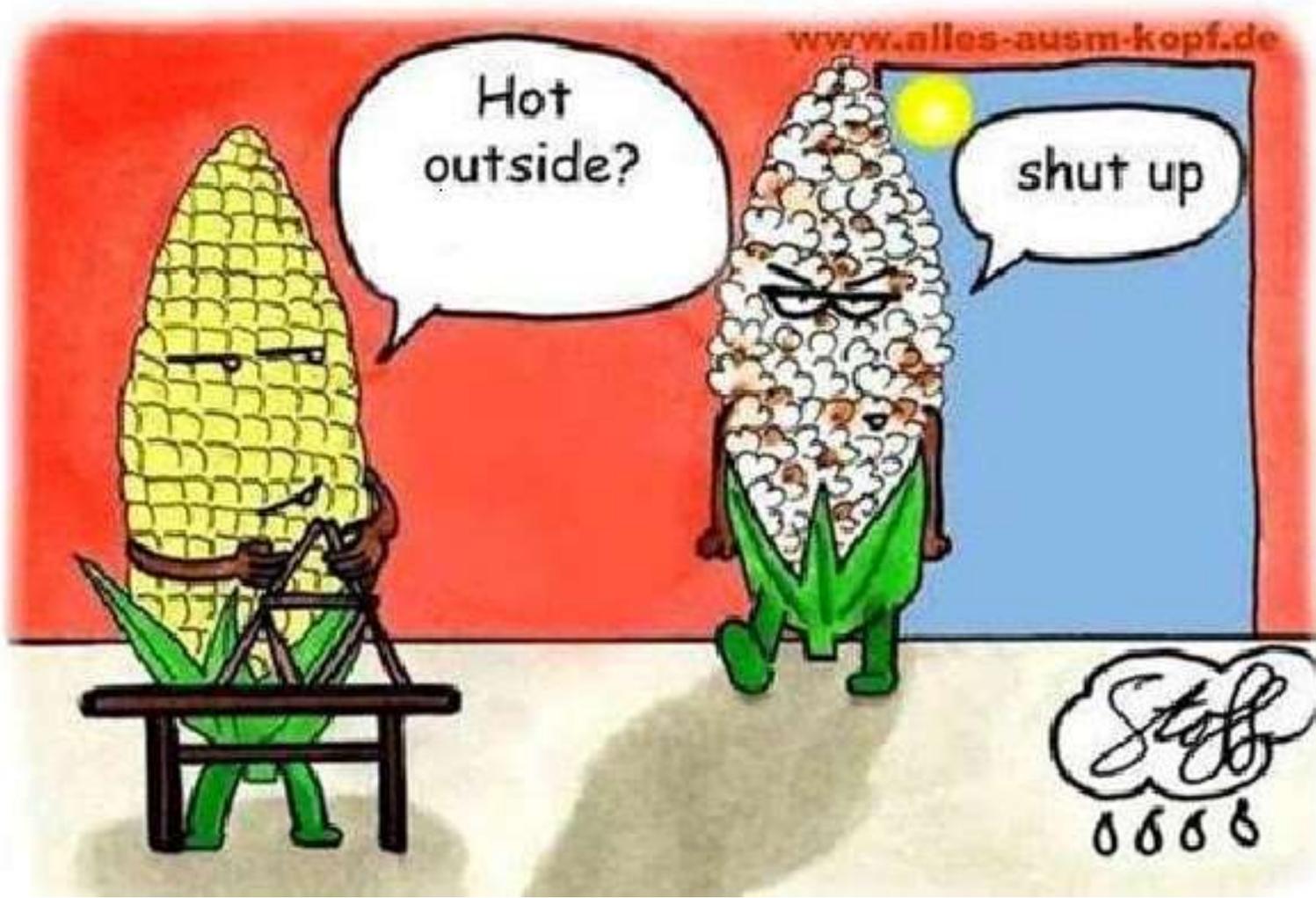
Dan Daniel











Hot
outside?

shut up

Stoff
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