Trees for Nebraska

HEATHER BYERS
NE. CERTIFIED NURSERYMAN
GREAT PLAINS NURSERY
WESTON, NE
Survival in nature requires *genetic diversity* & *adaptability* to environmental changes.
Genetic Diversity

- Seed grown vs. clones
Adaptability

- Temperature Swings
- Flooding
- Drought

<table>
<thead>
<tr>
<th>Site</th>
<th>Temp/Dewpoint Before Heat Burst</th>
<th>Temp/Dewpoint After Heat Burst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grand Island Airport ASOS</td>
<td>73/67 (2:53 a.m.)</td>
<td>99/41 (5:10 a.m.)</td>
</tr>
<tr>
<td>Hastings Airport ASOS</td>
<td>73/66 (1:53 a.m.)</td>
<td>97/39 (3:53 a.m.)</td>
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<tr>
<td>Holdrege Airport AWOS</td>
<td>77/68 (12:35 a.m.)</td>
<td>88/47 (2:35 a.m.)</td>
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<tr>
<td>Kearney Airport AWOS</td>
<td>75/66 (12:55 a.m.)</td>
<td>97/43 (3:15 a.m.)</td>
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<tr>
<td>Lexington Airport AWOS</td>
<td>79/68 (11:55 p.m.)</td>
<td>87/46 (2:15 a.m.)</td>
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<tr>
<td>Aurora Airport AWOS</td>
<td>73/63 (5:37 a.m.)</td>
<td>91/46 (6:38 a.m.)</td>
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</tbody>
</table>

June 2013

Source: [http://droughtmonitor.unl.edu/](http://droughtmonitor.unl.edu/)

Figure 1. U.S. Drought Monitor Map of Nebraska on September 18, 2012
Native Trees

• Utilize native trees that have evolved in our conditions
• Seed source??
Tree Selection

• Oaks – White group
  – Bur Oak
  – Chinkapin Oak
  – Dwarf Chinkapin
  – White Oak
  – Gambel Oak
  – Shingle Oak
  – Overcup Oak
  – Chestnut Oak
  – Hybrids

• Oaks – Red group
  – Red Oak
  – Black Oak
  – Hill’s Oak
  – Shumard Oak
Relict Bur Oak

Burr Oak Canyon – near McCook, NE

Characteristics of both Post Oak and Gamble Oak

The name refers to the ecology form meaning a plant that exists as a remnant of a formerly widely distributed group in an environment.
Tree Selection

- Kentucky Coffeetree
- Boxelder Maple
- Sugar Maple – Table Rock, NE
- Ohio Buckeye
- Niobrara Paper Birch
- Northern Pecan
- Black Walnut
- Northern Catalpa
- Hackberry
  - Leeman Springs (Hackberry Hollow)
- American Sycamore
- Prairie Gold Aspen
- Cottonwood
- Ironwood
- Pawpaw
- Black Cherry
- American Plum
- Chokecherry
- American Linden
- American Elm
Birds, Bees & Butterflies

Oaks support 534 species of caterpillars
OAK SEEDLINGS

NEWLY TRANSPLANTED
5/20/14
2 MONTHS OLD

7/1/14
4 MONTHS OLD

8/5/14
5 MONTHS OLD

GREAT PLAINS NURSERY
Tree Structure for Nebraska
Who said Bur oaks are slow growing?

#7 RT Bur Oak – 4 years after planting in Omaha
Thank you

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