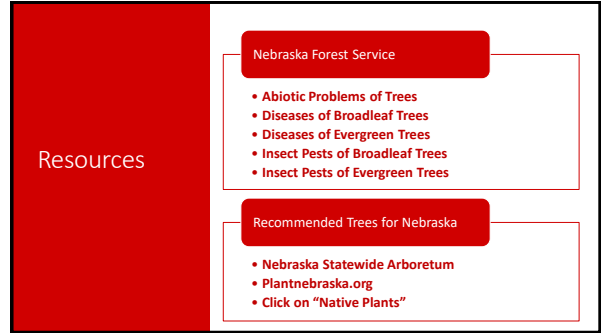
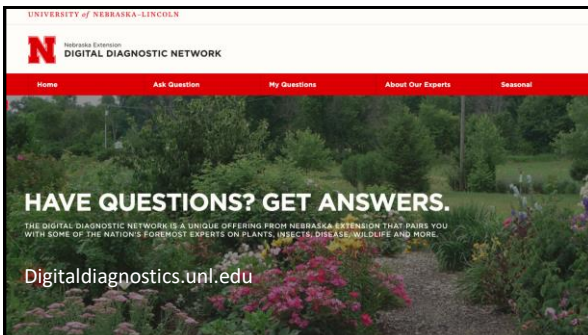




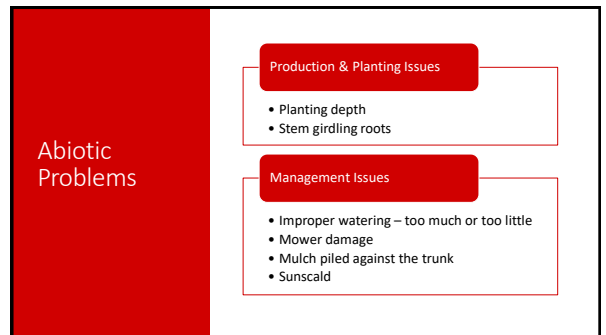
1



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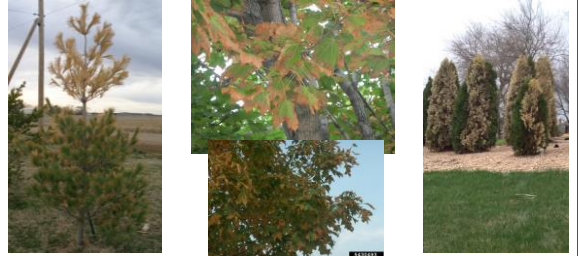
### Planting Issues



Poor planting depth. Sarah Browning, Nebraska Extension. Below - Proper trunk development. Sarah Browning, Nebraska Extension. Above and right - Stem girdling roots. Sarah Browning, Nebraska Extension.

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### Water Issues



Needle scorch. Sarah Browning, Nebraska Extension. Above - Leaf scorch. Sarah Browning, Nebraska Extension. Below - Cheryl Kester, University of Kentucky, Bugwood.org. Winter dieback. Sarah Browning, Nebraska Extension.

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### Mower & Mulch Issues



Mower damage. Sarah Browning, Nebraska Extension. Improper mulching. Above image John Fack, Nebraska Extension. Image right Joseph LaForest, University of Georgia, Bugwood.org.

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### Sunscald Issues



Sunscald on maple trunk. Sarah Browning, Nebraska Extension. Sunscald. Joseph Obrien, USDA Forest Service, Bugwood.org.

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**Leaf Problems**

- Diseases**
  - Anthracnose
  - Rusts, i.e. cedar-apple rust, cedar-hawthorn rust
  - Rhizosphaera needle cast
- Insects**
  - Bagworm
  - Japanese beetle
  - Spider mites
- Abiotic**
  - Scorch

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**Shade Trees - Leaf Problems**

Joseph O'Brien, USDA Forest Service, Bugwood.org  
 George Huber, Cornell University, Bugwood.org  
 Japanese beetle defoliation on Linden, Steven Karamch, Bugwood.org

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**Evergreen - Leaf Problems**

Two Colorado spruce with Rhizosphaera needle cast, Nicholas Brown, UMass Extension, <https://ag.umass.edu/extension/pest-disease/rhizosphaera-needle-cast/>  
 Bagworm damage, Sarah Browning, Nebraska Extension  
 Spider mite damage to interior needles, Ward Strong, NC Ministry of Forestry, Bugwood.org

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## Branch & Trunk Problems

Twig & Branch

- Fireblight
- Siroccocus tip blight

Trunk Damage

- Borers
- Scale

Entire Tree Affected

- Pine wilt
- Dutch elm disease

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## Twig & Branch Problems





Fireblight, Jason Sharman, Vitaltree, Bugwood.org
Siroccocus tip blight, George Huder, Cornell University, Bugwood.org
Diptelia tip blight, Sarah Browning, Nebraska Extension

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## Trunk Damage



EAB larvae



EAB



EAB tunnels








Emerald ash borer: Above Nebraska Dept. of Ag EAB Collage, below left: iohi Foch, Nebraska Extension, below right: Nebraska Forest Service EAB Map for 8/3/2020.
Oystershell scale: Sarah Browning, Nebraska Extension

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## Entire Tree Affected – Pine Wilt

Scotch pine on 8/20/2003, Anne Strach, University of Nebraska
Scotch pine on 9/2/2003, Anne Strach, University of Nebraska

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Landscape Pest Control Products

**Insecticides:**

- **Carbaryl** (*Sevin*)
- **Permethrin** (*Eight*)
- **Spinosad** (*Monterey Garden Insect Spray, Captain Jack's Dead Bug Brew*)
- **Bacillus thuringiensis** (*Monterey BT, Bonide BT*)

**Fungicides:**

- **Liquid copper** (*Bonide Liquid Copper*)
- **Chlorothalonil** (*Bonide Fung-onil, Fertilome Broad Spectrum Landscape & Garden Fungicide*)
- **Mancozeb** (*Bonide Mancozeb*)
- **Neem oil** (*Bonide Neem Oil, Garden Safe Fungicide-3, Garden Safe Neem Oil Extract*)

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**BACKYARD FARMER EXPERTS**

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**GROBigRed**  
Virtual Learning Series

**Growing Herbs**

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7/21—Fall Gardening	8/25 Tree Selection
7/28—Tomato Troubles	9/1 Tree Planting
8/4—Preserving the Harvest	9/8 Tree Care
8/18 Herbs	
9/15 Cover Crops	
9/22 Composting	
9/29 Putting Your Garden to Bed for Winter	

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<https://go.unl.edu/grobigrredvirtual>

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