Insects and diseases of cottonwood, willow, juniper and pinyon

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Photos: Philbrook Museum of Art (Tulsa, OK); prices for antiques
Outline
- Fremont cottonwood galleries
- Willow rust
- Juniper
- Pinyon

Photo: NPS; delange.org; CALflora
Apache cicadas
(*Diceroprocta apache*)

Photos: arizonensis.org; what's that bug; Progressive Pest Control
Fremont cottonwood galleries

Western Poplar Sphinx
(*Pachysphinx occidentalis*)

Photos: arizonensis.org; what's that bug; bugguide
Southwestern Tent Caterpillars
(*Malacosoma incurvum*)

Photos: Bugwood, taken by Bill Ciesla; arizonensis; John Pearson on BugGuide; Peter Bryant
Cottonwood Petiole Gall aphid; *Pemphigus* sp
Alternate host = weeds or crops

Photos: Bugwood; arizonensis; BugGuide; Peter Bryant; Univ. of Idaho
Psyllids with Formica ant

Credit: Peter Bryant; arizonesis
Willow rust – 2014
- North of Elko, NV on the way to the Jarbidge Mtns,
Humboldt-Toiyabe National Forest
Willow rust

Credit: Connie Millar, FS-PSW
Willow rust

Credit: Connie Millar, FS-PSW
Willow rust
Melampsora epitea
Alternate host Ribes and fir

Credit: Connie Millar, FS-PSW; Mycological Society of America
Juniper Borers

Western cedar borer, *Trachykele blondeli*
Black-horned juniper borer, *Callidium* spp.
Juniper twig pruner, *Styloxus bicolor*

Credit: Missouri Botanical Garden; bugguide.net; USFS-FHP; NMSU
True mistletoe
Phoradendron species

Credit: Cooperative Extension, Univ. of Arizona; ForestryImages.org; USFS
Juniper pocket rot  
*Pyrofomes demidoffii*

Credit: Nevada Division of Forestry; Mushroom.observer.org
Pinyon dwarf mistletoe, pinyon blister rust, black stain, pinyon Ips, pitch mass borer, pitch moth, *Dioryctria* spp, pinyon needle scale, and pinyon sawfly.

Credit: CSU; Arizonensis;
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