

Insects and Diseases of Trees and Turf

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Wyoming ECOSYSTEM

NATURAL



A landscape photograph of a golf course. In the foreground, there is a large, leafy tree on the left. A green lawn leads to a pond in the middle ground. A wooden gazebo with a thatched roof sits on a small island in the pond. The background is filled with various trees under a blue sky with light clouds. The word "LANDSCAPE" is written in red, bold, sans-serif capital letters, tilted upwards from left to right, across the top right portion of the image. The word "NOT NATURAL" is written in green, serif capital letters with a white outline, tilted downwards from left to right, across the bottom portion of the image.

LANDSCAPE

NOT NATURAL

BIOTIC-OR-ABIOTIC

CRITICAL NEED-TO-KNOW INFORMATION

**BIOTIC= AFFECTED BY A
LIVING ORGANISMS**

**ABIOTIC= CAUSED BY
PHYSICAL OR
MECHANICAL FACTORS**

EXAMPLE:

- INSECTS**
- RODENTS**
- FUNGI**

EXAMPLE:

- MOWER/TRIMMER
DAMAGE**
- FREEZE**
- DROUGHT**
- HAIL**

SCALES

TUSSOCK MOTHS

ANTS

GALLS

EAB

IPPS

MPB
APHIDS

SLUGS



***DON'T PANIC!
MAKE SURE WHAT
BEETLE IT IS...***

Spruce Ips Beetle



Host Tree Species

- *Spruce*

Damage

- *Beetles attack stressed trees*
- *Typically don't kill the tree immediately*
- *Girdles the tree, introduces fungus*

Control

- *Trunk sprays: carbaryl, permethrin*
- *Sanitation*



Ash/Lilac Borer



Host Tree Species

- *Green ash, white ash*

Damage

- *Tunnels into the stem and branches*
- *Seriously weakens the tree*
- *Interferes with sap flow*
- *Causes gnarled growth and sprouting*

Prevention/Control

- *Proper care/maintenance*
- *Don't overplant ash*
- *Don't prune in the spring-summer*
- *Trunk sprays: permethrin, carbaryl*



Nipplegall



Host Tree Species

- *Hackberry; Linden*

Damage

- *Warty leaf galls*
- *Can cover entire leaf*
- *Heavy infestations usually confined*
- *Don't produce much damage*
- *Unattractive*

Control

- *Not needed for health reasons*
- *Aesthetic treatments: systemics effective*
- *Good natural controls: wasps, birds*



Boxelder
Bugs

Aphids

- Host Tree Species
 - *Green Ash; Aspen; Honey Locust; Cottonwood*
- Damage
 - *New succulent growth affected*
 - *Defoliation at the ends of the branches*
 - *Attracts Ants*
 - *Honey Dew*
- Prevention/Control
 - *Species diversity*
 - *By mid-summer activity subsides*
 - *Good natural controls*
 - *Systemic*
 - *insecticides- Orthene, Merit*



UGA5083073

Oystershell Scale



Host Tree Species

- *Ash*
- *Cottonwood*
- *Aspen*
- *Willow*

Damage

- *Feeds on trunk/branches*
- *Dieback*
- *Weakens the tree*

Prevention/Control

- *Proper care and maintenance*
- *Rubbing off/pruning*
- *Crawler sprays*
 - *coincide with egg hatch: May-June*
 - *Sevin, Orthene, Tempo, Talstar, Astro*



UGA1325097



UGA1325081



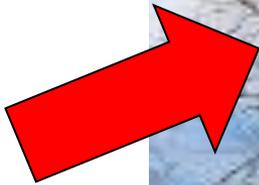
SQUIRREL DAMAGE



**STRIPPED
BARK**



**Girdling/Clipping
new growth**



**RESULT:
DIEBACK
-OR-
COMPLETE LOSS**

COMPLETE LOSS

Marssonina Blight

- Cause:
- Dead Plant Material Left Overwinter
- Treatment:
- Remove Fallen Leaves
- Avoid irrigating branches/trunk



ASCOCHYTA LEAF BLIGHT

- TYPICALLY TAKES HOLD MID SPRING
- DAMAGE SHOWS UP WHEN TEMPS CLIMB ABOVE 80F DEG.
 - NOT MOVED BY MOWING. TIRES CAUSE MECHANICAL DAMAGE TO LEAVES/STEMS
 - NOT PERMANENT DAMAGE

HOW TO FIX IT:

1. MAKE SURE IRRIGATION SYSTEM IS PROPERLY ADJUSTED
2. RAISE MOWER HEIGHT
3. SANITIZE MOWING EQUIPMENT

FUNGICIDES USUALLY DON'T SEE ANY APPRECIABLE RESULTS



Photo D.D. Minner

Ascochyta Leaf Blight showing more injury in mower tracks.

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WE'RE ONLY HALF THE BATTLE!



MAVERICK



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