Name:

Guided Notes

Lesson 5

**Forest Health Pests and Diseases & Biosecurity**

What are some identifying characteristics of pests?

* \_\_\_\_\_\_\_\_\_\_\_\_\_and shape
  + Elongated, oval, round, segmented
* \_\_\_\_\_\_\_\_\_\_\_\_
  + Observe the pest's color and any distinctive markings like stripes, spots, or patterns.
* Presence and type of \_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_
  + How many wings and legs? What color are the wings?
* The presence and type of antennae
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and damage to \_\_\_\_\_\_\_\_\_\_\_\_\_ caused
  + Different types of mouthparts (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, piercing-sucking, sponging, siphoning) can indicate the pest's feeding habits and help with identification.
* **What is a wood-boring pest?**
* **What kind of initiatives do you know about forest health and pests?**
* **What kind of wood-boring pests would you suspect could impact Texas?**
* **Adults bore into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to feed on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and xylem in the sapwood.**
* **Adults create feeding \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_within the tree.**
* **This is also how they can spread \_\_\_\_\_\_\_\_\_\_\_/\_\_\_\_\_\_\_\_\_\_\_\_ to trees.**

**PPA Priority Pests: Forest Health Threats**

* **Oak Splendour Beetle *Agrilus biguttatus***
* **Large Pine Weevil *Hylobius abeitus***
* **Six-toothed pine engraver *Ips sexdentatus***
* ***Megaplatypus mutatus* NCN**
* **Oak Ambrosia Beetle *Platypus quercivorus***

**Oak Splendour Beetle**

* **Host species: All Oak species (*Quercus* spp.), \_\_\_\_\_\_\_\_\_\_or \_\_\_\_\_\_\_\_\_\_\_.**
* **Native to: \_\_\_\_\_\_\_\_\_\_\_\_\_ and North Africa.**
* **Symptoms of Infestation:** 
  + **Tree canopy dieback**
    - **\_\_\_\_\_\_\_\_\_\_\_\_\_ branches die before the lowest ones.**
  + **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ exit holes from adults entering the tree**
* **Economic & Ecological Damage:**
  + **Texas is the 5th largest lumber producer for the United States.**
  + **Ecological: Oaks trees are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of our state’s Post Oak Savannah, Blackland Prairies, Gulf coastal Marshes and the Pineywoods ecoregions.**

**Oak Splendour Beetle**

* **Identification:**
  + **Metallic \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ color; ½ inch long**
  + **Only \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on the back of wings (elytra)**
  + **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ marks on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ edge**
  + **Larvae feed on tree cambium creating ‘\_\_\_\_\_\_\_\_\_\_\_\_\_\_’ galleries.**

**What is the difference between EAB and OSB?**

**Since they are both *Agrilus* species, OSB can be confused with the infamous invasive Emerald Ash Borer.**

**EAB is only in \_\_\_\_\_\_\_\_\_\_\_\_\_ trees and OSB is only in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**