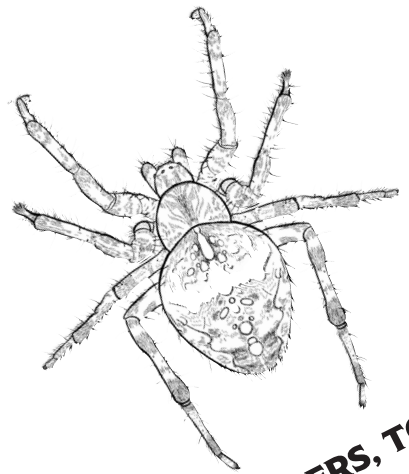
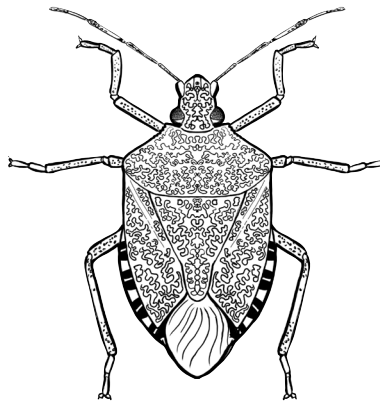
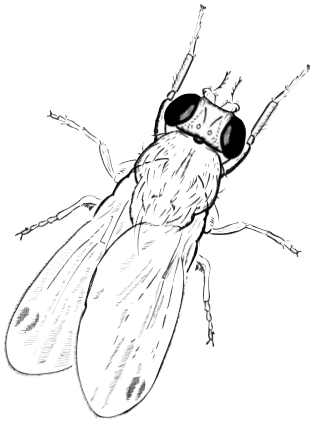


INSECTS IN OREGON

**ACTIVITY COLORING BOOK AND
INFORMATION EXTRAVAGANZA!**



...AND SPIDERS, TOO!



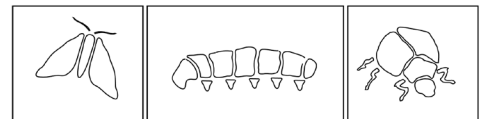
Oregon

Department
of Agriculture

635 Capitol St NE, Salem OR 97301
503-986-4636 or 1-800-525-0137

Oregon.gov/ODA/Plant/IPPM
created August 2018

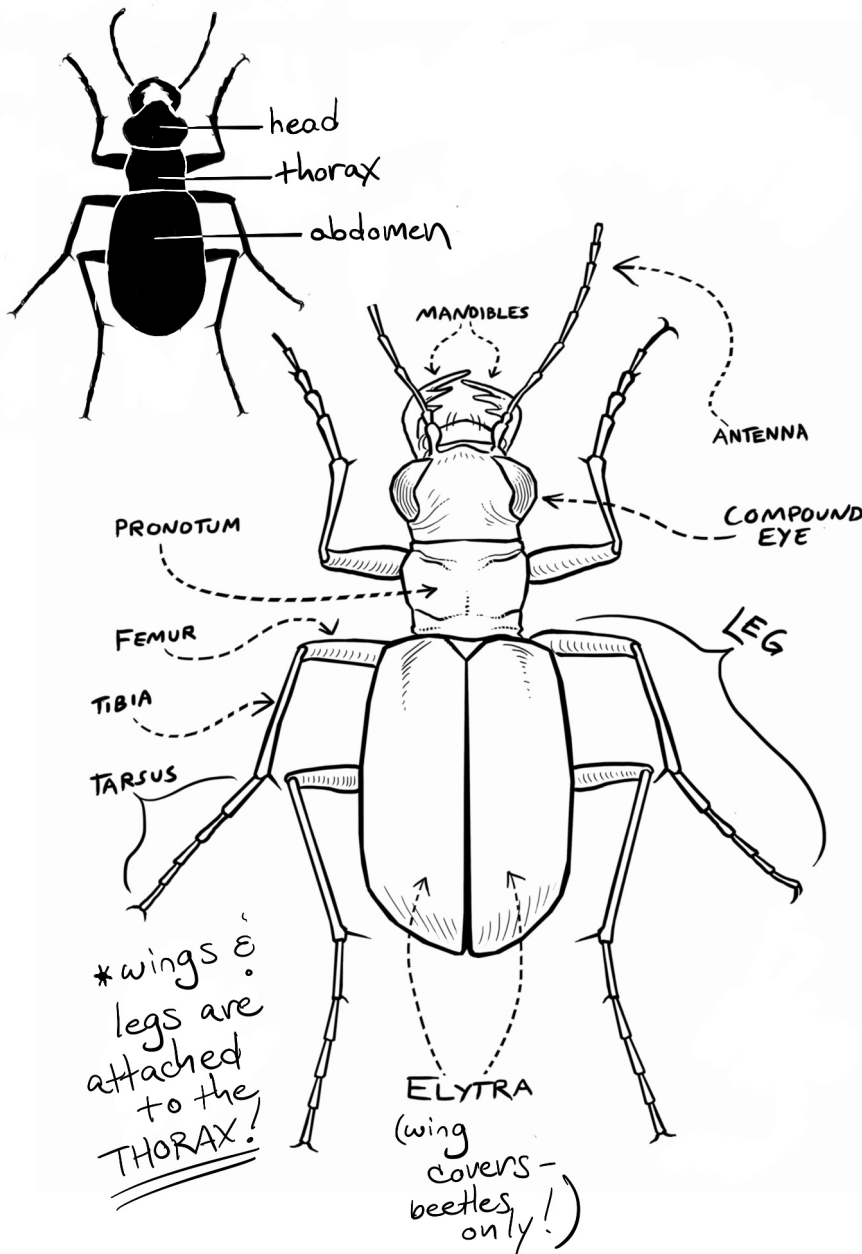
IPPM



Insect Pest Prevention & Management

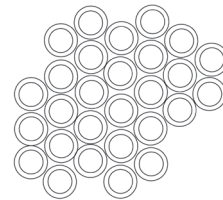
INSECT BODY PARTS

All adult insects have the same basic body parts (or some form of them), from beetles to bees to butterflies. The main body parts are the **head**, **thorax** and **abdomen**, 3 pairs of **legs**, and 2 pairs of **wings** or modified wings. Spiders have 8 legs, no wings, and are not insects.

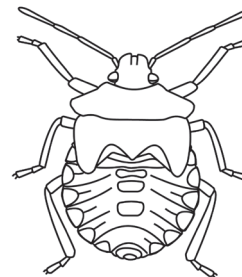
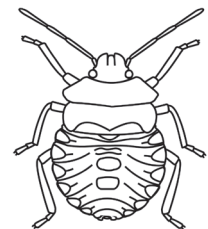


Incomplete life cycle

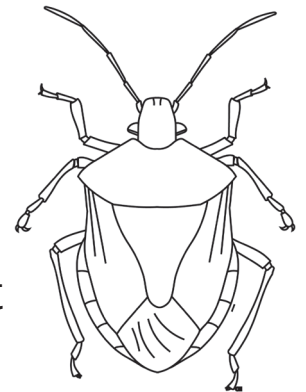
Stink bugs
Family Pentatomidae



eggs



nymphs

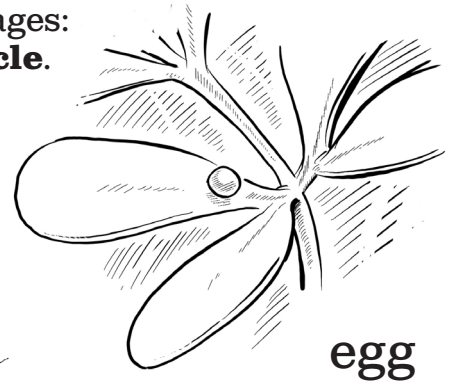


adult

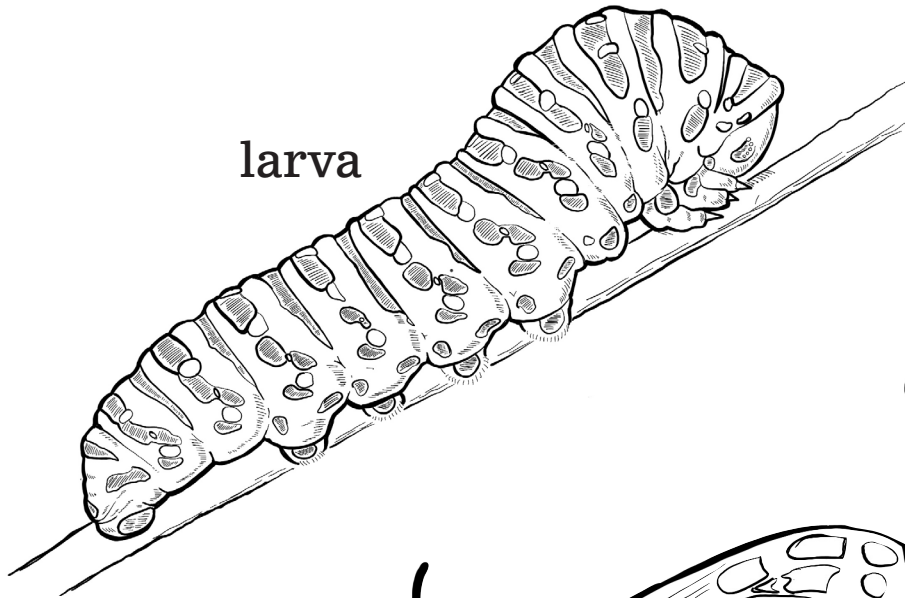
INSECT LIFE CYCLES

Some insects, like butterflies and beetles, have 4 main life stages: egg, larva, pupa and adult. This is called a **complete life cycle**.

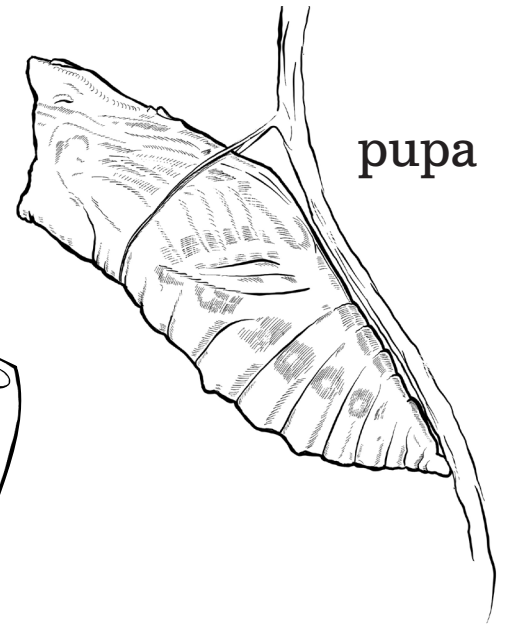
Others, like stink bugs or grasshoppers, have 3 stages: egg, nymph, and adult. This is called an **incomplete life cycle**. Nymphs look similar to adults but don't have wings.



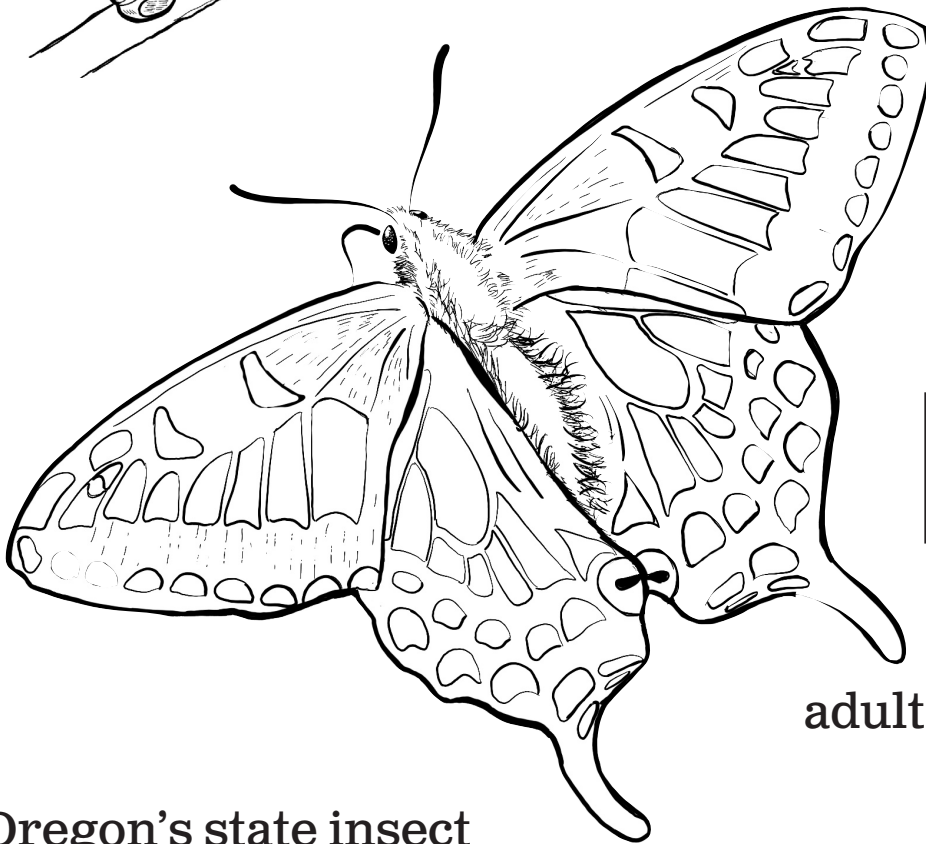
egg



larva



pupa

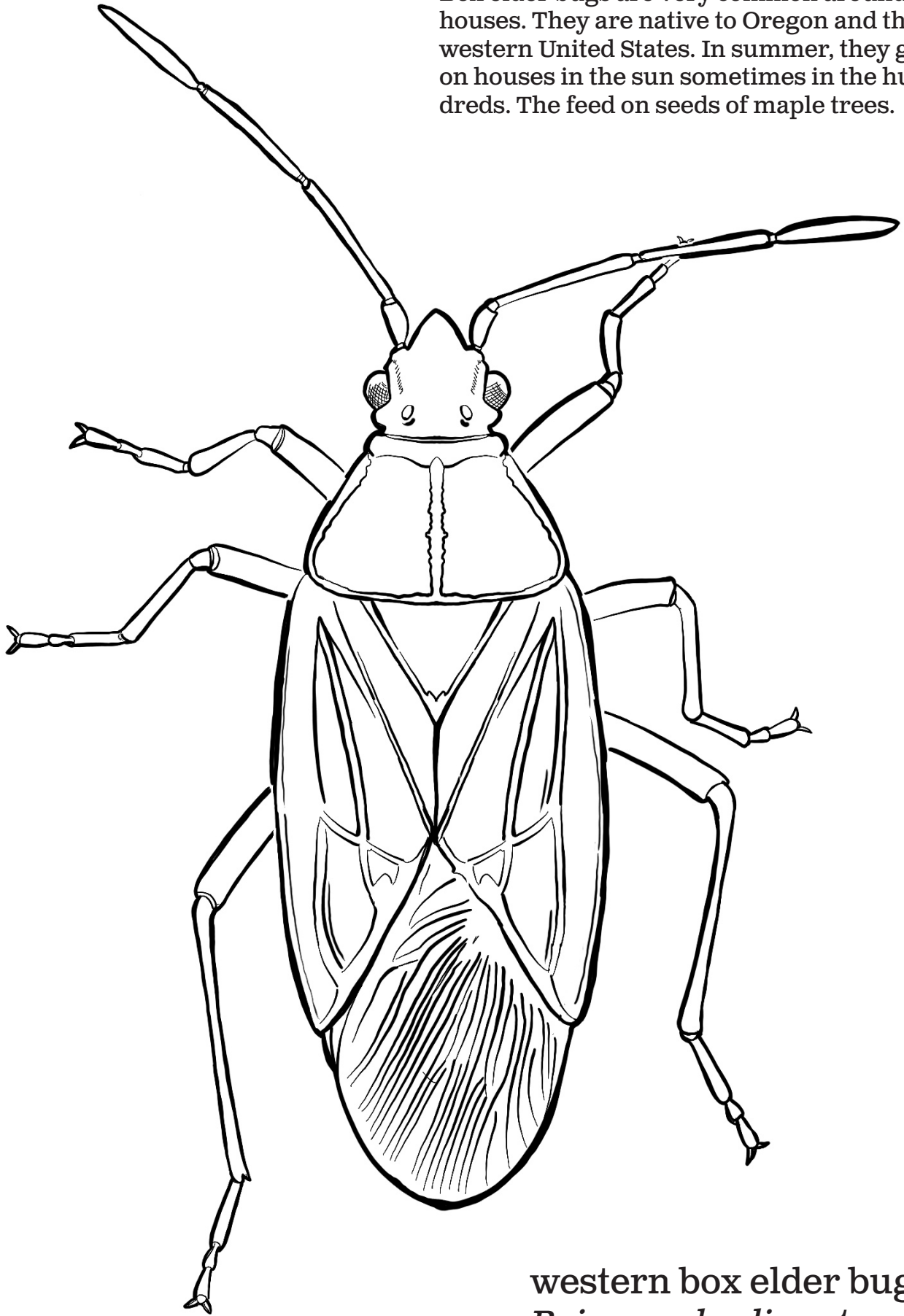


adult

Complete
life cycle

Oregon's state insect
Oregon swallowtail butterfly
Papilio oregonius

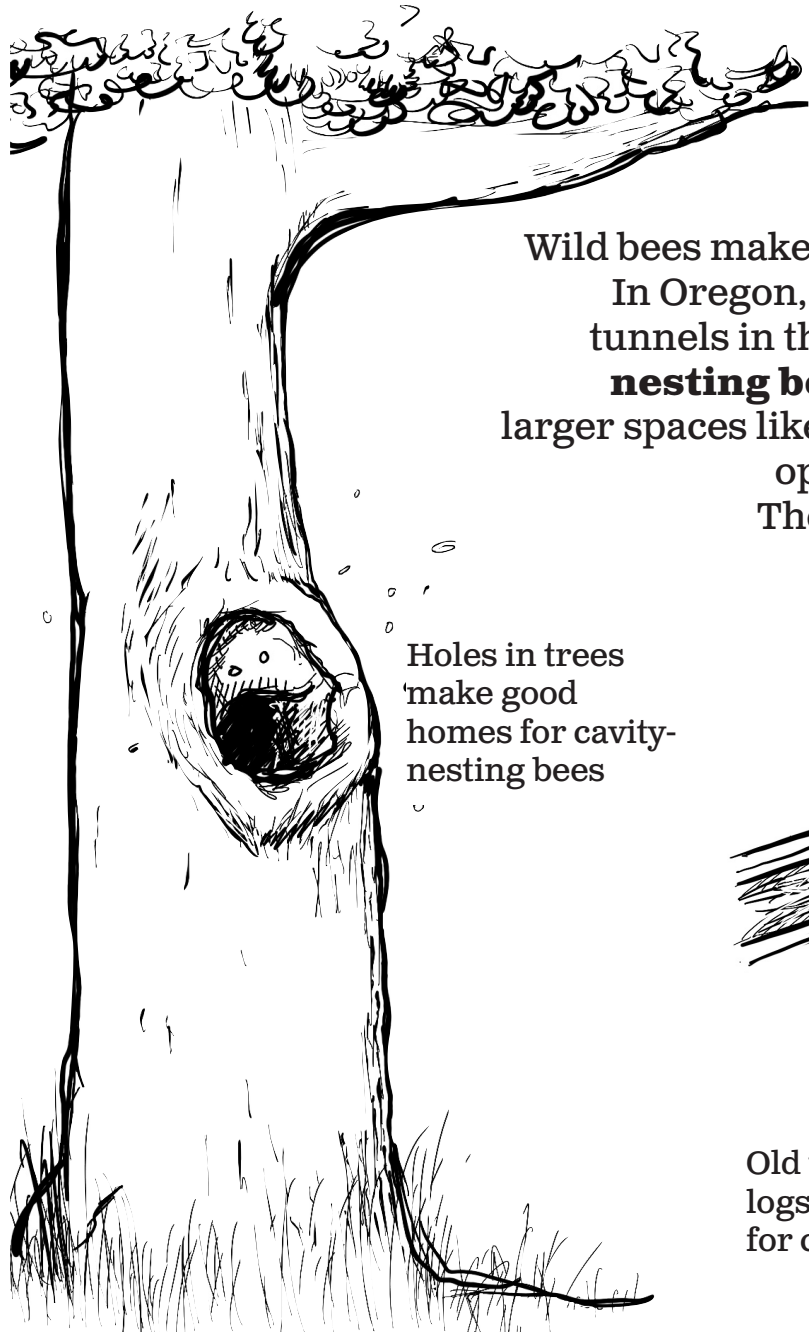
Box elder bugs are very common around houses. They are native to Oregon and the western United States. In summer, they gather on houses in the sun sometimes in the hundreds. They feed on seeds of maple trees.



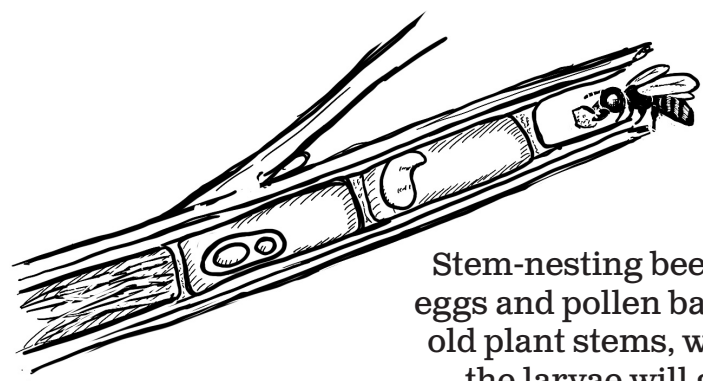
western box elder bug
Boisea rubrolineata

BEES IN OREGON

Wild bees make their nests in many different places. In Oregon, most of our bees make their nests in tunnels in the ground. These are called **ground-nesting bees**. Other bees make their homes in larger spaces like the inside of a hollowed out tree, an opening in a wall, or old rodents holes. These are called **cavity-nesting bees**.

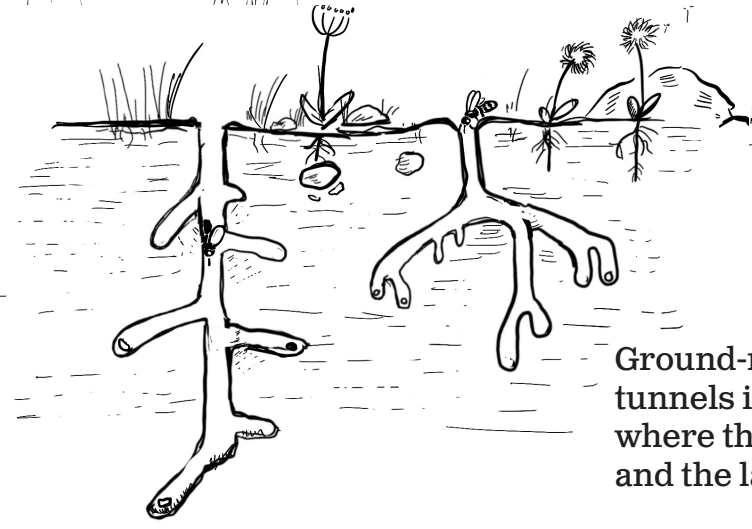
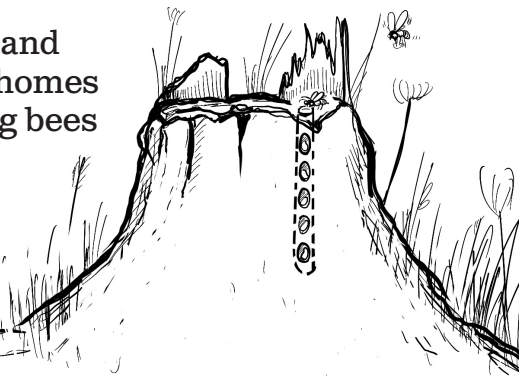


Holes in trees make good homes for cavity-nesting bees



Stem-nesting bees put eggs and pollen balls in old plant stems, where the larvae will grow.

Old tree stumps and logs make good homes for cavity-nesting bees

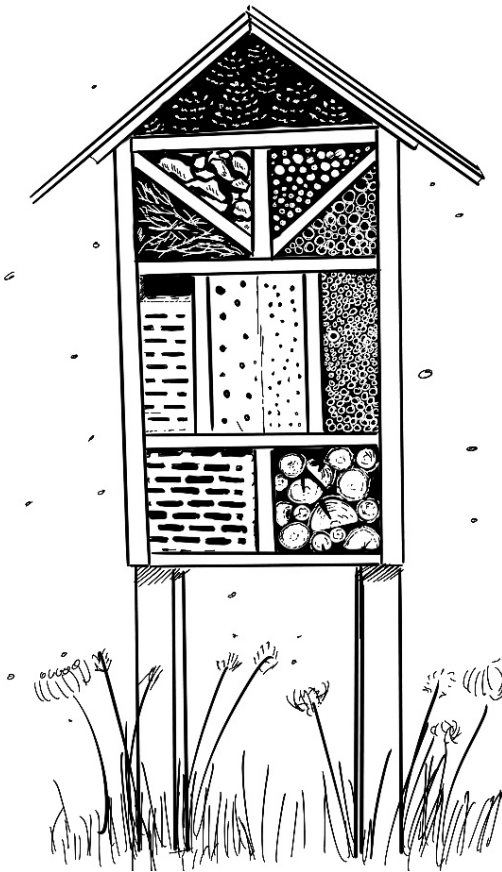


Ground-nesting bees dig tunnels in the ground, where the eggs are laid and the larvae grow.

People have been collecting wild bee nests for over 9000 years. These nests were used to collect products, like wax and honey, and for pollinating crops. Over time, people figured out how to raise some wild bee species by making nests for them. These bees are called **managed bees**. In Oregon, we have four types of managed bees: **Honey bees** (*Apis mellifera*), **leaf cutter bees** (genus *Megachile*), **mason bees** (genus *Osmia*), and **alkali bees** (genus *Nomia*). All types of managed bees are used to pollinate crops. Only honey bees are used to make honey and wax.

Use this space to draw some bees!

Beekeepers wear special clothes to protect themselves from bee stings.



Bee “hotels” have bamboo, wood with holes, sticks and other places for mason bees and others to make their homes.



Honey bees are kept in wood boxes called hives. They are the most common managed bees in the world.

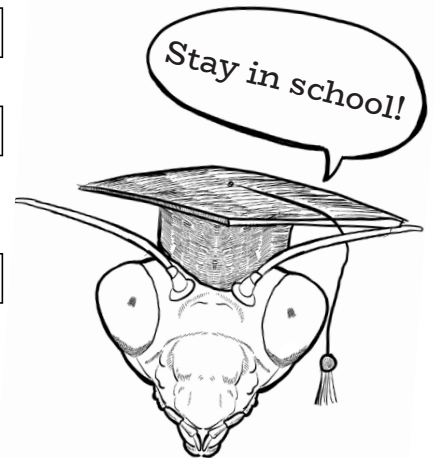
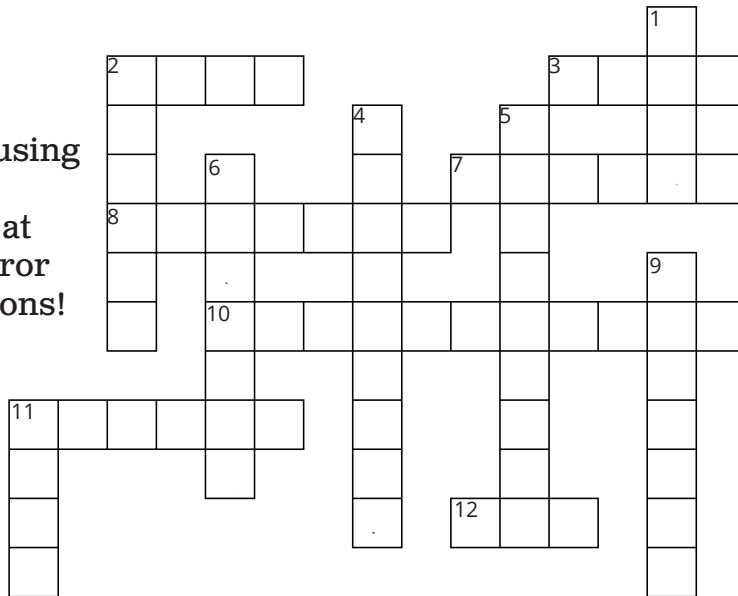
Grab your pen or pencil and see if you can find some bugs, spiders and other critters!
Words can be across, down, and diagonal!

BUG HUNTI!

R I F D K A P W I S P T
G C T A R B N H W P O P
H I C M W A N T Q I N Z
R C R O B Y G D I D F V
R A I T E O A O E E P U
K D C H E N X D N R S C
Z A K B U T T E R F L Y
A Q E Q U R T F C X L P
B E T B F E S N A I L Y
A L A D Y B U G T A Q P
T B E E T L E X Z B R T
S Z S W A S P W Q E P H

ANT
BEE
BEETLE
BUTTERFLY
CICADA
CRICKET
DRAGONFLY
LADYBUG
MOTH
SNAIL
SPIDER
WASP

Fill in the boxes using
the clues below!
Need help? Look at
the page in a mirror
to read the solutions!



Across:

- 2. night flying insect related to butterflies
- 3. spiders use this to build their webs
- 7. food for bees and butterflies
- 8. social insect that eats wood
- 10. long insect that makes a coccoon
- 11. 8 legged creature known for making webs
- 12. famous for making honey

Down:

- 1. a tiny blood feeding insect found on cats and dogs
- 2. predatory insect with grasping front legs
- 4. nectar loving insect with large colorful wings
- 5. an animal that eats plants
- 6. insect that jumps and chirps at night
- 9. colorful beetle often red with black spots
- 11. slimy creature often found in gardens

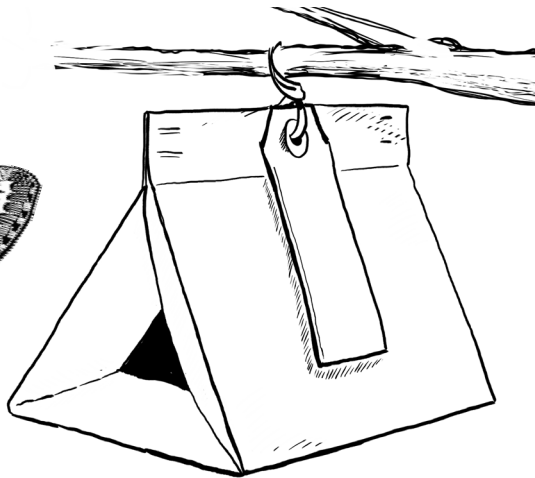
Down: 1. flea, 2. mantis, 4. butterfly, 5. herbivore, 6. cricket, 9. ladybug, 11. slug
Across: 2. moth, 3. moth, 3. silk, 7. nectar, 8. termite, 10. caterpillar, 11. spider, 12. bee

IT'S A TRAP!

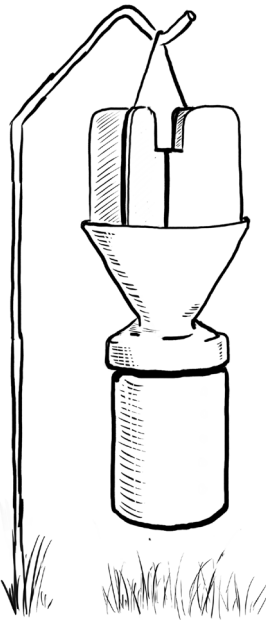
The Oregon Department of Agriculture works hard to protect the state's farmers and growers from invasive species. Every year the Insect Pest Prevention and Management program puts out thousands of traps all over Oregon to find these insects quickly before they can make a home here.



Gypsy moth
Lymantria dispar



"Delta" traps are triangular and usually found in trees. They are usually bright green, red or orange, and are used to catch moths such as Gypsy moth or light brown apple moth.

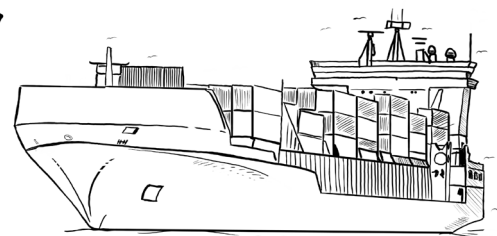
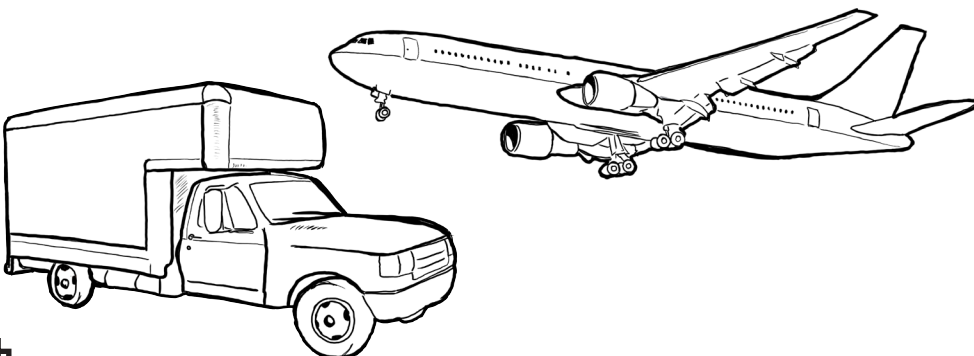


"Bucket" traps are green plastic and held low to the ground on poles. They are used to catch a pest called Japanese beetle.



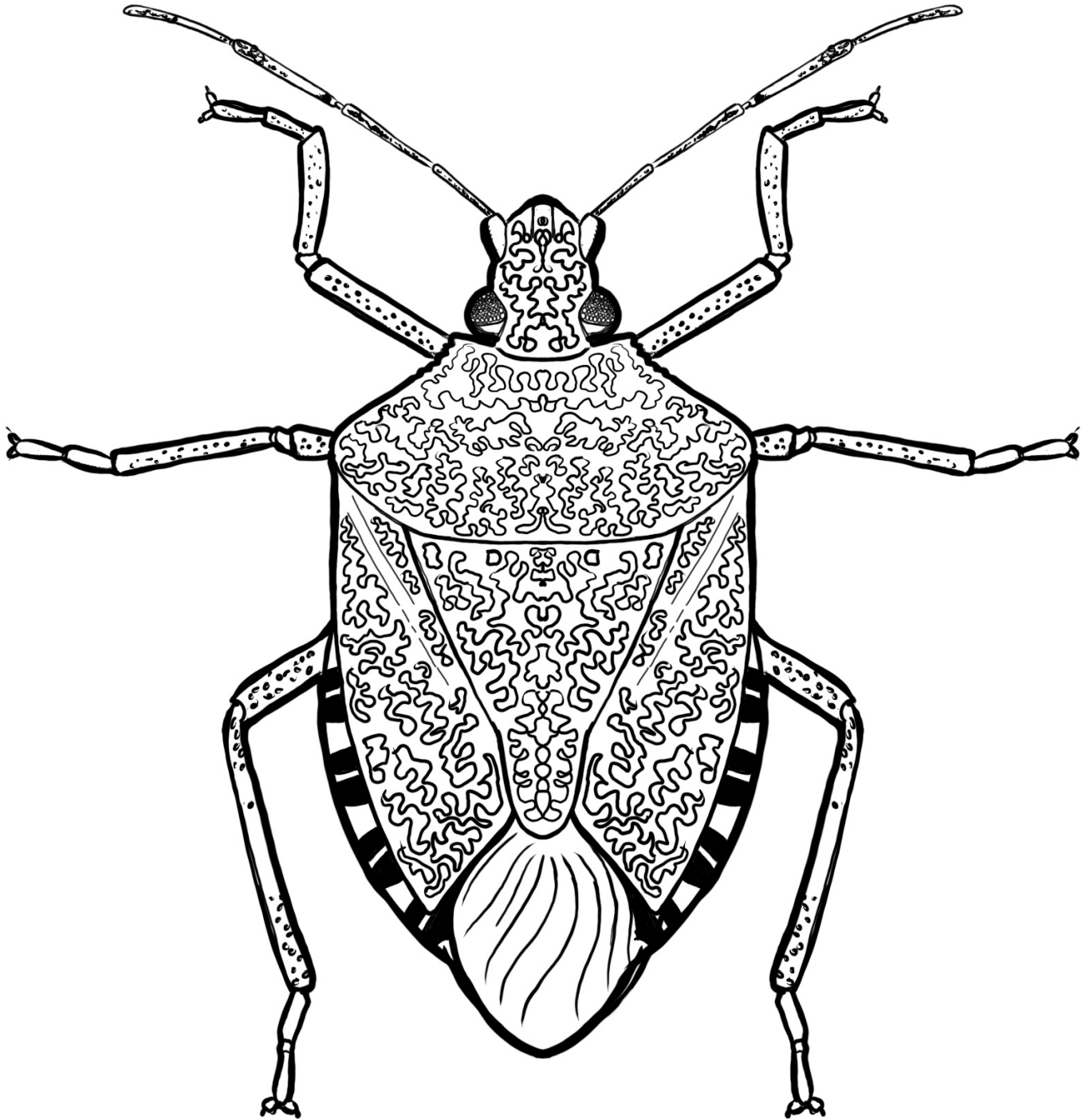
Japanese beetle
Popillia japonica

Invasive insects and plants can move in many ways:

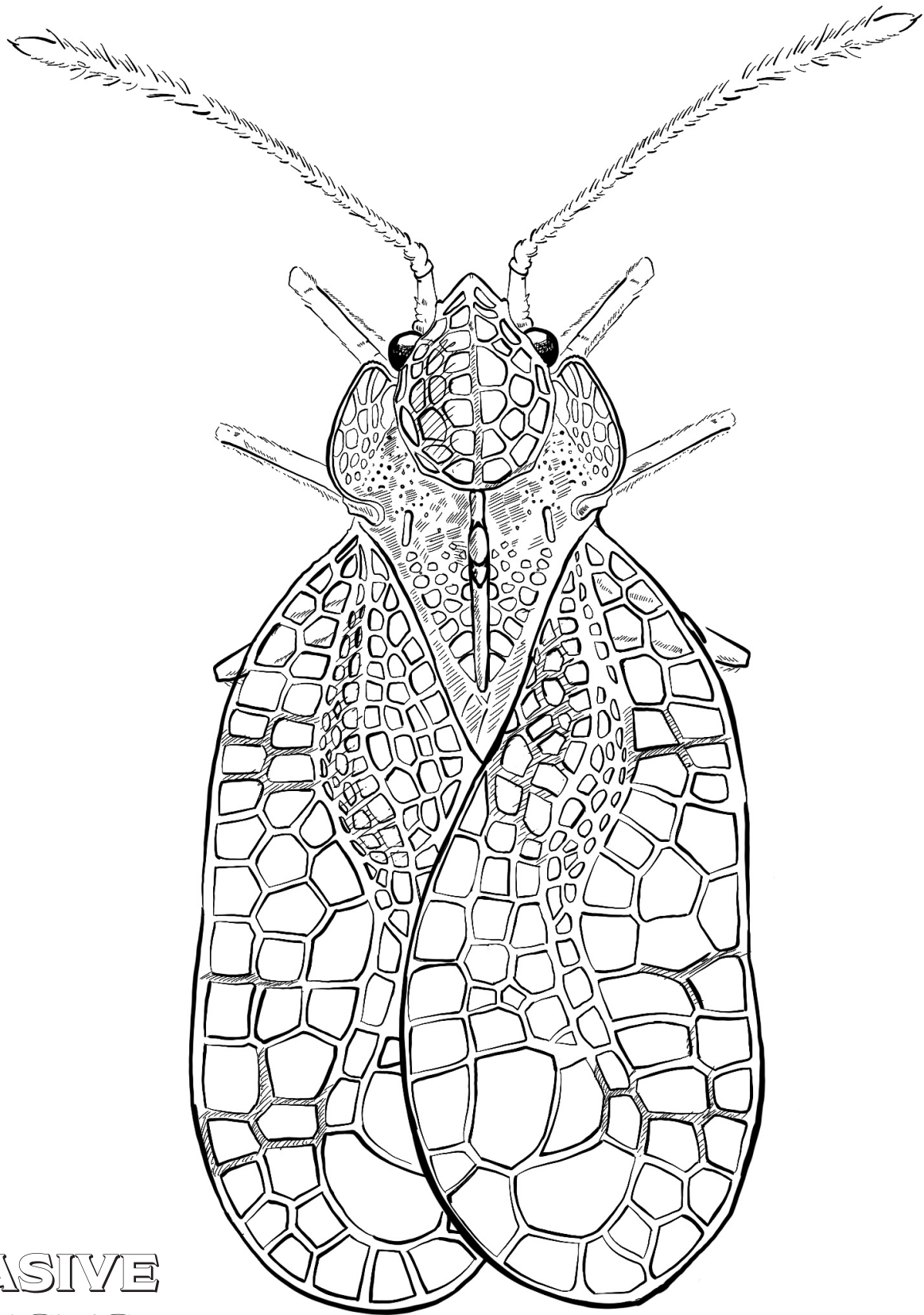


INVASIVE INSECTS IN OREGON

brown marmorated stink bug
Halyomorpha halys



Brown marmorated stink bugs gather on houses in the fall. They make a stinky smell when disturbed. They can also hurt plants when they feed on them. This is a big problem for farmers in Oregon and other parts of the United States who grow food crops. The first record of this species in Oregon was 2004.



INVASIVE
INSECTS IN
OREGON

azalea lace bug
Stephanitis pyrioides

Azalea lace bugs suck juices from the leaves of plants and leave poop spots that hide and protect their eggs. Before it was found for the first time in 2009, rhododendrons and azaleas were relatively care free plants to keep. Now, some varieties need pesticide treatments. These have also been found to feed on blueberries.

INVASIVE INSECTS IN OREGON

spotted-wing drosophila *Drosophila suzukii*

Spotted-wing drosophila (dro-SOFF-illa) are very small flies that lay eggs in ripening fruit. Their larvae feed on the fruit, which makes the fruit rotten. Before it was accidentally introduced from California in 2009, Oregon berry growers had few pests to deal with. Now growers often apply multiple pesticide applications to keep the pest in check.

