

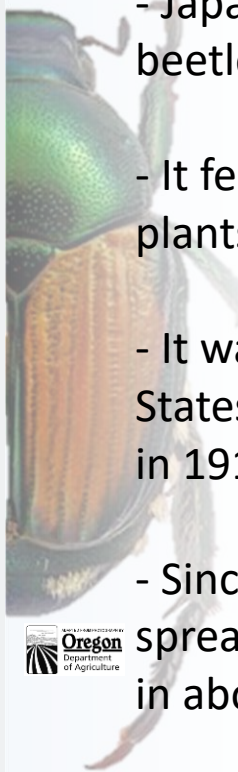
Japanese Beetle

NW Nursey Improvement 9.21.2021



Washington
State Department of
Agriculture

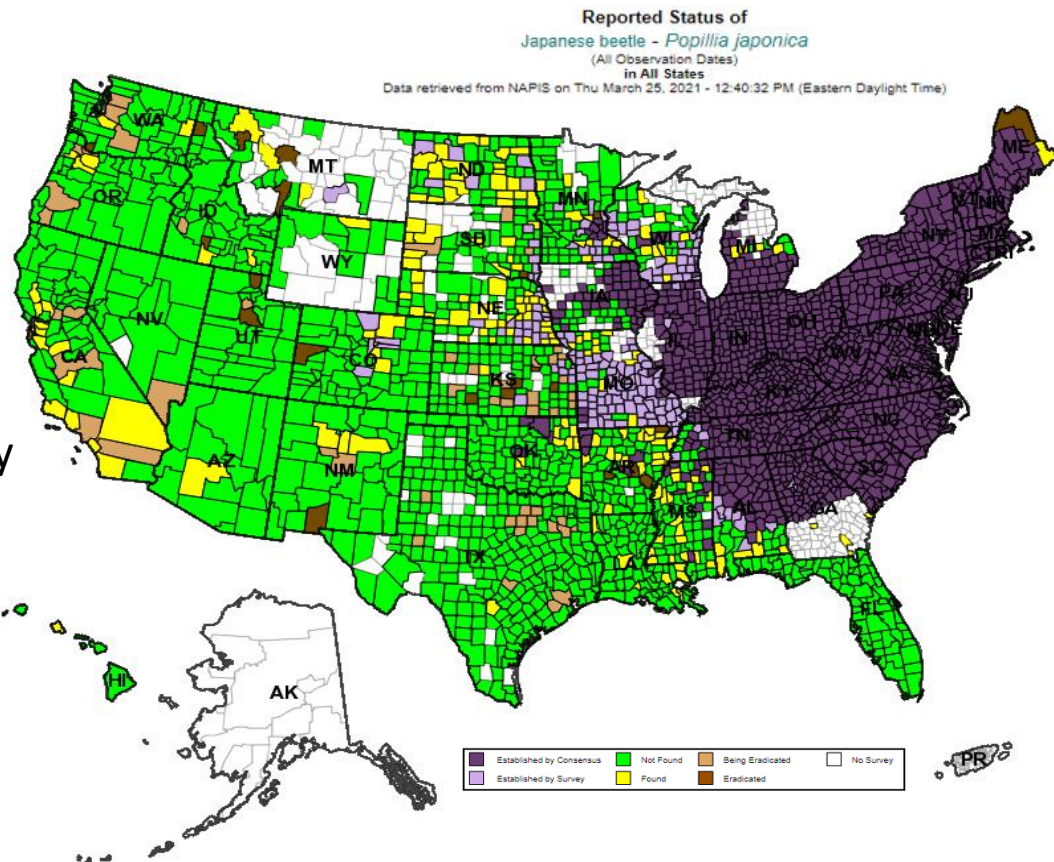
About Japanese Beetle



- Japanese Beetle is a scarab beetle native to Japan
- It feeds on over 300 types of plants
- It was first found in the United States near Riverton, New Jersey in 1916
- Since that time it has slowly spread and become established in about half of the country



agr.wa.gov/beetles



About Japanese Beetle

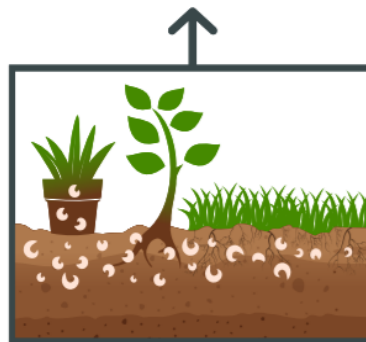


- As an adult, it can move many miles on airplanes, trucks, or trains
- Most often the detections are associated with air cargo and do not result in established populations

SEPTEMBER - MAY



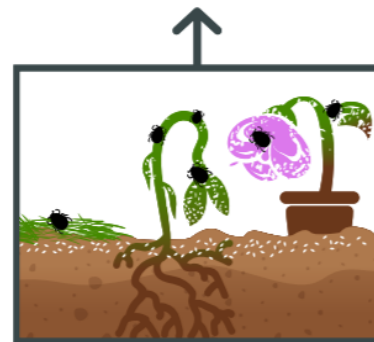
JAPANESE BEETLE LARVAE CAN BE FOUND IN SOD, TOP SOIL, ON ROOTS, AND IN POTTED PLANTS



JUNE - AUGUST



ANY YARD DEBRIS CAN MOVE BEETLES AND EGGS



- As a larva, it can spread in the soil of potted plants, compost, or fill



About Japanese Beetle



SPRING

Grubs awaken from winter and begin feeding on grass roots. After feeding, grubs change into pupae that will later become beetles.



SUMMER

Pupae turn into beetles, including Japanese beetles, which emerge to feed on garden foliage and flowers. Beetles lay eggs in the lawn soon after.



FALL

Eggs hatch into new grubs which feed on grass roots, thereby destroying your lawn. The destructive cycle begins all over again.



Photo credit to Ohio State Univ. Extension

About Japanese Beetle



Got Grubs?



Photo credit Michigan State University



Common host plants of Japanese beetle

Adults

- oak (*Quercus*)

- soybean (*Glycine max*)

- tomato (*Solanum lycopersicum*)

- hops (*Humulus lupulus*)

- blueberries, raspberries, blackberries

ODA Economic Risk Analysis

- Very high risk

- If the Japanese beetle becomes established in Oregon and generally disperses throughout the state, the economic impact to all crops, commodities, and other related businesses could be approximately **\$45.5 million**

What could an infestation look like for Washington?

Grubs

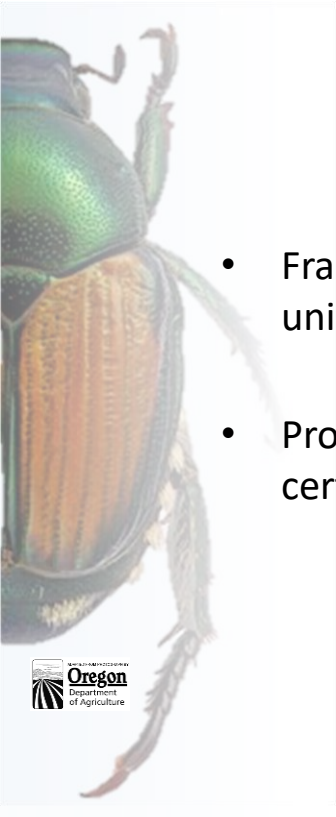
- roots of turf grass

- roots of ornamental plants

lilia spp.

- corn (*Zea mays*)

- *Asparagus officinalis*



- Framework to protect unfested states
- Provide consistent certification requirements



U.S. Domestic Japanese Beetle Harmonization Plan

*Adopted by the
National Plant Board
August 19, 1998
Last Revision June 20, 2016*

General Infestation Impacts



Extra requirements = extra costs

- Additional trapping
- Grow inside screens
- Require phytosanitary certificates
- Treat any plants in soil
- Screen all transport vehicles
- High cost of eradication
- *Limit size of, or all of export*

What could be regulated?

Soil, humus, compost, manure

All rooted plants, crowns, bulbs, tubers

Grass sod

Any other plant or article determined to present a hazard of spreading live JB

Top 10 Commodities in Washington



1 APPLES
\$2.4 billion



2 MILK
\$1.2 billion



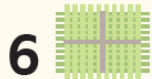
3 WHEAT
\$691 million



4 POTATOES
\$687 million



5 CATTLE
\$664 million



6 HAY
\$516 million



7 HOPS
\$489 million



8 CHERRIES
\$480 million



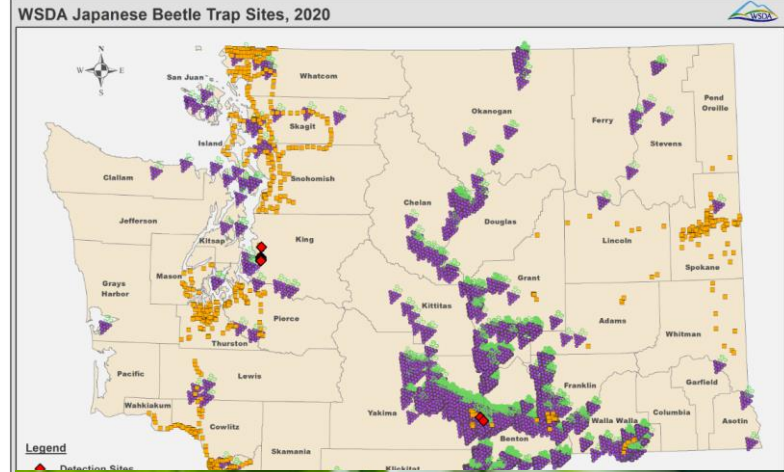
9 GRAPES
\$319 million



10 PEARS
\$246 million



- In 2020 WSDA deployed 1,600 Japanese Beetle traps and detected one in Sunnyside and two in Grandview.
- This seasons traps have caught over 25,000 beetles, and still counting, in the Grandview area.



What are we doing?

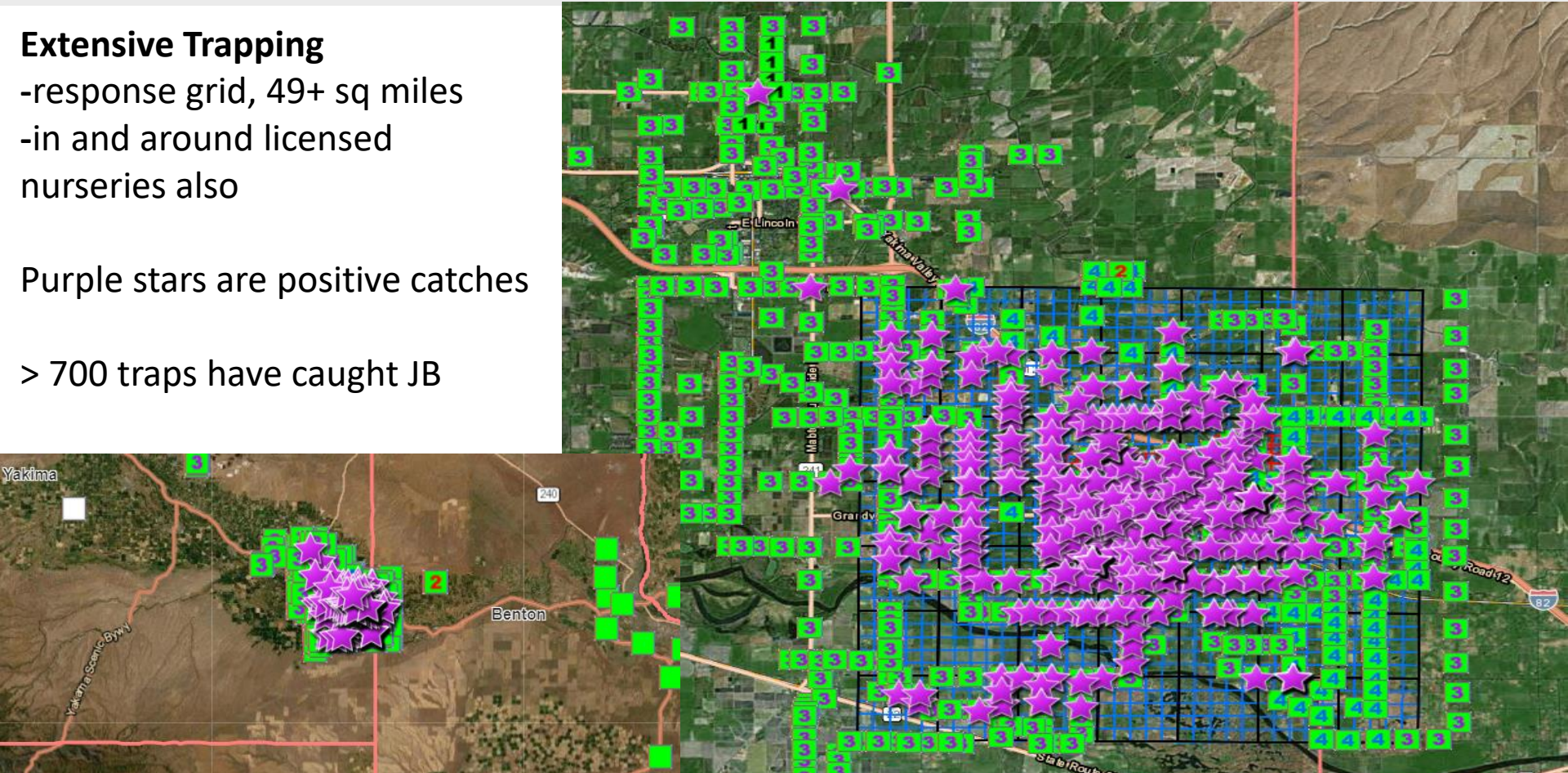


Extensive Trapping

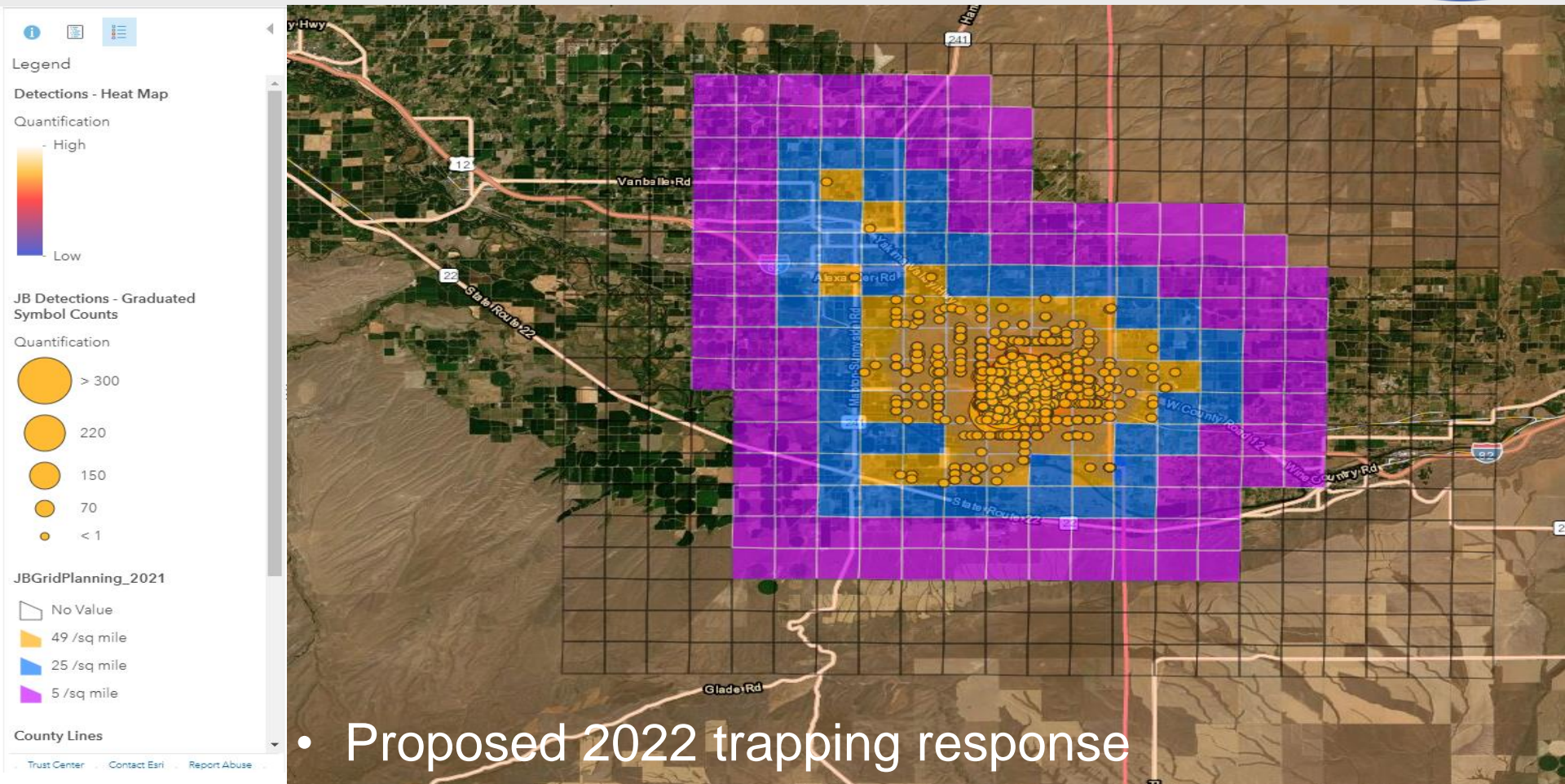
- response grid, 49+ sq miles
- in and around licensed nurseries also

Purple stars are positive catches

> 700 traps have caught JB



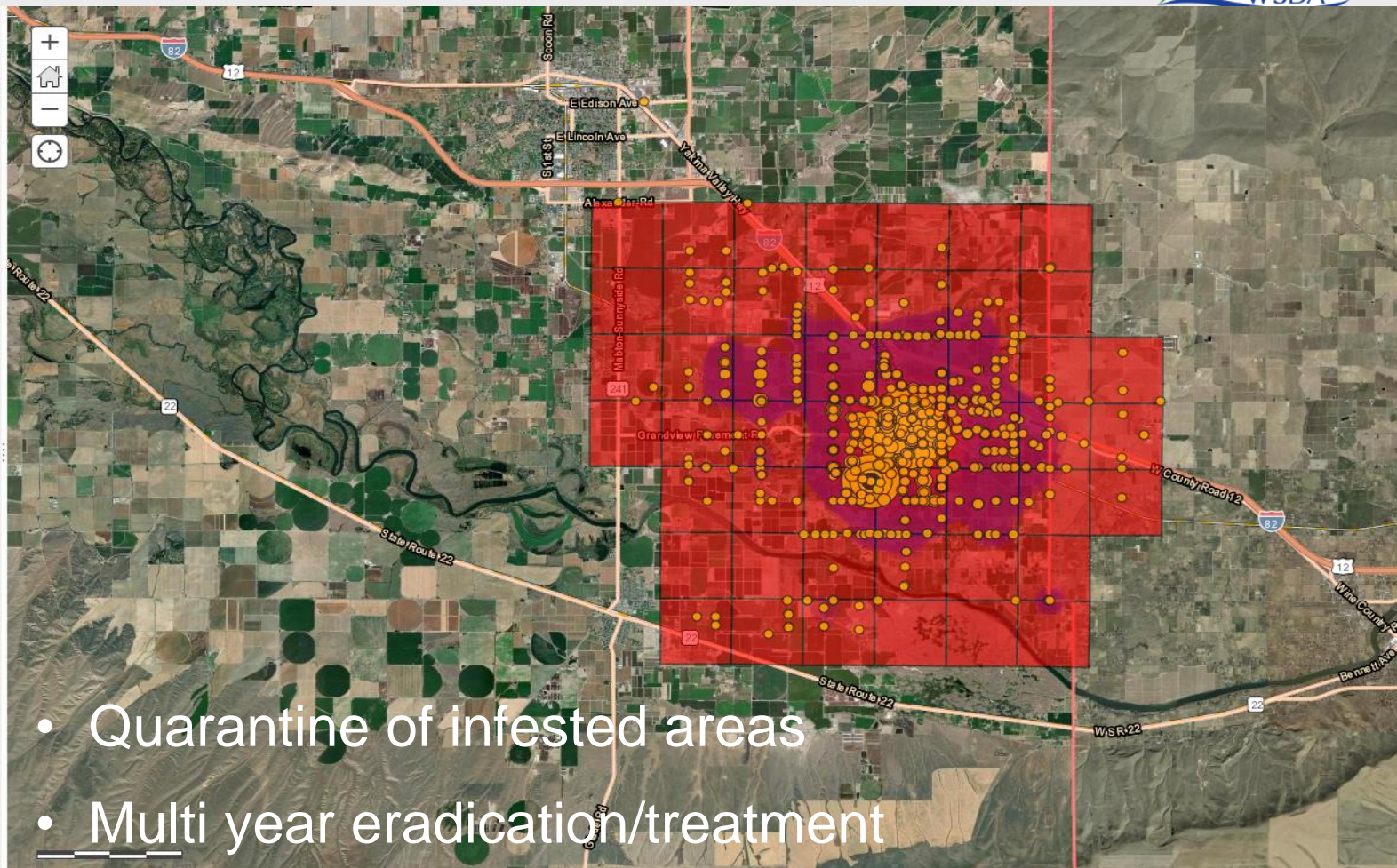
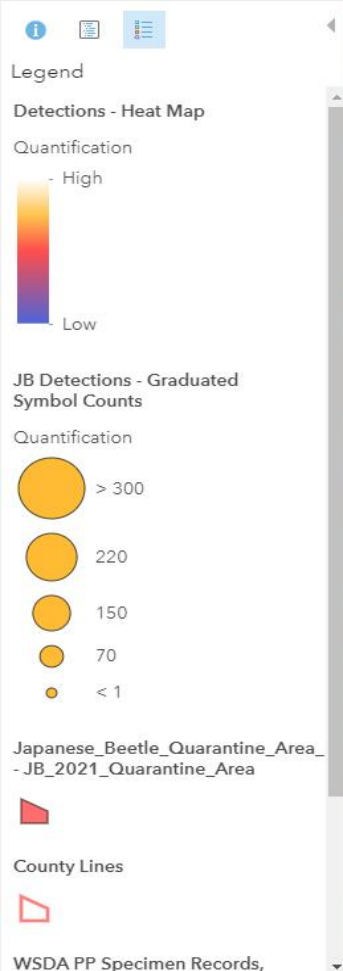
What are we doing?



- Proposed 2022 trapping response

What are we doing?

Proposed quarantine



- Quarantine of infested areas
- Multi year eradication/treatment

Draft Internal Quarantine



Considering prohibiting movement of these articles from the quarantine infested area, to other areas of the state or outside the state:

- All soil of residential, agricultural or commercial properties;
- Yard debris, grass sod/turf;
- All plants, bulbs, crowns with roots, unless bare root (free of soil). Potted nursery stock could move with special treatment;
- Hop bines & corn silage harvested during adult flight season;
- Any other article or means of conveyance that poses a risk of spreading Japanese Beetle.

Rule Making Process



- **CR-101**
 - Information gathering
- **CR-102**
 - Draft language
 - Survey stakeholders
 - Write Small Business Economic Impact Statement (SBEIS)
- **Public hearing**
- **CR-103**
 - Concise Explanatory Statement (CES)
 - Adopt Rule



How you can help



HAVE YOU SEEN THIS PEST?

- Report suspected sightings
- agr.wa.gov/beetles
- PestProgram@agr.wa.gov
- 1-800-443-6684

Report a Sighting Below

Click or tap below to choose a location on the map:*



You're Name (optional):

agr.wa.gov/beetles

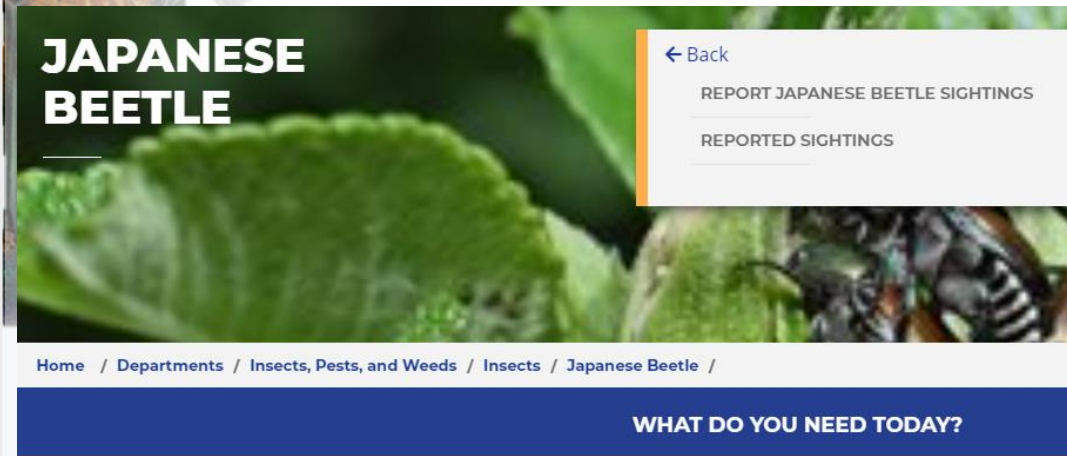
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Learn More



- Visit agr.wa.gov/beetles
- Join the Japanese Beetle Facebook group
- Sign up for email alerts on WSDA's website
- Follow us on Facebook, Instagram, and Twitter



Thank you!

agr.wa.gov/beetles

PestProgram@agr.wa.gov

1-800-443-6684