



THE PNW PASSPORT ROTARY CLUB ROUNDUP

Date: May 27, 2021
Meeting: 6:00 pm **End Time:** 7:15 pm
Place: Zoom Online – hosted by P-Elect Deb Wiggs

BOARD MEMBERS IN ATTENDANCE:

President	Roy Holman
President-Elect	Deb Wiggs
Membership & Engagement, Chair	Pati Villhauer
Membership-Elect	Rhian Piprell
Secretary	Joy St. John

BOARD MEMBERS ABSENT:

Treasurer	Terry Greer
Foundation Chair	Patricia Sibley

GUESTS:

P-Roy: Rang the bell at 6:06 pm after a lovely time socializing. He began with expressing hopes of soon having a meeting at Peace Arch Picnic area.

P-Roy: Our member Sean Hogan received a very prestigious and well-deserved award at this year's District 5050 Conference.

**Service
ABOVE Self**



As Rotary's highest honor for individual Rotarians, this award recognizes members annually who have demonstrated exemplary humanitarian service, with an emphasis on personal volunteer efforts and active involvement in helping others through Rotary.

If you know Sean then you know that he is very deserving of this award. His service to Rotary is nothing but exemplary from the moment he joined as a young man of 27 as he continues to be a leader in the Rotary.

P-Roy: Pati please introduce our guest speaker today.

Pati: It is with please I introduce to the members tonight Cassie Cichorz she will be speaking to us about the treasured Asian Giant Hornet. Cassie works for Washington State Department of Agriculture as an educator of the Asian Giant Hornet.

Cassie: Thank you for asking me to speak to you tonight about the Asian Giant Hornet that has become a predator here in the north west. They are a real threat to our honey bees which are so necessary for our agriculture.

You can find them on the menus in certain parts of Asia. In the country's central Chūbu region, exterminators and dedicated hornet-hunters are tasked with finding and removing the insects' massive nests. Both the insects and their larvae can be pan-fried or steamed, although only the adults are cooked on skewers and served like dangerous-looking shish kebabs.

The Asian Giant Hornet doesn't normally sting unless it is aggravated.

How to trap the Hornets:

4 oz (1/2 c) cooking rice wine

4 oz (1/2 c) 100% real orange juice (no pulp)

Place this in a container for trapping.

Please find Cassie's slide presentation attached to the Roundup.

P-Roy: Thank you Cassie for informing us about the Hornet that is a threat to our honeybees.

P-Roy: P-Elect Deb has our long-term visioning plan from the meeting on April 29th. Deb, please give us the plan for the Club's future.

P-E Deb: We have seven areas of focus. Our next step is to prioritize the club's goals. We need to champion each area that was focused on. The club membership needs to work together to meet our visioning goals. One of the first things we need to focus on is should we be a hybrid club. And what does that mean? One meeting can be in person at a set location and another meeting can be on Zoom.

Discussion: the members present weighed in on their views for our future meetings. We now need to have a survey of the membership as to what they would like to have happen as we re-open to in-person meetings. Our member Ken Smith said that three categories is what we need to focus on as we move forward, not seven categories. As we get the three organized and working well than we should progress with the other four categories. We need to have the Club accomplish the three to make the others work well. Because we will focus on three categories it doesn't make the club small, it makes it more focused. We need to find out why some members have never attended a meeting since we were chartered, we have to find out why members didn't attend our Zoom meetings, we need to find out what will attract our members to come to at least four meetings a year. These points are

pivotal to our growth over the coming years. Our member Rhian Piprell suggested more collaboration with other Rotary passport Clubs.

P-Roy: Thank you Ken and all in attendance today for your well thought out comments. P-E Deb will send out a survey to our Club to find out what three visioning items we should concentrate on. We will work hard as a club to obtain our visioning goals.

P-Roy: **Announcements:**

June 12: A mystery event – join us for Pati's mystery club meeting.

June 24: PNW Passport Rotary Club installation of new board members.

Phoenix McLaren will be our special guest to do the inductions.

P-Roy: Our Club had budgeted for 2021 RYLA a sum of \$500. we have had no candidates presented to us yet, the Club will still send the funds to help with expenses for the event.

RI is hoping you will support the Polio Plus Society.

Our Club dues will be sent to you by the end of June 2021 and they will need to be sent to the treasurer by June 30th.

RI Conference in June is now open for members to book their events.

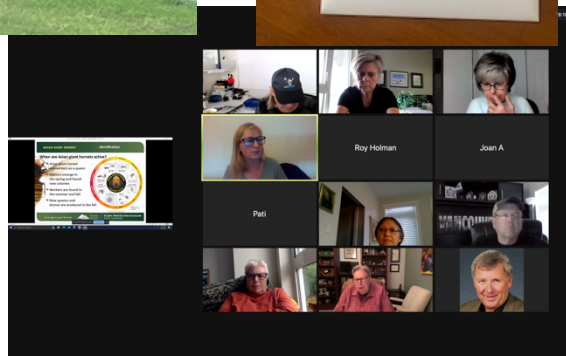
P-Roy: Thank you, for joining today. I now close our gathering at 7:15 pm



The Greer 2021 Ducklings



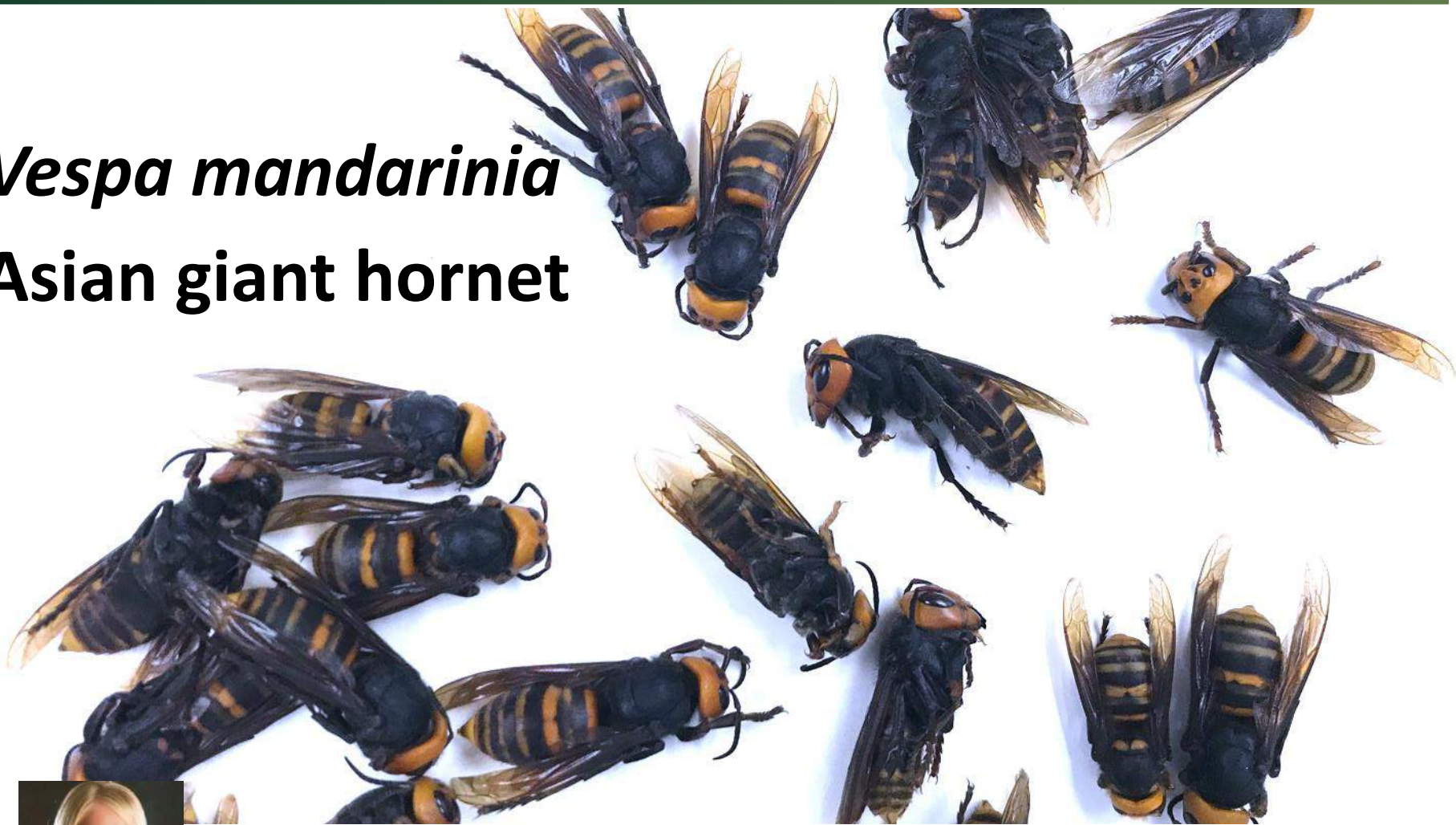
Pati has Thank-you cards addressed & ready to be sent



Our meeting

ASIAN GIANT HORNET

Vespa mandarinia
Asian giant hornet



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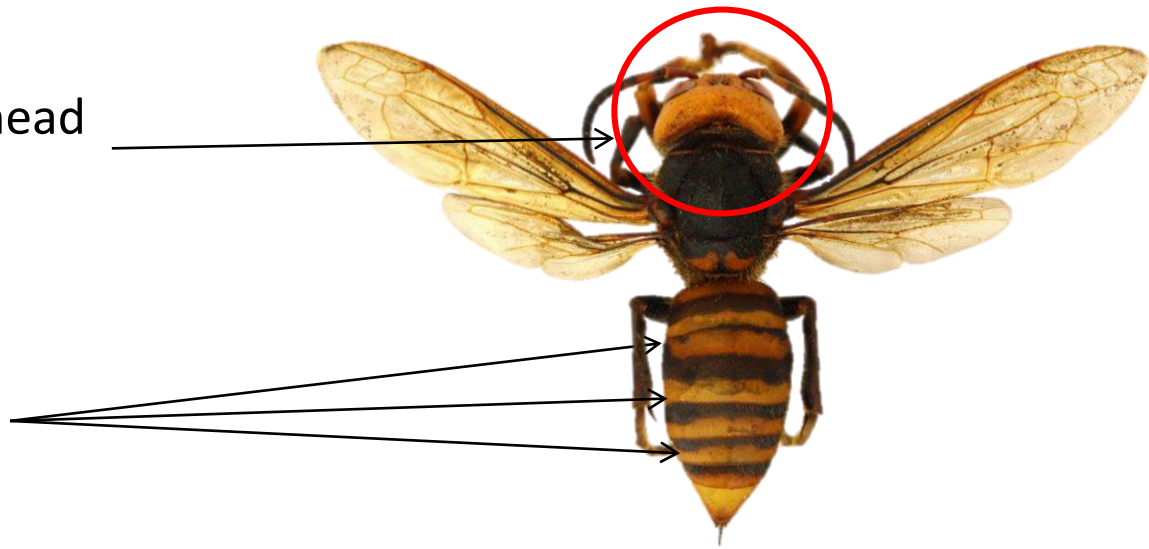
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What is Asian giant hornet?

🐝 largest hornet in the world, adults range between 1.5 to 2 inches in length

Large orange/yellow head

Orange/yellow bands on abdomen



Asian giant hornet, *Vespa mandarinia*



On December 8, 2019, a Blaine, Washington resident reported a specimen of Asian giant hornet to the Washington Invasive Species Council



WSDA confirmed the specimen on December 12, 2019



What is Asian giant hornet?

- resembles some native species
- These native species are mostly beneficial, and serve an important role in Washington's ecosystem
- Asian giant hornet threatens honey bees, human health, and agriculture

Sizing up the Asian giant hornet



Sphecus sp.
cicada killer



Spheg ichneumoneus
great golden digger wasp



Vespa crabro
European hornet
(does not occur in WA)



Cimbex americana
elm sawfly



Vespa mandarinia
Asian giant hornet



Vespaula pensylvanica
western yellowjacket



Polistes dominula
European paper wasp



Apis mellifera
western honey bee



Dolichovespula maculata
bald-faced hornet



Tremex columba
pigeon tremex

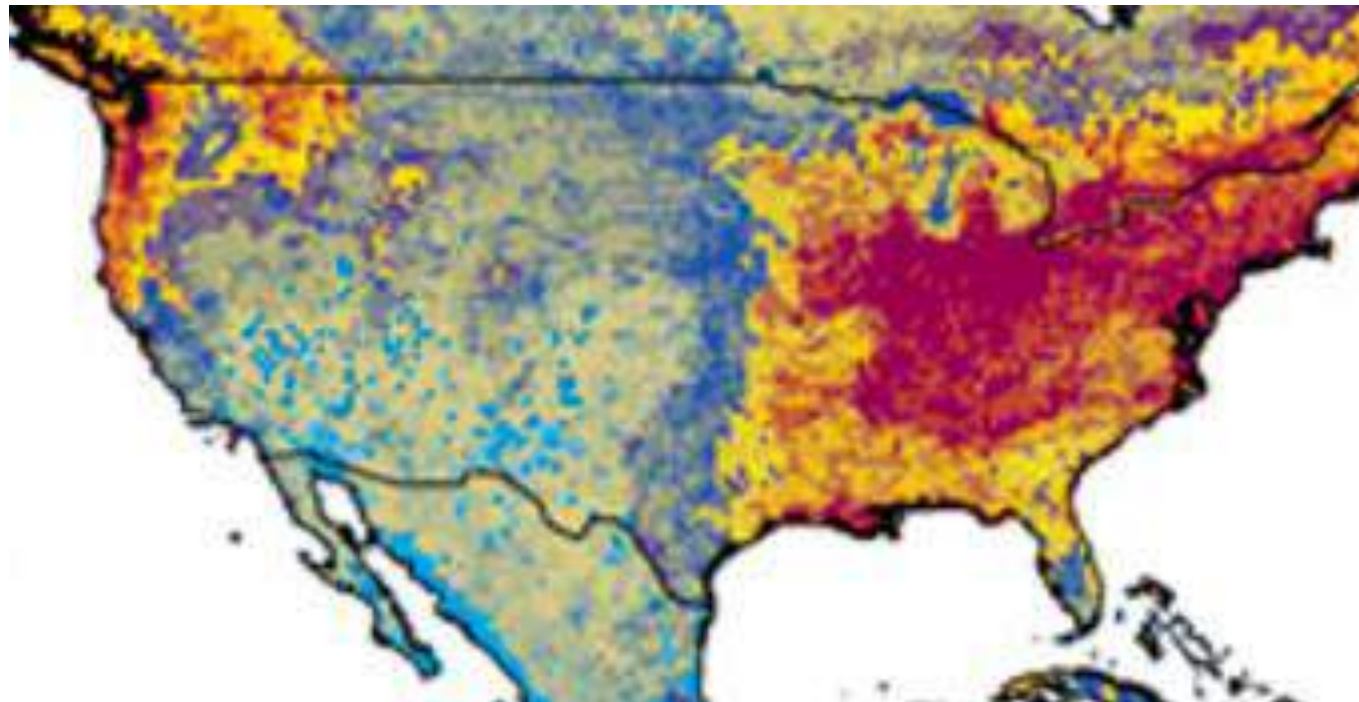


Bombus flavifrons
yellow head bumble bee

AGR PUB 909-046 (N/A/20)
Do you need this publication in an alternate format?
Contact WSDA at (360) 902-1976 or TTY Relay (800) 833-6398.

ASIAN GIANT HORNET

Identification



Zhu, G., Illan, J. G., Looney, C., & Crowder, D. W. (2020). Assessing the ecological niche and invasion potential of the Asian giant hornet. doi:10.1101/2020.05.25.115311

(D) Ensemble forecast of global habitat suitability. Increasing intensities of yellow represent increasing climate suitability, and increasing blue represent increasing severity of invasions due to human activity.

Where do Asian giant hornets nest?

- 🐝 In the ground at the base of pine trees or in animal burrows
- 🐝 Rarely recorded above ground in hollow trees
- 🐝 Nests can be > 2 feet wide
- 🐝 Can produce hundred of adult hornets



Photo credit: George Doibi

Where do Asian giant hornets nest?



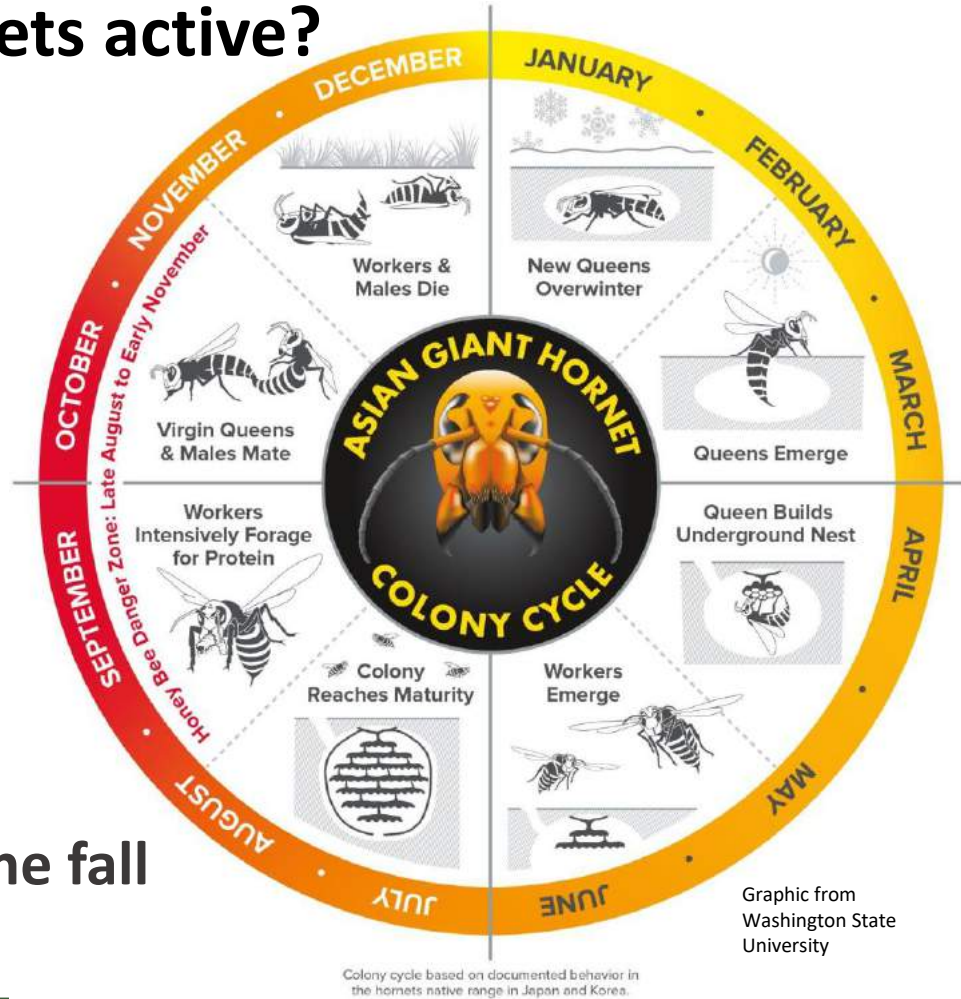
Video credit: Conrad Bérubé

ASIAN GIANT HORNET

Identification

When are Asian giant hornets active?

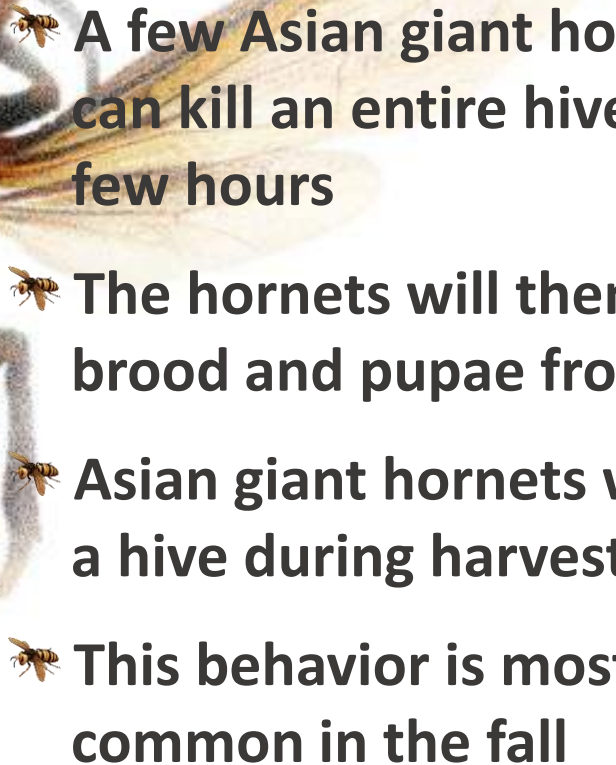




- Asian giant hornet overwinters as a queen
- Queens emerge in the spring and found new colonies
- Workers are found in the summer and fall
- New queens and drones are produced in the fall



Graphic from Washington State University

ASIAN GIANT HORNET

A special note on managed bees:

- 
-  A few Asian giant hornets can kill an entire hive in a few hours
 -  The hornets will then harvest brood and pupae from the hive
 -  Asian giant hornets will defend a hive during harvesting
 -  This behavior is most common in the fall



ASIAN GIANT HORNET

 Identification



 **Japanese honey bee**

VS.

 **European honey bee**



ASIAN GIANT HORNET

Identification



Photo credit to Woo Kittti

www.agr.wa.gov/hornets



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Initial Response

N1v30
@n1v30





"Murder hornets arrived in a America"

Everybody:



11.3K 11:04 AM - May 2, 2020

2,930 people are talking about this

-  The public will play a critical role in detection
-  Respond to misguided news
-  Encourage citizen scientist trapping
-  Encourage reporting



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INVASIVE HORNETS

← Back

BEEKEEPING

DATA

FAQ

HUMAN HEALTH

IDENTIFICATION

NEWS

REPORTED SIGHTINGS

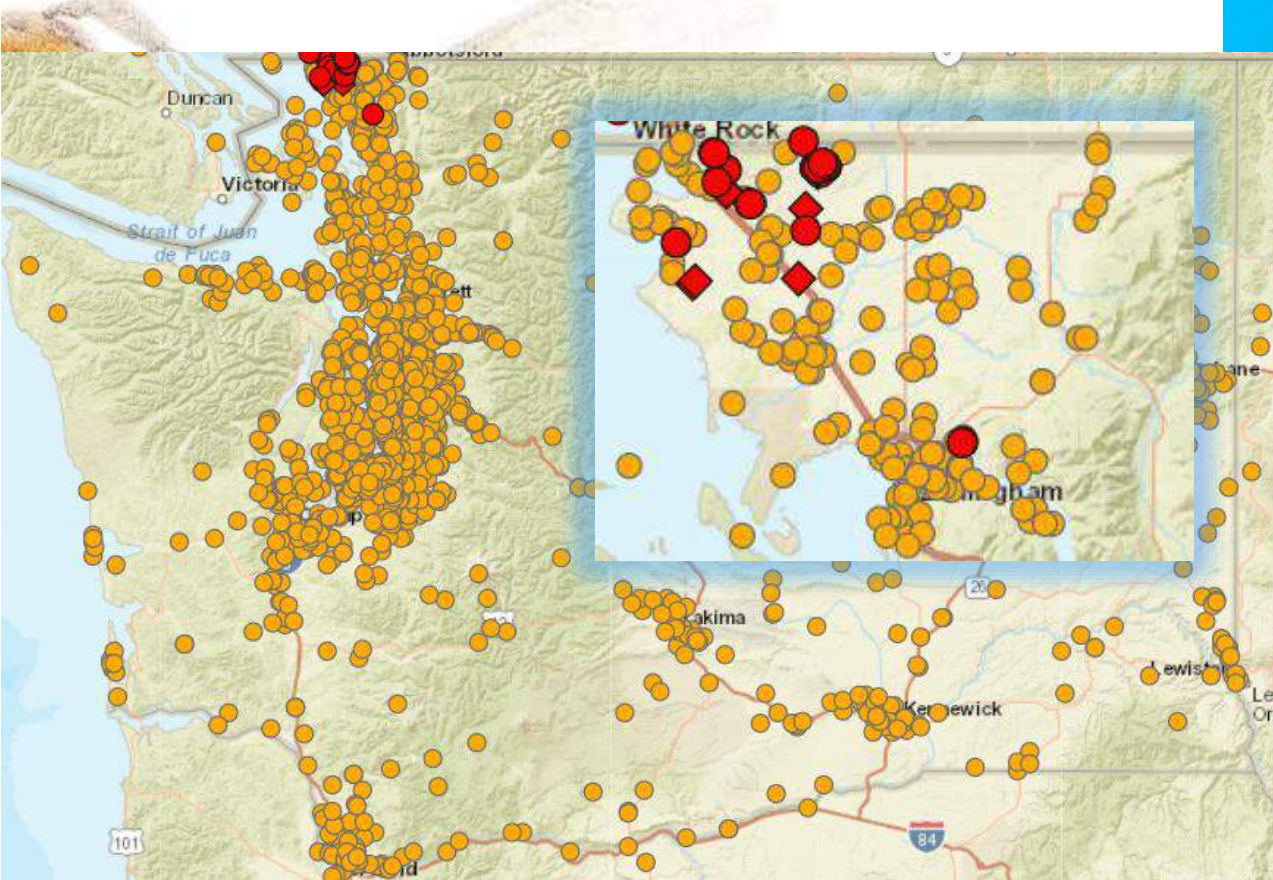
TRAPPING

ASIAN GIANT HORNET



Communication > Survey

Where have reports been confirmed?



 **Whatcom county
(31 in 2020)**

 **6 in BC White Rock
- Aldergrove**

ASIAN GIANT HORNET

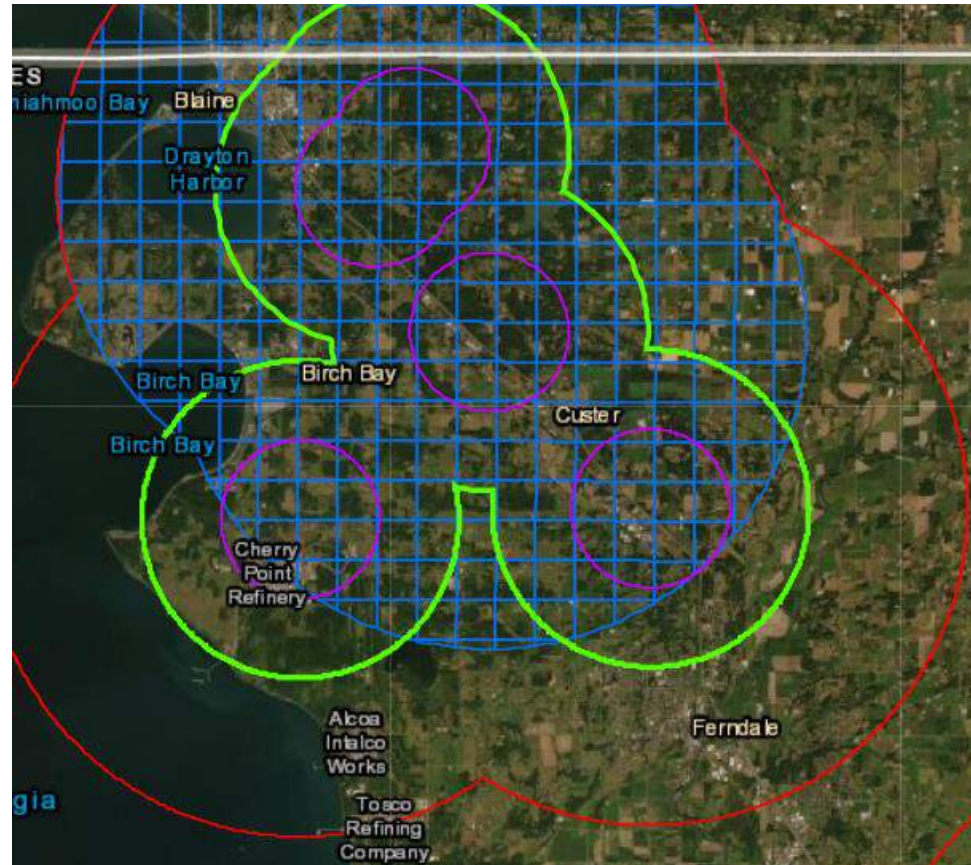
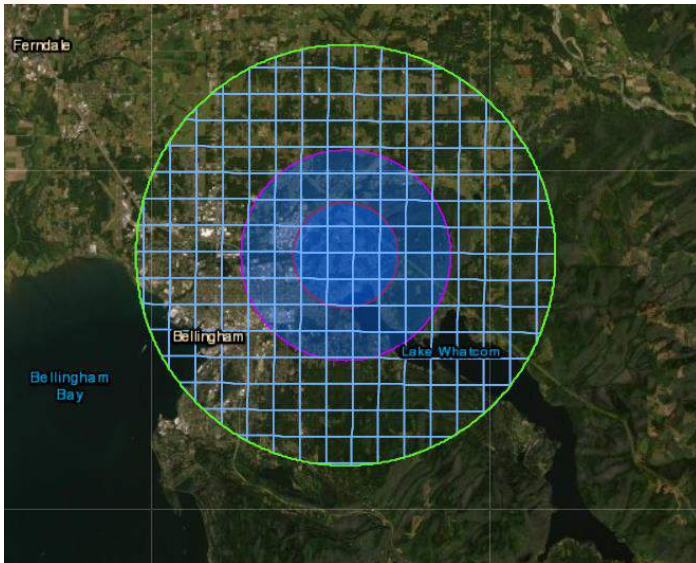
Survey

Inside WSDA Trapping

 Blaine Grid

 Bellingham Grid

 Birch Bay Grid



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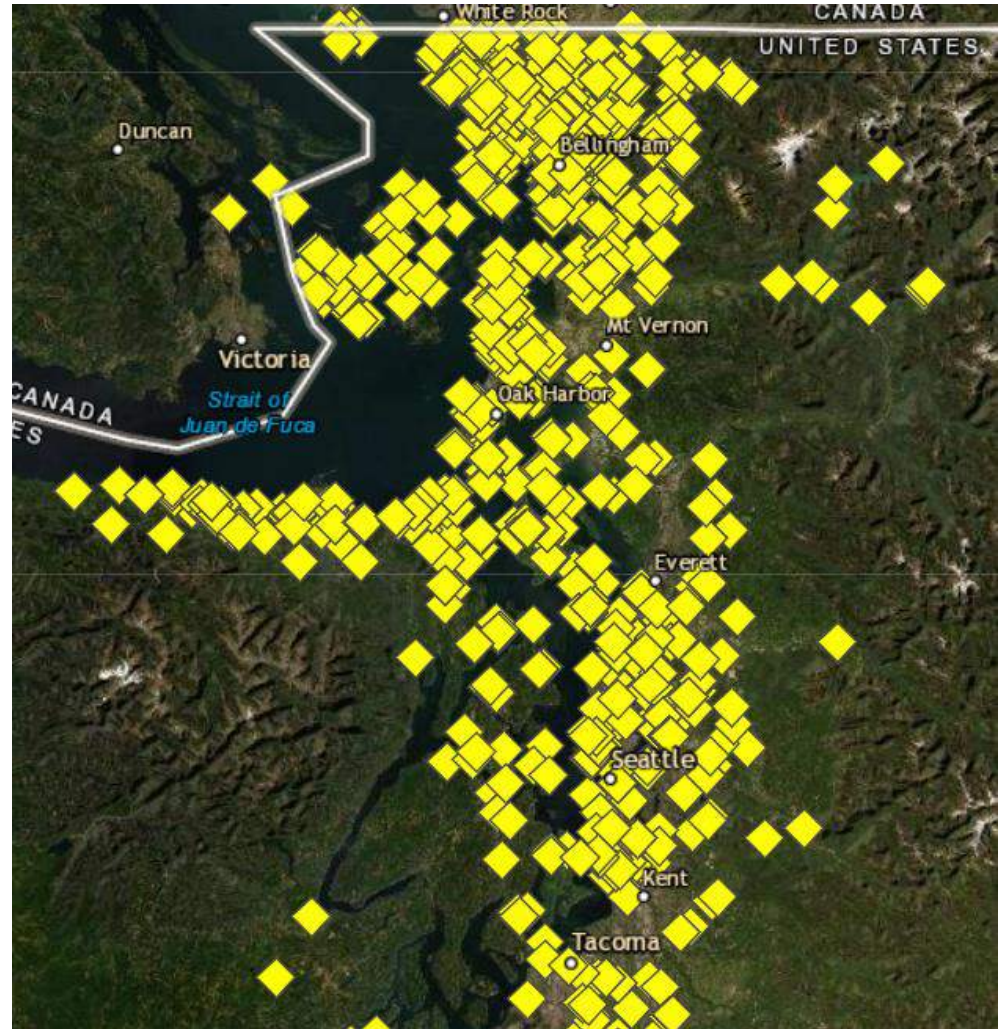
Survey

Joint Efforts in Trapping

 Citizen Scientists
 Cooperators



 agr.wa.gov/hornets



www.agr.wa.gov/hornets
www.agr.wa.gov/hornets



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 Survey

Track Don't Whack!

 Capture a live Asian giant hornet



www.agr.wa.gov/hornets



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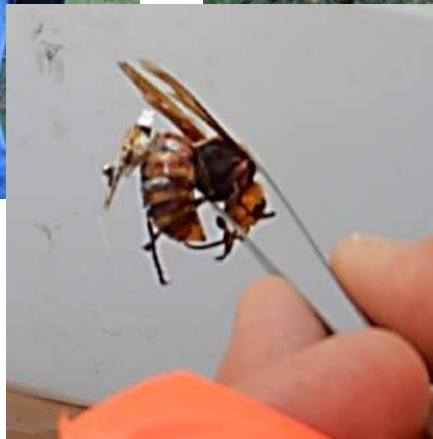
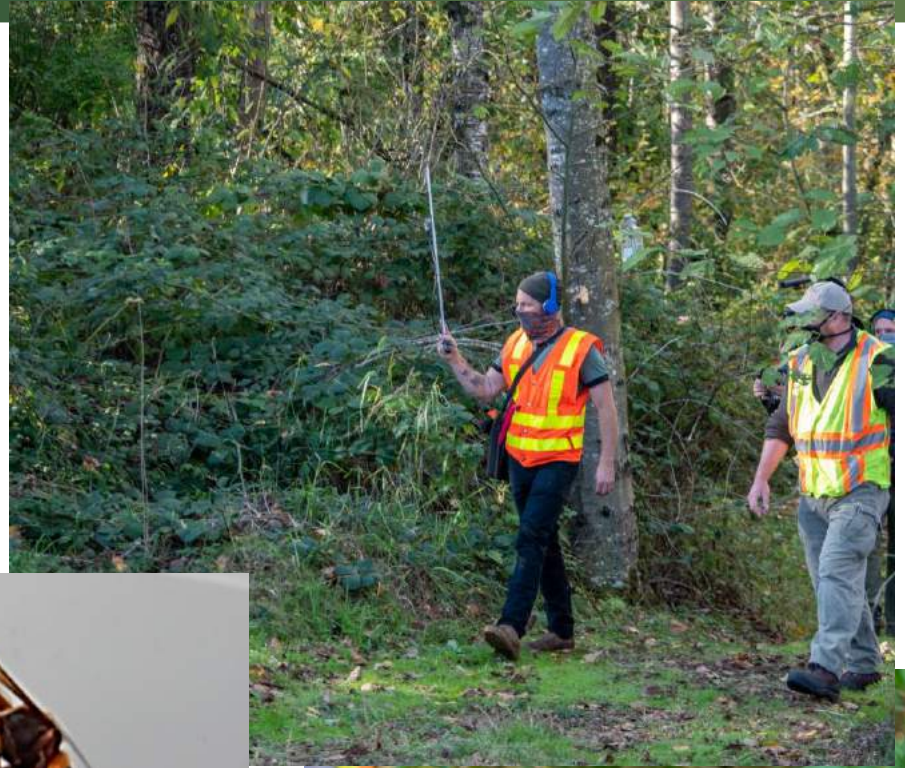
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ASIAN GIANT HORNET

Survey

Track Don't Whack!

 Track to the nest



www.agr.wa.gov/hornets



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Survey



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ASIAN GIANT HORNET

Eradication

Eradication

Remove nest



Strict safety procedures to protect workers, including special hornet suits will be used

ASIAN GIANT HORNET

Eradication

First nest located and removed in the United States.



ASIAN GIANT HORNET



Nest entrance was about 8.3 feet up in the tree.

It was in a cavity that was about 8-9 inches in diameter.

Nest length - 14 inches

- **6 combs**
- **6 unhatched eggs**
all in the last and smallest comb
- **190 total larvae**
most had fallen out of the combs
- **112 workers**
85 were removed with a vacuum
- **9 males**
- **76 queens**
all but one should be new queens



108 capped cells with pupae

Based on size, these are likely all queens

ASIAN GIANT HORNET



Potential management for SWD



Gene Sequencing

Catching hope: Possible ally in fight against harmful fruit fly discovered in Asian giant hornet trap

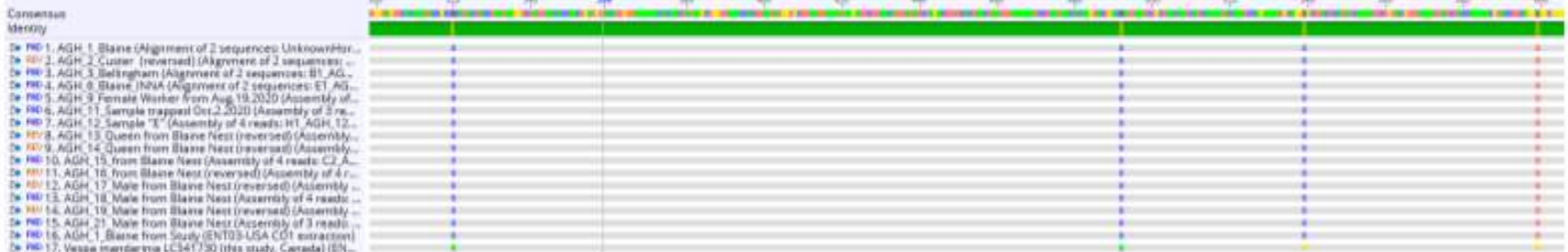
Karla Salp
Communications

The benefits of the Washington State Department of Agriculture's Asian giant hornet program just keep coming. Not only did they find and eradicate the first Asian giant hornet nest this fall, but now entomologists have found a very promising sign in the hornet traps: the first-known detection of *Leptopilina japonica* in the United States.

Leptopilina japonica is a tiny parasitic wasp that kills spotted wing drosophila (SWD,) which has been causing extensive damage to fruit crops in Washington for both farmers and



Leptopilina japonica
Photo credit: Warren H. L. Wong,
University of British Columbia, Canada



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Reporting, Citizen Scientist Trapping, & Events

July - November

Check the hornets website for updates

1. Enter Information

Your Name (optional):

Contact Info (optional):

Detection Date

Enter the date that the insect was seen.

Notes and Observations:

Please include a photo for identification if you can.

2. Select Location

Specify the location for this entry by clicking/tapping the map or by using one of the following options.

Search

Latitude: 46.30550, Longitude: -125.47104



ASIAN GIANT HORNET

Upcoming Efforts




Inside WSDA Trapping

 8 km from detection

 Based off foraging distance



Legend

-  2 km Buffer
-  8 km Buffer
-  1km USNG UTM10 Grid

Survey Type

-  Trap
-  Visual

2 km Buffer - 184 Full or Partial 1 km Cells
 8 km Buffer - 730 Full or Partial 1 km Cells



ASIAN GIANT HORNET



What to do if you're stung by an **ASIAN GIANT HORNET**

One Sting

Localized Pain

- Apply ice to sting site
- Take antihistamine
- For pain, take aspirin
- Clean sting site

Anaphylactic Reaction¹

- If easily available, immediately inject epinephrine (EpiPen)

Call 911

Multiple Stings²

Localized Pain

- Apply ice to sting sites
- Take antihistamine
- For pain, take aspirin

See a health care provider promptly

Severe or Anaphylactic Reaction¹

- If easily available, immediately inject epinephrine (EpiPen)

Call 911

Asian giant hornet venom can damage the skin surrounding a sting.



Hornet sting photo: Singh Y, Joshi SC, Saxena SR, Kalil M. Int J Health Allied Sci 2014;3:56-9

¹ Hives, flushed skin, or paleness. Suddenly feeling too warm. Feeling like you have a lump in your throat or difficulty swallowing. Nausea, vomiting or diarrhea. Abdominal pain. A weak and rapid pulse. Runny nose and sneezing, or swollen tongue or lips.

² Deaths from hornet stings are mainly due to anaphylactic shock or cardiac arrest, though rarely there can be failure of kidneys or multiple organs, typically after a relatively large number of stings.

ASIAN GIANT HORNET

Imposters



Size comparison of an Asian giant hornet and a honey bee. Photo: USDA

ASIAN GIANT HORNET

Imposters

Bumblebee



AGH



ASIAN GIANT HORNET

Imposters

Bald-faced Hornet



Photo: USDA



 **AGH**

ASIAN GIANT HORNET

Imposters

Great Golden Digger Wasp



Dave Wilkes



 AGH

Joel Nielsen

ASIAN GIANT HORNET

 **Imposters**

 **Cicada Killers**

 **Cicada Killers**



 **AGH**



Photo: USDA

www.agr.wa.gov/hornets



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ASIAN GIANT HORNET

Imposters

Hornetail Wasp (wood wasp)



Billmcmillan / CC BY-SA (<https://creativecommons.org/licenses/by-sa/4.0>)

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ASIAN GIANT HORNET

Imposters

Yellowjacket

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Photo: USDA

ASIAN GIANT HORNET

Imposters



Photo: USDA

Sawfly



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Imposters

Paper Wasps

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Photo: USDA

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Reporting



GOOD



Report sighting to WSDA with details of what you saw and where.

BETTER



Get a photo of the suspected hornet to submit with your report.

BEST



Collect the specimen if it is dead.
Keep it in case WSDA needs to test it.

ASIAN GIANT HORNET

Reporting

In Washington State, please report any suspect sightings to:



Online: agr.wa.gov/hornets



Email: hornets@agr.wa.gov



Phone: 1-800-443-6684



GOOD



Report sighting to WSDA with details of what you saw and where.

BETTER



Get a photo of the suspected hornet to submit with your report.

BEST



Collect the specimen if it is dead.
Keep it in case WSDA needs to test it.

If you are in Oregon report sightings to:

plant-entomologists@oda.state.or.us

www.agr.wa.gov/hornets



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ASIAN GIANT HORNET



AGHStakeholderUpdate21-01.pdf 1 / 4 | - 100% + | [Icons]

1

2

3

Washington State Department of Agriculture

ASIAN GIANT HORNET STAKEHOLDER UPDATE #21-01 – FEBRUARY 10, 2021

- [Asian giant hornet life cycle update](#)
- [WSDA Update](#)
- [USDA-APHIS Hosted an Asian Giant Hornet Meeting](#)
- [New Detections](#)
- [WSDA's 2020 Asian Giant Hornet Response – A Look Behind The Scenes](#)
- [Asian Giant Hornet pilot program](#)
- [Top WSU Research Story for 2020](#)
- [More Than Hornets – Blog](#)
- [TVW Documentary - Nest Zero](#)
- [Update from Canada](#)
- [Stay connected](#)

ASIAN GIANT HORNET LIFE CYCLE UPDATE

In their native range, all Asian giant hornet colonies follow a specific life cycle. As winter approaches, the new virgin queens and males emerge from the nest and mate not far from the nest. Many queens will not successfully mate. Both mated and unmated queens will disperse to overwinter, finding a sheltered area or place in the soil. Males and workers will die over the winter.

Mated queens will emerge in the spring and attempt to found a nest; unmated queens do not establish functioning nests.

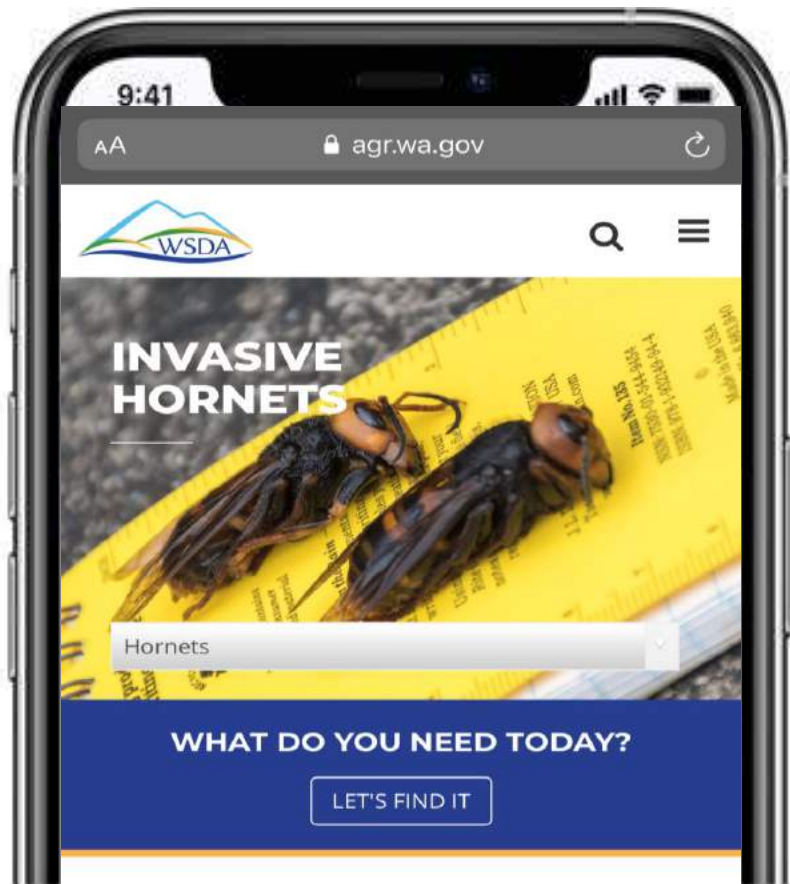
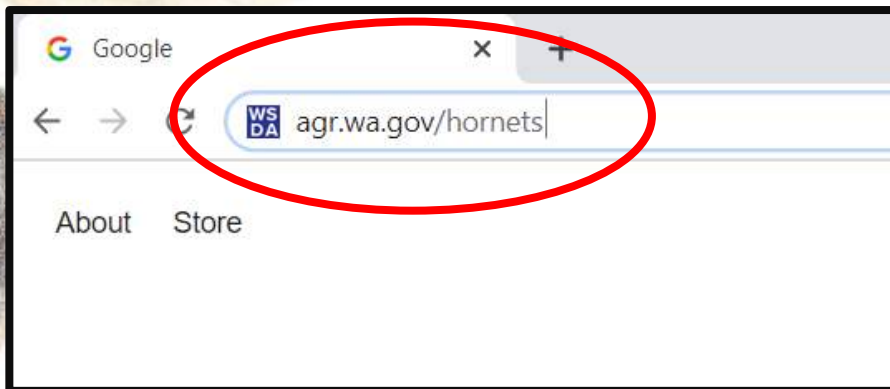
WSDA UPDATE

WSDA met with USDA partners over the last two weeks. The meetings evaluated the Asian giant hornet program from the 2020 season, and planned changes to the upcoming 2021 season including the upcoming citizen scientist program. Residents of Washington will be encouraged to trap again, however some of the instructions will be modified. WSDA greatly appreciates all that Washington residents did in

ASIAN GIANT HORNET

 Connect

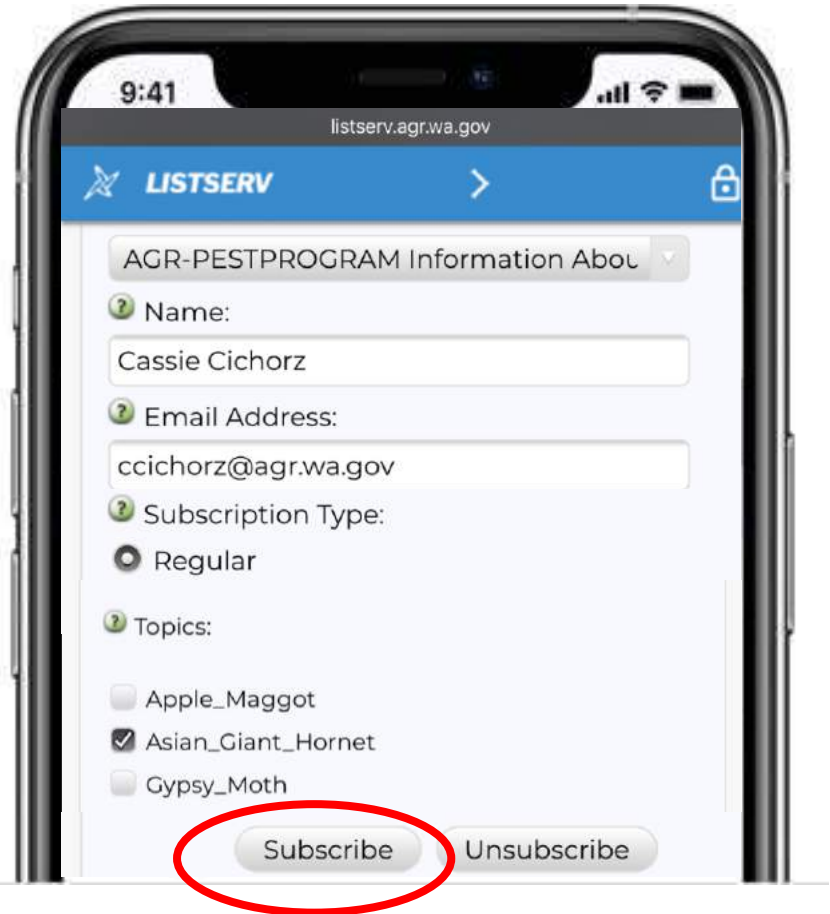
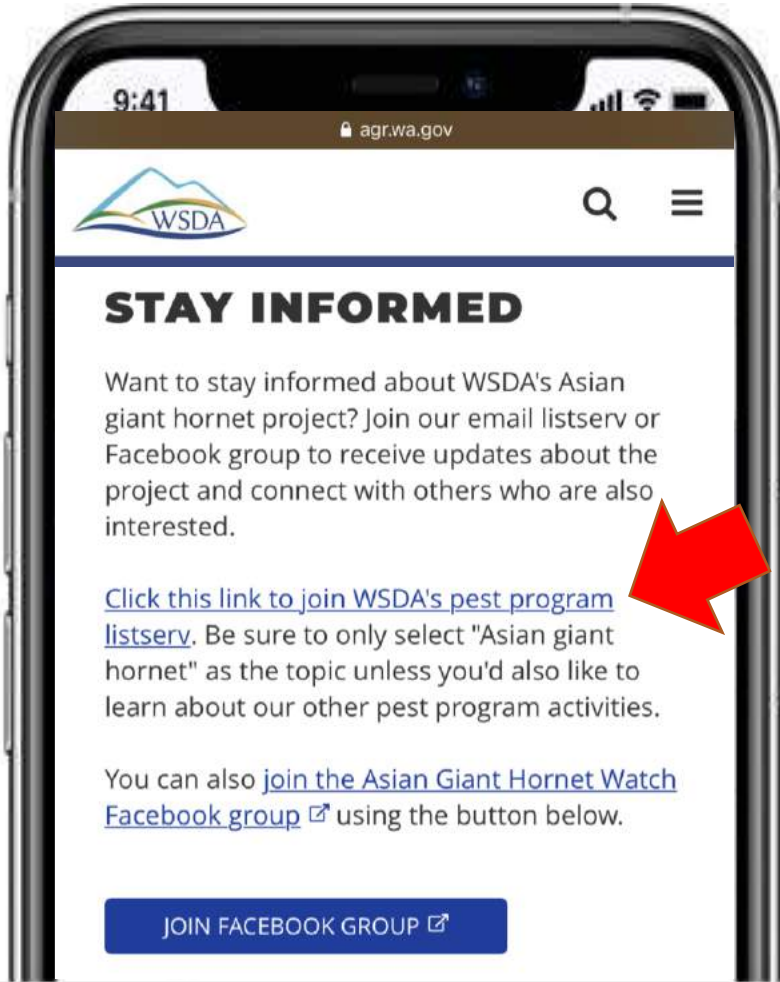
 Go to the hornets webpage



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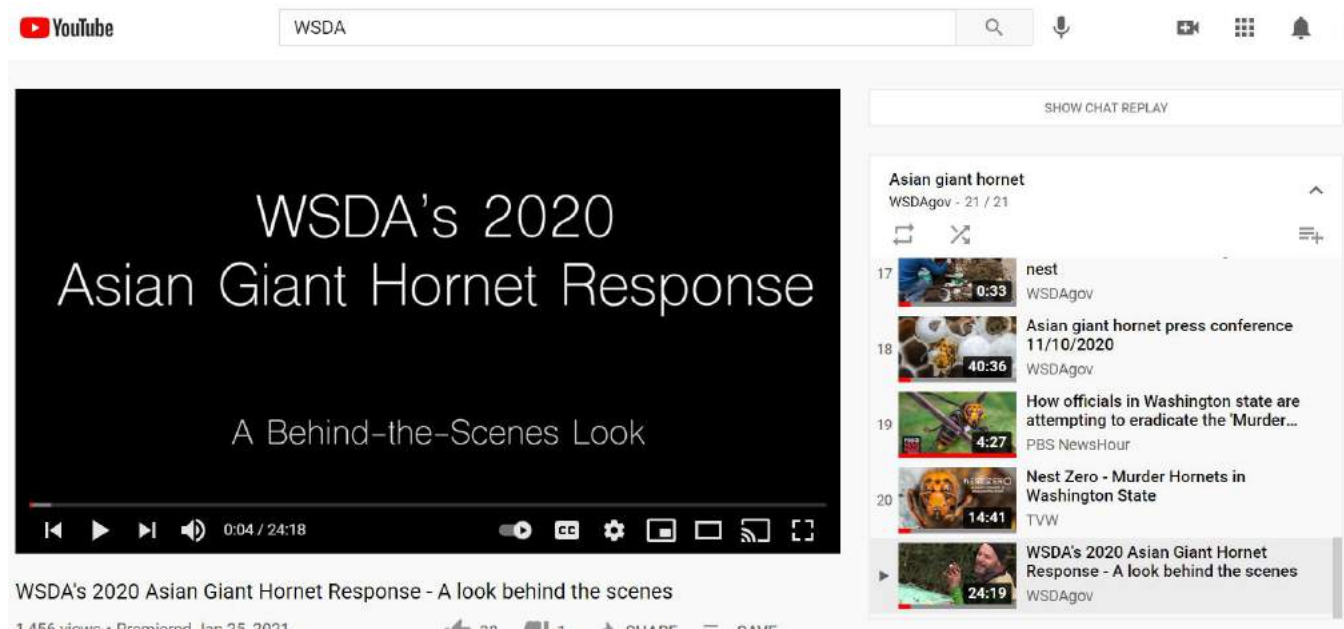


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 You can also follow our hornet activities on Facebook:

www.facebook.com/groups/hornets



The screenshot shows a YouTube video player with the title "WSDA's 2020 Asian Giant Hornet Response" and the subtitle "A Behind-the-Scenes Look". The video is currently at 0:04 / 24:18. To the right of the video player is a list of related videos:

- 17 nest WSDAgov 0:33
- 18 Asian giant hornet press conference 11/10/2020 WSDAgov 40:36
- 19 How officials in Washington state are attempting to eradicate the 'Murder... PBS NewsHour 4:27
- 20 Nest Zero - Murder Hornets in Washington State TVW 14:41
- WSDA's 2020 Asian Giant Hornet Response - A look behind the scenes WSDAgov 24:19

Cassie Cichorz (Outreach & Education)

Asian Giant Hornet Outreach & Education Specialist

Email: ccichorz@agr.wa.gov

ASIAN GIANT HORNET



code word below



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