

BMSB Pest Status and Distribution Pacific Northwest Region

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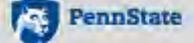
Nik Wiman, OSU



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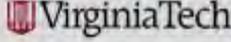
Collaborating Institutions



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OR Report system – EDD Maps

ABOUT ACADEMICS INTERNATIONAL RESEARCH OUR BEST OUTREACH AND EXTENSION UNITS

Report a parasitized BMSB egg mass or samurai wasp sighting

Visit [here](#) for information on identifying and reporting parasitized eggs.

Report a BMSB Sighting

- In or around a home or structure
- In an orchard, field, or crop
- In a vehicle or other place



Key characters for identifying adult BMSB and distinguishing them from similar species are (1) the distinct light bands on the dark antennae, (2) smooth "shoulders", and (3) abdominal margins have a distinct banding pattern.

Brown marmorated stink bug (BMSB), *Halyomorpha halys*, is an important exotic pest insect in Oregon. It first arrived from Asia to the Portland area around 2004. This insect is relatively unique as it affects a wide segment of Oregon society including citizens, business owners, and farmers. In and around the home BMSB is a problem when it aggregates on structures where it overwinters and can become a continual winter annoyance to residents. It also has a negative effect on urban agriculture including backyard gardens where it damages fruits and vegetables, sometimes causing complete crop destruction. Businesses are also targeted by BMSB for overwintering. In the urban environment populations of the pest build up primarily on ornamental trees. Farmers are most adversely affected by the pest. BMSB causes feeding damage on a huge spectrum of crops, including high-value specialty crops such as vegetables, hazelnuts, tree fruits, and small fruits. In other areas of the country management of BMSB in agriculture has been very challenging and costly. Current management programs are heavily reliant on insecticides and this has disrupted Integrated Pest Management (IPM) Programs that took years to develop.

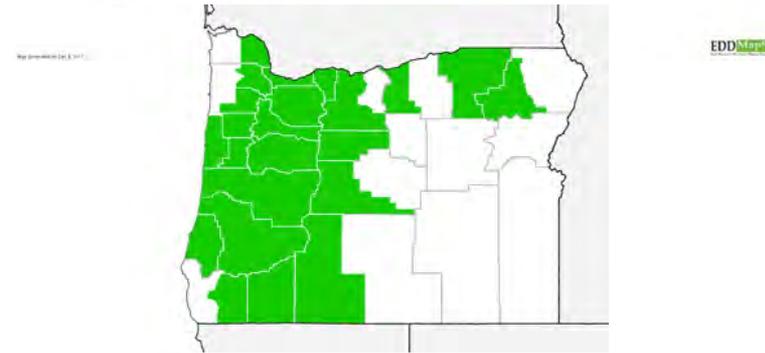
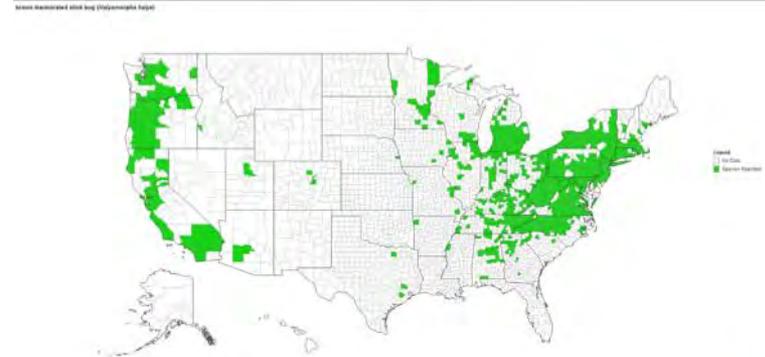
Oregon offers BMSB a comfortable environment with abundant habitat and less pressure from natural enemies than it has in its native range of China, Korea, and Japan. However, that may be changing as its chief natural enemy in Asia was discovered in 2015 along the Oregon border in Vancouver and in 2016 in Portland. This natural enemy is a minute wasp (1-2 mm) called *Trissolcus japonicus*. Female wasps seek out the egg masses of BMSB and they lay their own eggs inside. Instead of the BMSB eggs hatching with BMSB nymphs, they instead produce a new set of wasps. They don't

Home

Apple and pear growers battle against brown marmorated...

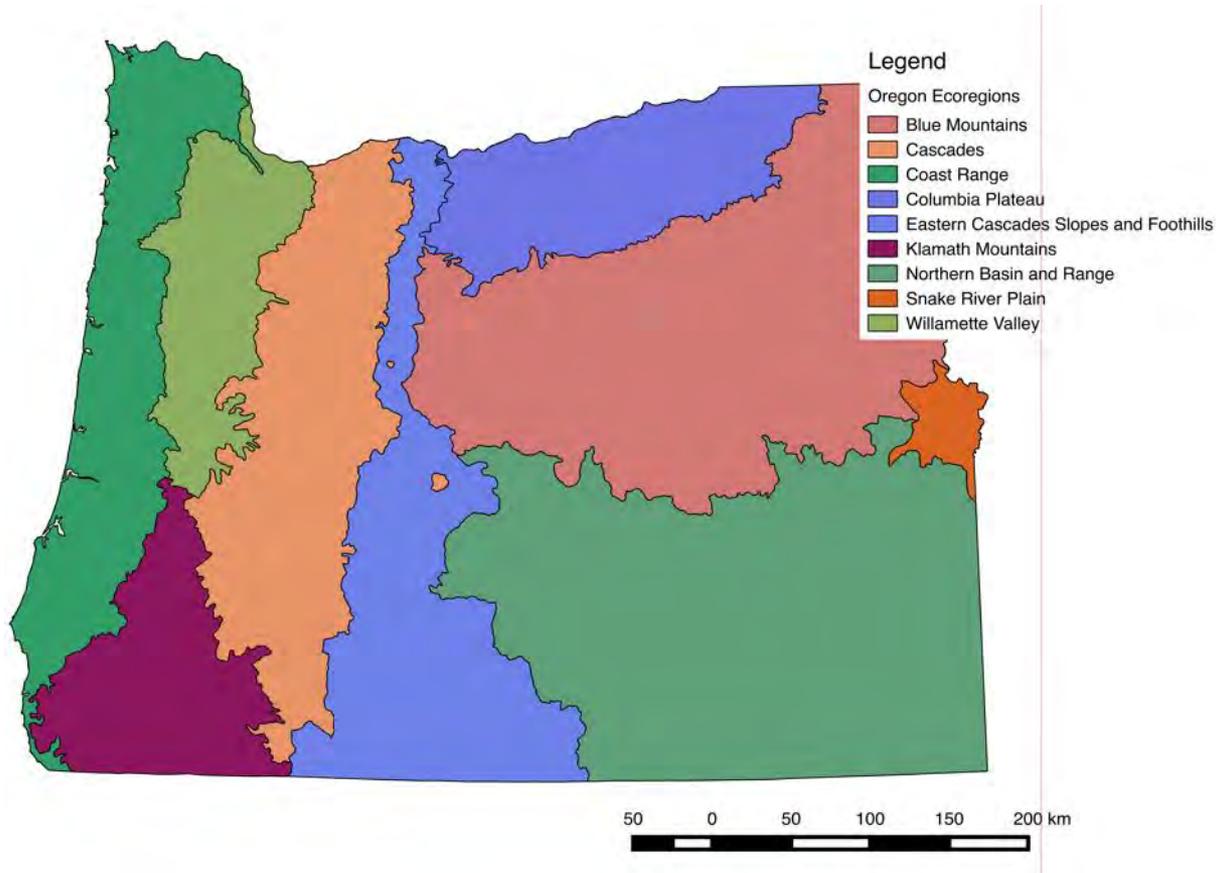
The Weekly Times Apple and pear growers battle against brown marmorated stink bug. The Weekly Times "In the US in 2010, because they did not have ti..."

Dec 28, 2017 2:45 AM news.oregonstate.edu



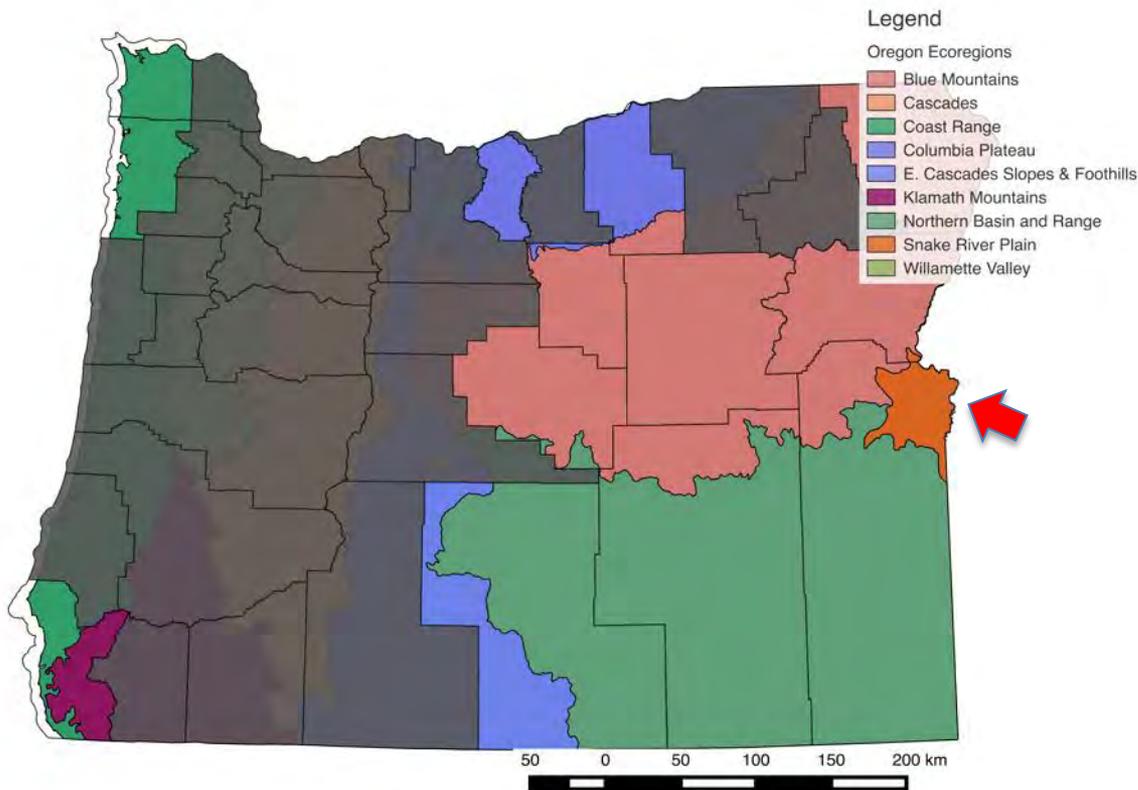
EDDMaps

Oregon Ecoregions



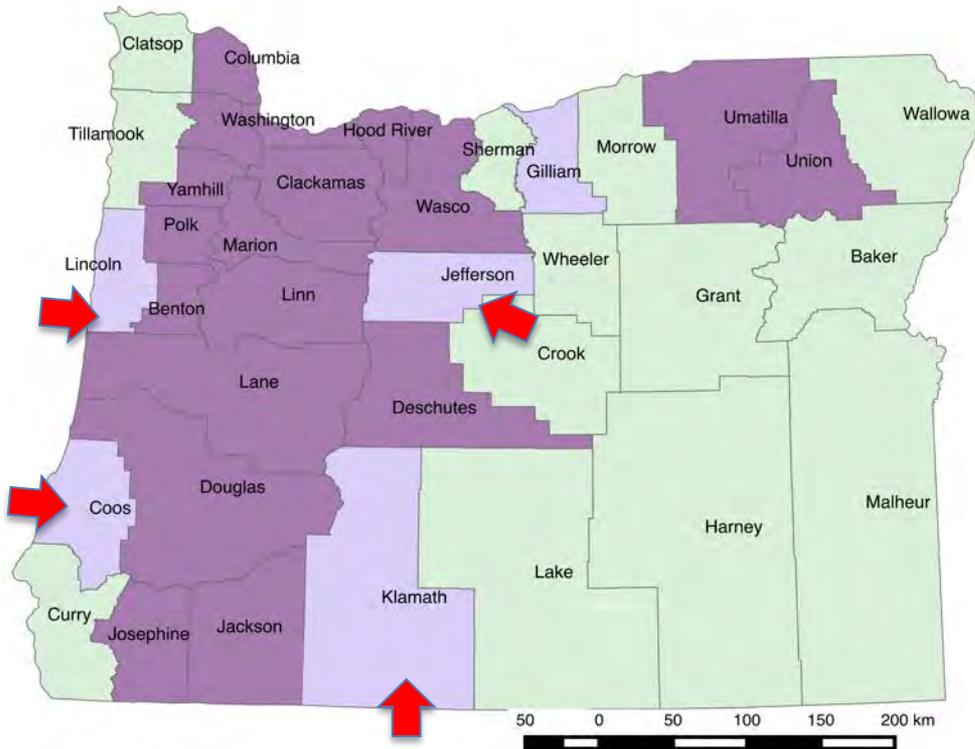
- There are 9 ecoregions in Oregon

Oregon Ecoregions + BMSB counties



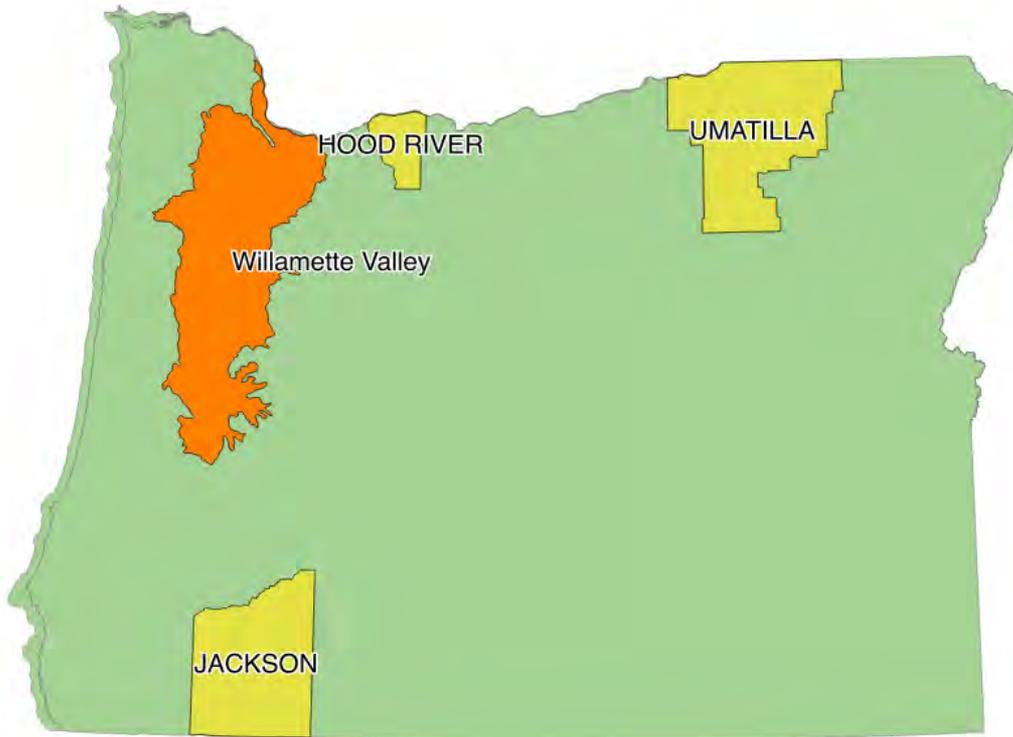
- BMSB are found in 7 of the 9 regions
 - County presence/absence data
- Snake River and N. Basin are only negatives
 - Snake river on ID side has BMSB

County Status and Recent Finds



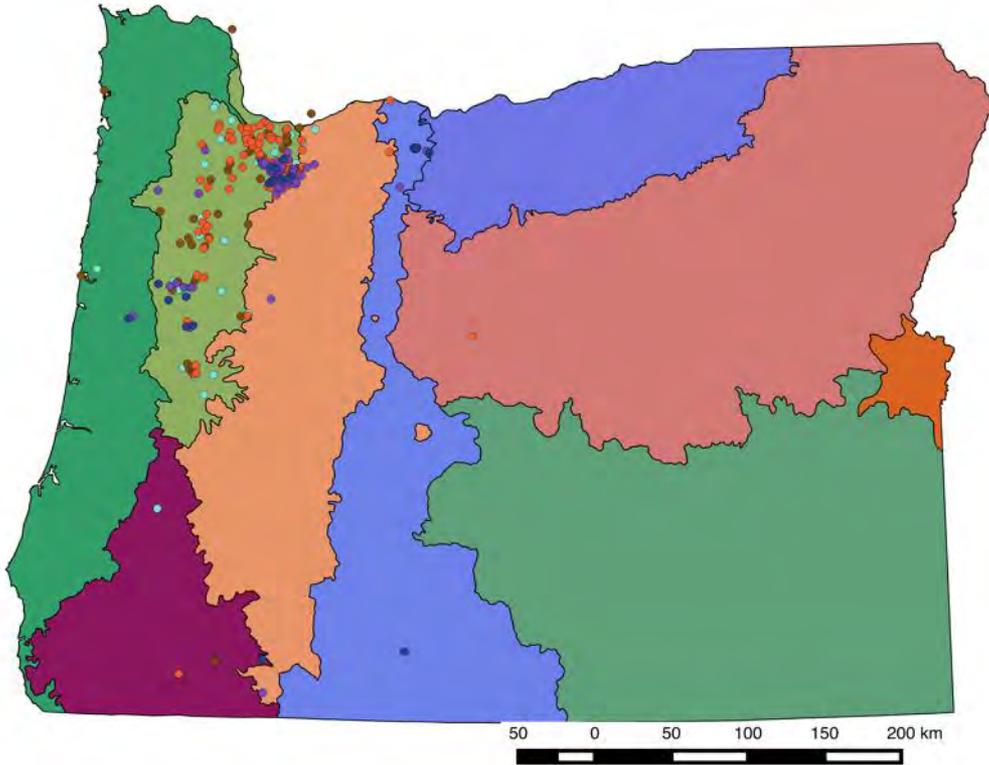
- Recent finds (light purple = detected)
 - Klamath 2017
 - Coos 12/27/17
 - Lincoln 2017
 - Jefferson 2017

Oregon hotspots



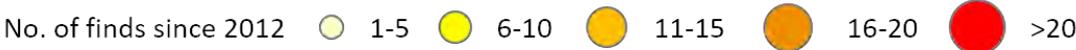
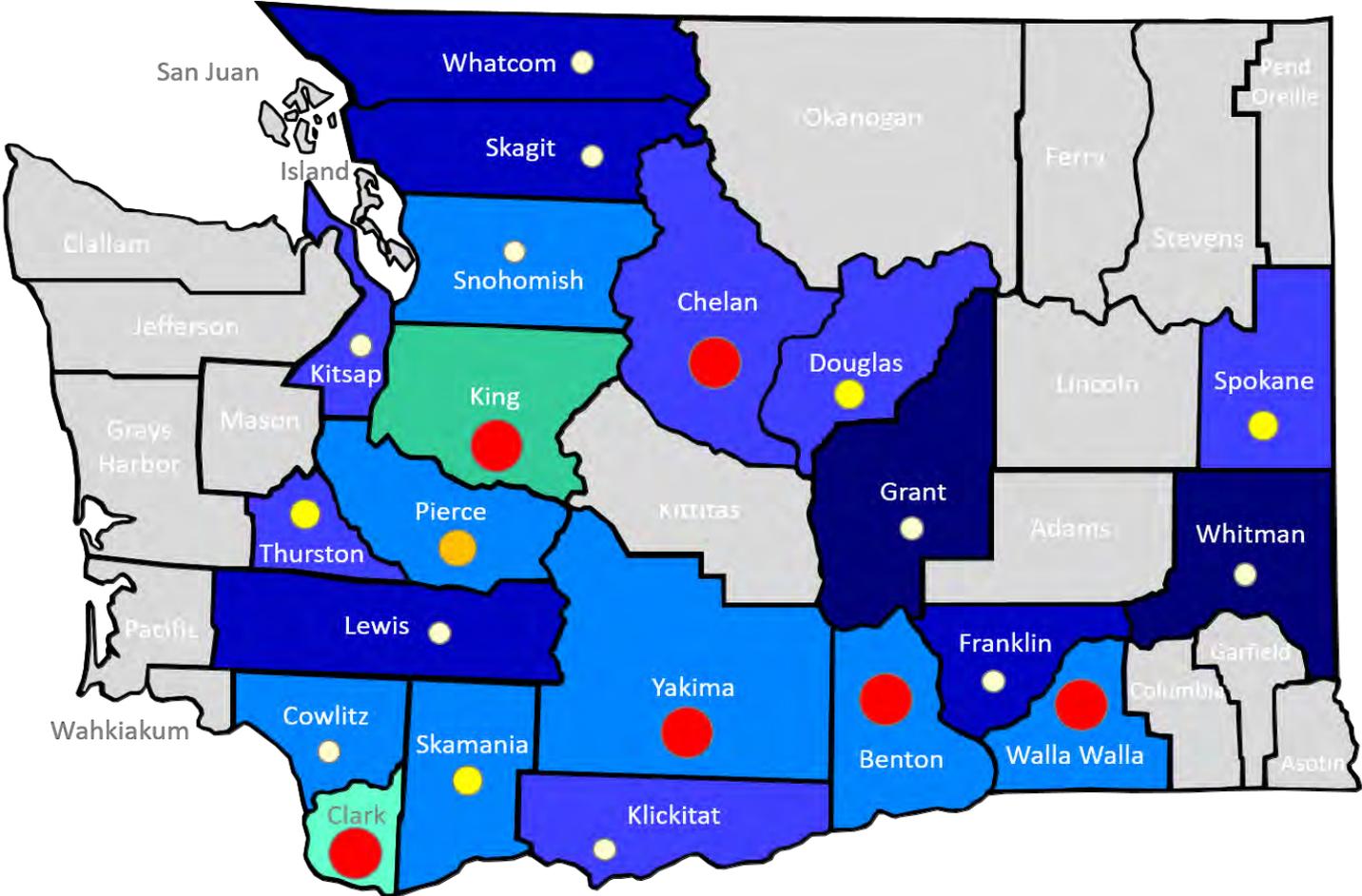
- The Willamette Valley
 - Early establishment (2004)
 - Tree fruits, hazelnuts
- Umatilla
 - Milton-Freewater
 - Walla Walla valley
- Jackson
 - Some SB damage showing in pears
- Hood River/Gorge
 - Orchards
 - Farm buildings/packers

Report locations



- Citizen reports
- Concentrated in WV
- Increasingly rural

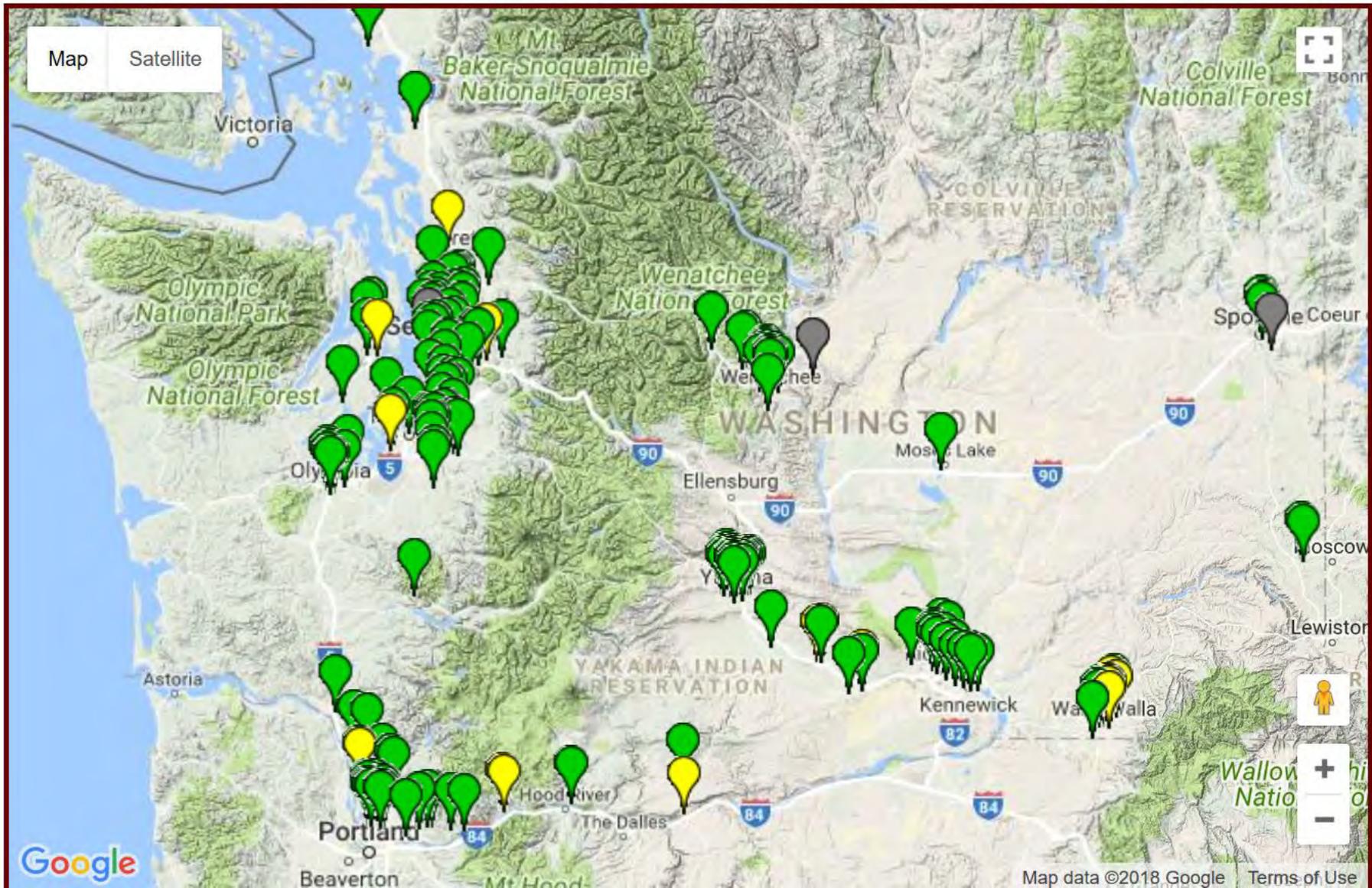
Current Distribution of BMSB in Washington 2017



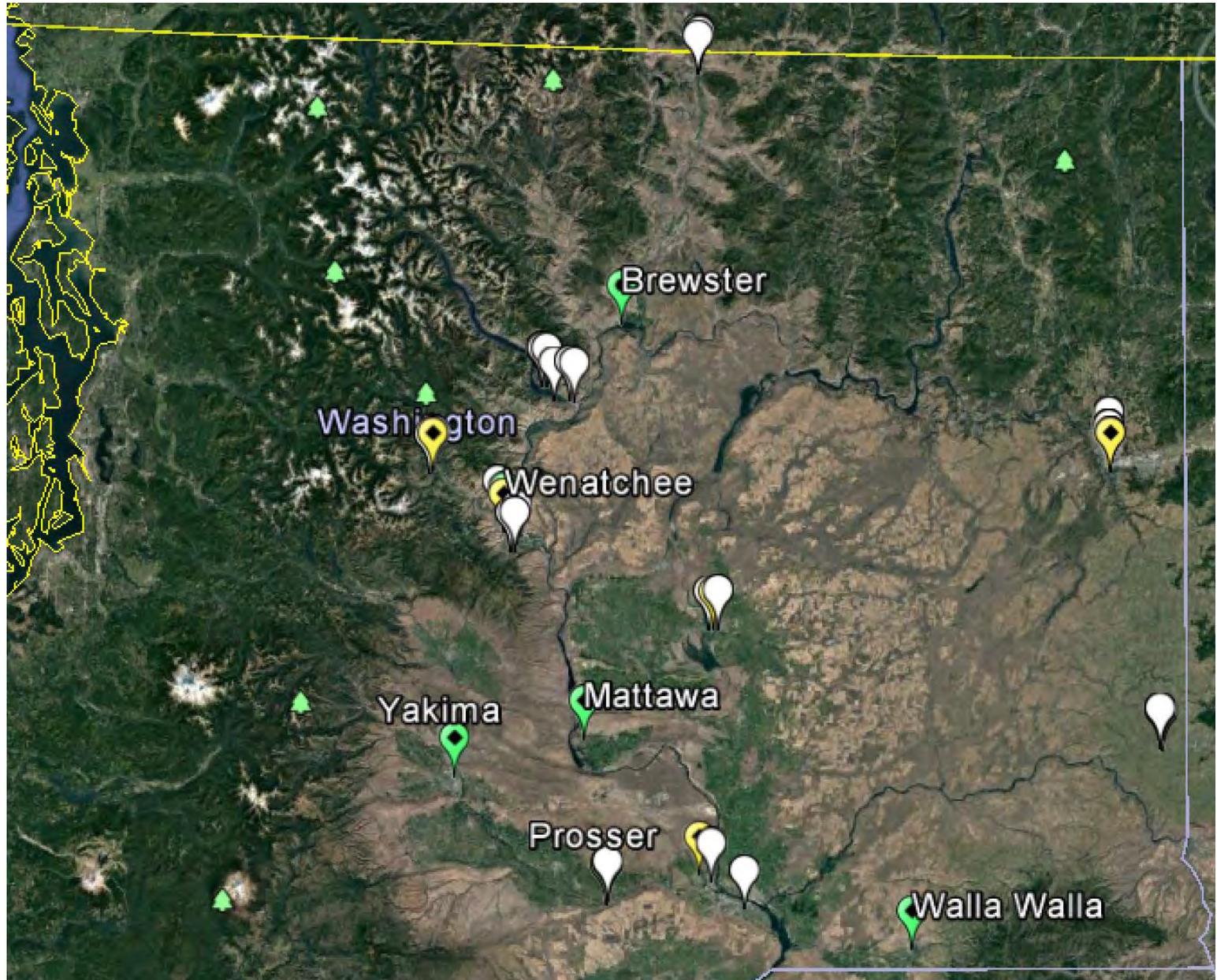
BMSB by WA County (Dec. 2017)

County	Nymphs	Adults	Total
Benton	1	22	23
Chelan	0	26	26
Clark	1	46	47
Cowlitz	0	2	2
Douglas	0	6	6
Franklin	0	2	2
Grant	0	1	1
King	1	45	46
Kitsap	1	3	4
Klickitat	2	3	5
Lewis	0	1	1
Pierce	1	14	15
Skagit	0	1	1
Skamania	2	5	7
Snohomish	1	2	3
Spokane	1	7	8
Thurston	0	10	10
Walla Walla	8	21	29
Whatcom	0	1	1
Whitman	0	2	2
Yakima	6	79	85

BMSB Distribution (GPS)



BMSB Distribution (Obj. 1 – ‘Shotgun samples’)



BMSB Distribution

(Obj. 1 – ‘Shotgun samples’)

