



SHASTA COUNTY DEPARTMENT OF AGRICULTURE WEIGHTS AND MEASURES FALL 2020 NEWSLETTER

Commissioner's Updates

Rick Gurrola – Shasta County Agricultural Commissioner / Sealer of Weights and Measures



Reports of unsolicited seed shipments from China have greatly decreased over the last several months, however they continue to trickle in. Approximately 120 separate seed samples from over 70 residents have been collected and submitted to USDA for identification and testing. Anyone who receives

any type of unsolicited agricultural product in the future should contact their local Department of Agriculture.

The Department has received an additional shipment of N95 respirators, disposable and cloth non-medical masks, and hand sanitizer from California Office of Emergency Services intended for distribution to agricultural workers exposed to the recent wildfire smoke. The masks are free to all agricultural producers with personnel who are in need of respirators. N95 masks are also available to pesticide applicators who are required to wear them.

The Shasta County Board of Supervisors adopted Ordinance SCC 2020-02 on May 19, 2020 to allow indoor cultivation and processing of industrial hemp, which is limited to nursery stock and micro-greens only. Both of which, by definition, are immature plants that do not have the potential to emit noxious odors. Outdoor cultivation remains prohibited, except in the cities of Redding and Shasta Lake, where it may be grown with restrictions. The Board of Supervisors directed staff to agendize the

issue of industrial hemp for additional discussion at a future Board of Supervisors' meeting within a month after COVID-19 pandemic restrictions subside, and the public is allowed to attend the Board meetings in person

Department staff continue to test commercial weighing and measuring devices to ensure consumer protection and equity in the marketplace. As winter approaches, sellers and purchasers of firewood should be aware that firewood deliveries must include a receipt which contains the date of sale, the volume of wood sold, the purchase price, and the dealer's name and address. Purchasers of firewood not receiving a written receipt may have limited legal recourse if they believe they received less than what was purchased. Firewood must be sold in measures of cords (one cord is equal to 128 cubic feet), or fractions of a cord, unless the quantity is 1/8 cord or smaller - in which case it can be sold by the cubic foot.

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Shasta County Agricultural Commodities

John Ingram – Shasta County Deputy Agricultural Commissioner

Shasta County Department of Agriculture staff typically walk garlic fields during the month of August, inspecting for signs of pests and disease. The garlic produced in Shasta County is primarily seed garlic, which has the potential to be shipped out of county and sold for commercial or residential planting.



Late August through early September marks the start of the mint harvest in our high valley regions. Mint is cut and placed into truck mounted steel tanks, where it is distilled with high-pressure steam to extract the mint oil. This oil is used in a variety of commercial and consumer products, including toothpaste and chewing gum.

August/September also marks the beginning of the wild rice harvest of the Burney/Fall River area. Shasta County saw 5,200 acres of wild rice harvested in 2019. While the traditional white rice is grown extensively in the Sacramento Valley, wild rice is particularly well suited for the growing conditions in our higher elevation valleys, which tend to see cooler summertime temperatures while still receiving abundant sunshine.



During the month of September, Department of Agriculture staff begin field walks for strawberry nursery plants produced in our higher elevations. Staff walk strawberry fields looking for signs of disease or pests. When symptomatic plants are found, samples are taken and sent to the CDFA laboratory in Sacramento for analysis. Field walks are completed to document potential pests found in the field while the plants are growing. Since strawberry plants grown in Shasta County have the potential

to be shipped anywhere in the world, strict inspection requirements must be followed before importing countries will allow plants to enter.

With the cool nights of September, the hay season in the Fall River Valley begins to wrap up. The cooler nights come with more moisture in the air, which can cause the hay to take considerably longer to cure. Major types of hay produced in the county include Timothy, Pasture, Orchard Grass, and Alfalfa. Growers are working hard to get their third and fourth cuttings in the barn before the rains start. Anyone who's driven Highway 299 East recently knows there's no shortage of hay trucks on the road working diligently to bring hay produced in our higher altitudes down to livestock producers and small homesteaders throughout the state.

Late September through early October starts the walnut harvest in the fertile soils found along the Sacramento River in the southern part of our county. While walnut production acreage is smaller in comparison to other counties in the Sacramento Valley, it still represents a very valuable commodity in Shasta County.

Unsolicited Seed Shipments from China

Shasta County Department of Agriculture

Recently, the California Department of Food and Agriculture (CDFA) has become aware of reports regarding “mysterious and unsolicited seeds from China”. These seed packages, often labeled as jewelry, are being shipped to homeowners throughout the US, including to residents in Shasta County. CDFA is communicating with the United States Department of Agriculture (USDA) to determine any necessary actions for shipments received in California.

In the meantime, the Shasta County Department of Agriculture is instructing residents not to open, plant, or dispose of any unsolicited seed packets. Residents who receive unsolicited seed shipments should contact the Shasta County Department of Agriculture for further instruction. “Invasive species can devastate the environment, displace or destroy native plants and insects, severely damage crops, and poison livestock. Taking steps to prevent their introduction is the most effective method of reducing both the risk of invasive species infestations and the cost to control and mitigate those infestations,” stated Rick Gurrola, Shasta County Agricultural Commissioner. “We are anxiously awaiting the results of these seeds shipped to unsuspecting Shasta County residents, as well as to other states in the nation. This may truly be an innocent “brushing scam” and not intended to deliberately introduce and spread plant disease or noxious weeds. This event should be a reminder to everyone how easy it could be to truly cause bioterrorism activities. Please be vigilant of any future suspicious activity of any type.”



Unsolicited seed packets can be dropped off to the Shasta County Department of Agriculture. If you did plant seeds, please contact the Department of Agriculture for additional direction.

The Shasta County Department of Agriculture may be contacted at 3179 Bechelli Ln, Ste. 210, (530) 224-4949

For more information from USDA regarding seed imports from China, visit:

https://www.aphis.usda.gov/aphis/newsroom/stakeholder-info/sa_by_date/sa-2020/sa-07/seeds-china

Japanese Beetle – Be on the Lookout!

Courtesy CDFA PHPPS Pest Profiles

Be on the lookout for Japanese Beetle. Delimitation trapping is ongoing in Sacramento County in response to the detection of 65 beetles in Rancho Cordova and 28 beetles in Sacramento this year.

The Japanese beetle is originally from Japan, and was first found in the U.S. in 1916 in New Jersey. It is not a serious pest in Japan where there are relatively few large grassy areas favorable for its reproduction, and the action of predators, parasites, and pathogens keep the beetle numbers low. In the U.S., however, a favorable climate, large areas of permanent turf for reproduction, and ineffectual natural enemies favor increased population densities. It is considered a serious pest of turf, and adults damage a wide variety of both ornamental and agricultural plants.



The adult beetle is a broadly oval insect about 13 millimeters long (0.5 inch) and about six millimeters wide (0.25 inch). The body is a bright metallic green, the legs are a darker green, and the wing covers are a coppery brown and do not quite extend to the end of the abdomen. There are two small tufts of white hairs just behind the wing covers and five patches along each side. The small white oval eggs are laid in the soil. The larva is C-shaped with three pairs of legs, white, and grows to 25 millimeters in length (one inch). Pupae are light reddish-brown and 13 millimeters long (0.5 inch).

A wide range of plants are attacked in the U. S. by the adult beetles, which consume flowers and skeletonize leaves by eating around the larger veins. Hosts include small fruits, tree fruits, truck and garden crops, ornamental shrubs, vines, and trees. Feeding studies show a host range in excess of 300 plants in 79 plant families. Among the preferred plants are grape, apple, cherry, peach, plum, rose, and corn. Corn is injured by eating the silk which interferes with formation of kernels. Soft fruits such as grapes, berries, and stone fruits may be completely consumed. Medium to high densities of larvae will cause patches of dead grass.

Females lay eggs in small clusters of one to four eggs within cells two to four inches below the soil surface. Each female may lay 40 to 60 eggs in her lifetime. Eggs hatch in 10 to 14 days. Larvae feed on many types of plant roots, but are fond of grasses. They move deeper into the soil at the onset of winter, and return to the root zone in the spring to feed. Larvae develop through three instars. Pupation takes place in earthen cells later in the spring, and adults emerge after eight to 20 days. There is usually one generation per year, although larvae can take up to two years to develop in unfavorable conditions such as wet or damp soils. The adults emerge from May to September and feed on foliage, flowers and fruit. The exact timing of emergence depends upon geographical location and weather.

Second Invasive Mosquito Species Identified in Shasta County

Courtesy Shasta County Mosquito and Vector Control District



August 26th, 2020

During the Shasta Mosquito and Vector Control District's (SMVCD) response for the initial detection of the invasive mosquito *Aedes aegypti* (Yellow Fever Mosquito), staff detected and identified another invasive mosquito within its boundaries; *Aedes albopictus* (Asian Tiger Mosquito). A collection of larvae from a standing water source in the same general area as the original invasive *Aedes* discovery were positively identified as *Aedes albopictus*. The *Aedes albopictus*, commonly known as the Asian Tiger Mosquito, was found near a central Shasta County neighborhood west of Highway 273/Market St and north of Lake Blvd. The California Department

of Public Health confirmed the invasive species detection.

"The concern with this find is the continuing expansion of the initial detection perimeter. Our response to *Aedes albopictus* is not different than our response to *Aedes aegypti*; however, the more we look, unfortunately the more we find," said Peter Bonkrude, District Manager. "We have now found several new areas near the original invasive *Aedes* detection that are also positive for *Aedes aegypti* and the detection of *Aedes albopictus* gives us broader concern. Our goal is still to determine the extent of the infestation for both species and to limit their spread."

SMVCD utilizes a science-based, data-driven approach to mosquito control. This Integrated Vector Management approach will include immature surveillance and control, like door to door inspections, as well as adult surveillance and control, which will include ultra-low volume spraying, barrier treatments and a variety of live mosquito trapping.

The *Aedes aegypti* and *Aedes albopictus* mosquitoes have been detected previously in other areas of California, but never in Shasta County. Until now, the furthest north detection of *Aedes albopictus* in California was Los Angeles County. *Aedes albopictus* and *Aedes aegypti* have the potential to transmit viruses such as chikungunya, dengue, yellow fever, and Zika, which are not known to be transmitted by our native mosquitoes.



Prevent Invasive *Aedes* development in your yard:

1. Inspect your yard for standing water sources and drain water that may have collected under potted plants, in bird baths, discarded tires, and any other items that could collect water;
2. Check your rain gutters and lawn drains to make sure they aren't holding water and debris;
3. Check and clean any new containers that you bring home that may contain water. *Aedes aegypti* eggs can remain viable under dry conditions for months.

As with all mosquito issues, native and non-native, the Shasta Mosquito and Vector Control District staff urges residents to take precautions to avoid mosquito bites by implementing the **4 Ds** of protection:

- **D**rain any standing water that may produce mosquitoes, this includes flowerpots, old tires, and buckets. Some species of mosquitoes can lay their eggs in very small sources of water, like a bottle cap.
- **D**efend yourself and your home by using an effective insect repellent and making sure screens on doors and windows are in good condition.
- **D**usk or Dawn, avoid outside activities.
- **D**ress in long sleeves and pants when mosquitoes are active.

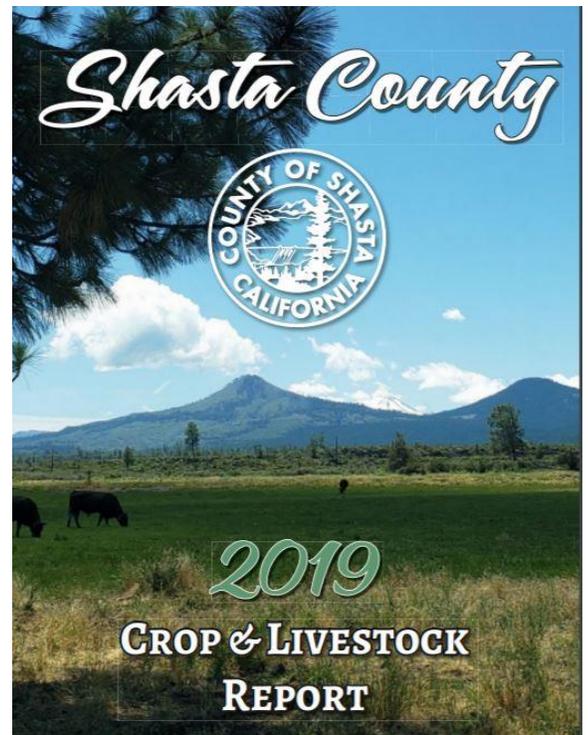
For information about invasive mosquitoes in California - <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Aedes-aegypti-and-Aedes-albopictus-mosquitoes.aspx>

For more information about SMVCD's services, invasive mosquitoes, West Nile virus, or new emerging mosquito-borne diseases, contact the Shasta Mosquito and Vector Control District at (530) 365-3768 or visit www.ShastaMosquito.org.

Shasta County 2019 Crop Report

On August 18th, 2020, the Shasta County 2019 Crop and Livestock Report was presented to the Shasta County Board of Supervisors prior to submission to the Secretary of the California Department of Food and Agriculture. This annual report summarizes the acreage, production, and gross value of agricultural commodities and livestock produced in Shasta County. All figures in the report represent gross returns only and do not reflect the net income of producers. The total gross value of Shasta County's agricultural production in 2019 was \$79,547,000, which represents a 2.3% decrease from the previous reporting year. The Shasta County Department of Agriculture / Weights and Measures wishes to thank the producers, agricultural business representatives, and public agencies that assisted in providing the data necessary to produce this report.

The 2019 Crop and Livestock Report is available to the public by visiting: https://www.co.shasta.ca.us/docs/libraries/agriculture-docs/crop-reports/2019-livestock-report-web.pdf?sfvrsn=3ebcf289_2



MEDITERRANEAN OAK BORER DETECTED IN LAKE, NAPA, AND SONOMA COUNTIES

Courtesy CDFA News Release August 4, 2020

SACRAMENTO, August 4, 2020 – The California Department of Food and Agriculture, in cooperation with the Lake County Agricultural Commissioner, Napa County Agricultural Commissioner, Sonoma County Agricultural Commissioner, the California Department of Forestry and Fire Protection (CAL FIRE), University of California Cooperative Extension, and the USDA - United States Forest Service (USFS), have started an extensive survey and outreach project, and are examining patterns of attack and management options, in response to the detection of Mediterranean Oak Borers (MOB) in Lake, Napa, and Sonoma counties.

The survey is part of California's pest prevention system that protects our agriculture and natural resources from non-native invasive species. To date, the MOB has been detected in Lake, Napa, and Sonoma counties, with two detections in Contra Costa County in 2018. The Contra Costa MOB detections were at a wood collection facility that included firewood. Firewood is a pathway that can artificially spread the pest to other areas; we urge the public to "Buy It Where You Burn It, Don't Move Firewood." The area generally infested by MOB includes Pope Valley on the east, Seigler Mountain on the north, Calistoga on the south, and Knights Valley on the west. The primary infestation is in the Calistoga area.

The MOB is an ambrosia beetle native to Europe, the Middle East, and North Africa, where it primarily attacks oak species. MOB attacks at least 12 species of oaks. In California, it has been found infesting two species of white oak; most commonly valley oak and, to a lesser extent, blue oak. A single, very limited attack was found in a severely distressed California black oak.



MOB creates tunnels (or galleries) in the trunks and branches of host trees while continuing to multiply. It initially attacks the crown of the tree, where it will kill individual limbs. Infestation can continue over several growing seasons, eventually invading the main trunk and killing the entire tree. Infested trees become hazards when widespread tunnels undermine the strength of limbs, making limbs susceptible to falling. Additionally, MOB beetles

grow fungi inside their tunnels and use it for food for larvae and adults. Some of the fungi may be pathogenic and cause tree decline, structural failure, and in some cases tree death.

Additional information, including the University of California MOB Pest Alert can be found here <https://www.ucanr.edu/sites/mobpc/> and you can report-a-pest here cdfa.ca.gov/plant/reportapest/

Pest Exclusion in Shasta County

Shasta County Department of Agriculture staff continue inspections of nursery shipments at local retailers and incoming freight at parcel-handling terminals. Most recently, inspectors intercepted A-Rated ants contained in a shipment of cut flowers from Hawaii, as well as several types of A-rated scale intercepted on cut flowers from Ecuador.

A-rated pests are those of known economic or environmental detriment which are either not known to be established in California, or are present in a limited distribution which allows for the possibility of eradication or successful containment. A-rated pests are prohibited from entering the state because, by virtue of their rating, they have been placed on the Plant Health and Pest Prevention Services Director's list of organisms "detrimental to agriculture" in accordance with the California Food and Agriculture Code sections 5261 and 6461. Invasive species can devastate the environment, displace or destroy native plants and insects, severely damage crops, and poison livestock. Once established, invasive pests can be difficult to impossible to eradicate, and their potential impact on agriculture can have a direct impact on the price we pay for food.



The Shasta County Department of Agriculture also maintains a robust pest trapping program to target pests of high concern. The trapping season in Shasta County runs from May through October and targets a variety of A-rated pests, including the Japanese Beetle (trap pictured at right) and the Gypsy Moth (trap pictured at left). Peak trap deployment in mid-summer sees over 1200 traps in service. Traps are inspected every 14 days, and traps with suspected targeted pests are sent to the CDFA Entomology Laboratory for review.



Resources and Links

County of Shasta Home Page: <https://www.co.shasta.ca.us/index.aspx>

California Department of Food and Agriculture: <https://www.cdafa.ca.gov/>

California Division of Measurement Standards: <https://www.cdafa.ca.gov/dms/>

USDA Animal and Plant Health Inspection Services: <https://www.aphis.usda.gov/aphis/home/>

California Department of Pesticide Regulation: <https://www.cdpr.ca.gov/>