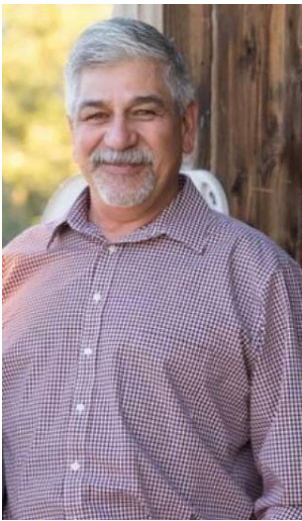




SHASTA COUNTY DEPARTMENT OF AGRICULTURE WEIGHTS AND MEASURES WINTER 2020-21 NEWSLETTER

Commissioner's Updates

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



The Shasta County Department of Agriculture / Weights and Measures (SCDA) office continues to remain open to the public; however, certain precautions are in place to help prevent the spread of COVID-19. Appointments are not needed, but the office currently allows only one customer at a time in the lobby. Visitors should plan to wear a mask while in the building.

Those without masks will be provided with one to wear. Individuals experiencing symptoms consistent with COVID-19 are requested to stay home until their symptoms subside.

During Winter in the North state, firewood usage increases for homeowners who utilize fireplaces and woodstoves for heating or esthetic purposes. This is the time of year we receive consumer complaints regarding possible shortages after making firewood purchases. Please read the article on page 6 to learn how to protect yourself from possible shortages, and what you should do if you believe you were shorted.

This newsletter also features an article about the latest pest of concern in North America that has received national media attention, the Asian giant hornet (aka the "murder hornet"). Even though it is the world's largest hornet (two inches in length, with a 3-inch wingspan), human

fatalities are rare. The primary concern in Shasta County is for the commercial bee industry, as the Asian giant hornet is capable of killing an entire beehive within a few hours.

On September 27th, 2020, the Zogg Fire erupted in Western Shasta County and burned through the communities of Igo, Ono, Platina, and parts of Tehama County. Not only was wildlife habitat destroyed, but important rangeland resources and livestock infrastructure, including grazing lands, fences, and barns were also damaged. The fire devastated over 56,000 acres, destroyed over 200 structures, and caused the deaths of 4 individuals. Efforts to assess the total value of losses to the impacted agricultural community are ongoing. Our hearts go out to those impacted by this disastrous event.

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Murder Hornet Nest Eradicated in Washington State

Washington State Department of Agriculture

The Asian giant hornet (*Vespa mandarinia*), often nicknamed the 'murder hornet', is the world's largest hornet, and is common in parts of Asia and Russia. It was not known to North America until sightings in 2019 in both Washington State and British Columbia indicated its presence. While the hornet can pose a danger to people, human fatalities are generally rare. The primary concern with the Asian giant hornet is the devastation it can wreak on honeybee populations and the commercial bee industry. A few hornets can destroy a hive in a matter of hours. The hornets will invade a hive, then proceed to kill the bees by decapitating them. The hornets then defend the hive as their own, taking the brood to feed their own young.

On Oct. 24, 2020, just two days after finding the nest in a tree in Blaine, WA, officials with the Washington State Department of Agriculture (WSDA) successfully eradicated the Asian giant hornet nest. In all, the entomologists with WSDA's Pest Program removed 98 worker hornets during the extraction; 85 hornets were vacuumed out of the nest and another 13 live hornets were collected with a net while the nest was being observed.

ASIAN GIANT HORNET NEST ERADICATION

On October 22, 2020 an Asian giant hornet nest was located on a property in Blaine, WA after using a radio tracker attached to a captured hornet. It is the first ever such nest found in the U.S.

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

AGR Pub 809-877 (N/11/20). Do you need this publication in an alternate format? Contact WSDA at (360) 902-1976 or TTY Relay (800) 833-6388.



Entomologists with the WSDA preparing a tree for Asian Giant Hornet extraction
Photo by Washington State Department of Agriculture

Donning protective suits, the team stuffed dense foam padding into a crevice above and below the nest entrance and wrapped the tree with cellophane, leaving just a single opening. The team then inserted a vacuum hose into the nest to remove the hornets. After extraction ceased, the team pumped carbon dioxide into the tree to kill or anaesthetize any remaining hornets. The tree was then sealed with spray foam, wrapped again with cellophane, and removed from the location. Traps were placed nearby to catch any potential survivors or remaining hornets that may have been away during the operation and returned to the tree.

WSDA Pest Program staff gathered at the Washington State University Puyallup Research and Extension Center where the cellophane-wrapped log holding the nest was placed in a walk-in cooler. The cool temperature was intended to help keep any remaining live Asian giant hornets less mobile. Numerous adult specimens were collected, including a significant number of both new queens and workers. Once the adults were collected, the team set about removing and analyzing the remainder of the nest, which included larvae and many white-capped cells with developing adults.

They also found the radio tag which had been attached to the Asian giant hornet that led the team to the nest. The radio tag appeared to have been chewed off.

While the Asian giant hornet has not been observed in California, the Shasta County Department of Agriculture (SCDA) would like to remind residents that the Africanized honey bee (AHB) poses an actual threat within California and has become established in all Southern California counties as well as the southern end of the Central Valley.

The AHB is much more defensive than the domesticated European honey bee and will protect its colonies in greater numbers, which typically leads to more stinging incidences when a nest is disturbed. They are also known to follow and attack intruders for up to a quarter mile. Beekeeping is also disrupted by the AHB, which are more difficult to manage and transport. Maintaining colonies of European bees in areas with AHB causes beekeepers to face additional expenses, greater difficulty finding sites for bees, and increased liability concerns. If you encounter any bee or insect that is unfamiliar to your environment, please contact the SCDA for assistance with identification.

For more information on the Asian giant hornet, please visit the WSDA website at <https://agr.wa.gov/departments/insects-pests-and-weeds/insects/hornets>

For more information on the Africanized honey bee, please visit https://ucanr.edu/sites/sandiego/About/Africanized_Honey_Bees/

Nursery License Requirements

Shasta County Department of Agriculture

The Shasta County Department of Agriculture (SCDA) would like to remind residents that a license to sell nursery stock is required for any person who sells plants for planting, propagation, or ornamentation in California. This includes those who sell nursery stock seasonally, sellers at flea markets and swap meets, and those who advertise and sell on online markets (Craigslist, Facebook Marketplace, etc). The role of the nursery program is to prevent the introduction and spread of agricultural pests originating in nursery stock, and to protect consumers and the agricultural industry against economic losses resulting from the sale of inferior, defective, or pest-infested nursery stock. Nurseries are inspected annually to ensure their stock meets the standards of cleanliness set by the California Department of Food and Agriculture (CDFA). Fee exempt nursery licenses are available for individuals and businesses whose sales amount to less than \$1,000 per year of nursery stock, sell plants which are of their own production, and sell plants only in the county in which they were produced. Individuals and businesses not meeting these criteria and intending to sell nursery stock must obtain a fee-based license to sell nursery stock, with the fee dependent on the acreage of the nursery grounds.

For more information on the SCDA nursery program, or to obtain applications for fee-based or fee-exempt nursery licenses, please visit <https://www.co.shasta.ca.us/index/ag-wm/ag-programs/nursery>, or contact the SCDA at (530) 224-4949 with any questions.

Multiple Disaster Declarations in Affect for North State Counties

Shasta County Department of Agriculture



As a result of wildfires and drought conditions impacting many areas in California, multiple North state counties have been designated as natural disaster areas in an effort to make emergency loans available to agricultural producers and affected small businesses. While Shasta County has not yet been declared a primary disaster area, it is identified in many disaster declarations as a contiguous county to a primary disaster area. This designation as a contiguous county allows agricultural producers and certain small businesses affected by these disasters to be eligible for low-interest emergency loans. These loans are administered through the USDA Farm Service Agency (FSA) and the US Small Business Administration (SBA).

Current declarations impacting Shasta County include:

Declaration	Declaring Agency	Declaration Date	Deadline to Apply	Reason
FEMA-4569-DR	Presidential	10/16/2020	06/16/2021	Wildfires
FEMA-4558-DR	Presidential	10/18/2020	06/18/2021	Wildfires
SBA #16729-01	US SBA	10/15/2020	06/15/2021	Drought
SBA #16607-01	US SBA	08/24/2020	04/26/2021	Drought
USDA #S4824	USDA	10/15/2020	06/15/2021	Drought
USDA #S4741	USDA	08/24/2020	04/26/2021	Drought

Those interested in these emergency disaster loans should visit:

www.sba.gov/disaster These loans are administered through the SBA and are available to eligible small, non-farm businesses, agricultural cooperatives, and most private non-profit organizations. Deadlines to apply are dependent on the specific declaration.

<https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/emergency-farm-loans/index> These loans are administered through the FSA and are available to farmers and ranchers conducting family farming operations who meet additional eligibility requirements. Deadlines to apply are dependent on the specific declaration.

FSA has a variety of additional programs to help farmers and ranchers recover from the impacts of disaster. FSA programs that do not require a disaster declaration include: [Emergency Assistance for Livestock, Honeybees and Farm-Raised Fish Program](#); [Emergency Conservation Program](#); [Livestock Forage Disaster Program](#); [Livestock Indemnity Program](#); [Operating and Farm Ownership Loans](#); and the [Tree Assistance Program](#).

Gray Wolf Updates

Excerpts from California Dept of Fish and Wildlife (CDFW)

The Lassen Pack is California’s second contemporary wolf pack, and the only currently known pack in the state. The wolves generally utilize a broad area of western Lassen and northern Plumas counties, and the pack’s home range is approximately 500+ square miles. The pack has produced litters in 2017 (four pups), 2018 (five pups), 2019 (four pups), and 2020 (nine pups minimum). The pack had two litters in 2020 – the original breeding female (LAS01F) had at least 5 pups, and a two-year old female (LAS09F) had at least 4 pups.



Estimated area of Gray Wolf Activity, October 2020
Image: California Department of Fish and Wildlife

In summer 2020, the pack consisted of at least three adults, three yearlings, and nine pups. In late summer 2020, a satellite-collared yearling male wolf (LAS13M) dispersed from the pack. After traveling through northern Lassen and Modoc counties, LAS13M entered Oregon in early October.

CDFW continues to receive and investigate reports of wolf presence from many parts of California. Public reports are an important tool for CDFW. Please report wolves or wolf sign on the CDFW Gray Wolf web page: www.wildlife.ca.gov/Conservation/Mammals/Gray-Wolf/SightingReport.

CDFW and USDA Wildlife Services staff investigated 15 suspected wolf depredation events during 2020; eight of these investigations confirmed wolf depredation. The confirmed depredations are as follows:

Date	Determination	Depredation Loss	County
5/14	Confirmed	1 Calf, dead	Modoc
8/17	Confirmed	1 Cow, dead	Lassen
8/23	Confirmed	1 Calf, dead	Lassen
8/28	Confirmed	1 Calf, dead	Plumas
9/5	Confirmed	1 Calf, dead	Plumas
9/15	Confirmed	1 Calf, dead	Lassen
10/19	Confirmed	1 Cow, dead	Lassen
10/31	Confirmed	1 Cow, 1 Calf, dead	Lassen

Information on the determination criteria used to confirm wolf depredation can be found at:

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=162369&inline>

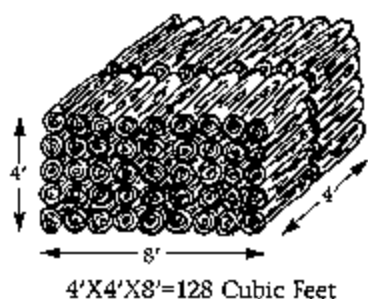
More information about the gray wolf in California, including information on individual depredation incidents, can be found at: <https://wildlife.ca.gov/conservation/mammals/gray-wolf>

Information for Buyers/Sellers of Firewood

California Department of Food and Agriculture – Division of Measurement Standards

In California, bulk firewood may only legally be sold by a measurement called a "cord." Firewood, in units of 1/8th of a cord or larger, must be sold by the cord or fraction of a cord. A cord of wood, by law, must equal 128 cubic feet. The volume of wood must be measured when it is "ranked and well stowed." To determine if you have a cord, stack the wood neatly by placing the wood in a line or row with individual pieces touching and parallel to each other. Make sure that the wood is compact with the fewest gaps possible. If the width, multiplied by the height, multiplied by the length equals 128 cubic feet, the volume meets the definition of one cord of firewood.

Stacking a Cord for Measurement



Some producers of firewood may stack green wood in an offset or crosshatch pattern to help dry the wood by increasing airflow, or to create a more stable structure when stacked. Measurements of the wood lot taken when stacked in this offset pattern are incorrect as the wood is not considered ranked and well stowed. If a properly stacked quantity of wood doesn't equal 128 cubic feet, it is not a cord.

A cord, like other measurements such as a foot, a gallon, or a ton, is defined by law. A seller may not legitimately use terms such as "truckload," "face cord," "rack," or "pile" because these terms have no legally defined meaning and, therefore, you have no way of determining how much firewood you are receiving. If a seller uses such terms, it should alert you to a possible problem. Wood can only be sold by the cord or by fraction of a cord.

Purchasers of firewood should be sure to get a sales invoice or delivery ticket which shows, at minimum, the name and address of the seller, the date purchased or delivered, the quantity purchased, and the price for the quantity purchased. When the wood is delivered, ask the seller to stack it, or stack the wood yourself. Measure the wood before using any. If the cubic measurement indicates less than the correct volume, contact the seller before you burn any wood.

If the seller can't or won't correct the problem, contact the Shasta County Department of Agriculture – Division of Weights and Measures office before you burn any wood. It is also helpful to document the possible shortage by taking pictures of the stacked wood.

Device Testing – Liquefied Petroleum Gas

John Ingram – Shasta County Deputy Agricultural Commissioner / Sealer of Weights and Measures

During the Fall and Spring months, the Shasta County Department of Agriculture / Weights and Measures (SCDA) tests retail Liquefied Petroleum Gas (LPG) dispensers throughout the County. Currently, 64 stationary LPG dispensers and 27 LPG truck meters are registered in the county. These devices are tested annually, and on a complaint basis, to check for accuracy and ensure that certain technical requirements are met. Stationary LPG dispensers are those typically found at fuel stations, certain retail establishments, and LPG suppliers. LPG truck meters are those mounted on trucks which deliver LPG to stationary meters and to residences, typically in rural areas, who use LPG as fuel for heating and cooking.



LPG device testing at local retailer using 25-gallon trailer mounted prover

Weights and Measures staff use a 25-gallon wet bottom prover to conduct tests of stationary LPG meters. To conduct the test, enough LPG is dispensed to indicate 25 gallons on the retail meter. Weights and Measures staff then compare the actual volume dispensed into the prover to what is indicated on the retail meter, with corrections made for temperature and pressure. The propane is returned to the owner by pumping back into the tank. Testing for LPG truck meters follows a nearly identical process, with the main difference being the volume of LPG used for testing. Due to the high flow rate of the truck meters, a much larger 100-gallon prover is required to obtain the minimum test draft.

Tests may be conducted multiple times to check the accuracy of the dispenser. The allowable tolerance for these meters is one percent above or below the indicated metered volume. If the meter is within tolerance, and applicable technical requirements are met, the test is complete and Weights and Measures staff will affix a new seal to the dispenser. Meters that fail testing may be placed out of service or allowed to operate for up to 30 days, depending on the nature of the issue and the impact to the consumer. Common issues that may arise include incorrect volume of product dispensed and lack of price indication.

Prior to purchasing LPG, consumers are encouraged to check for a current county seal to ensure the device has been recently tested. Consumers should also verify that the price per unit is posted and any conditions of sale, such as a minimum purchase, are expressly stated. Consumers who believe they have received an incorrect volume of product, or who would like to file a complaint about another issue under Weights and Measures jurisdiction, should contact the SCDA at (530) 224-4949, or visit <https://www.co.shasta.ca.us/index/ag-wm/wm-programs> to obtain a complaint form.

Noxious Weed Eradication

Shasta County Department of Agriculture – Weed Eradication Program

The Shasta County Department of Agriculture (SCDA) maintains a dedicated noxious weed eradication program which targets plant species identified in California as being exceptionally detrimental to agriculture and wildlands. The purpose of the program is to identify and eliminate these species before they become established. The SCDA encourages property owners to control infestations on their properties, but may assist with identification and treatment depending on the circumstance. Additionally, the SCDA contracts with private and public landowners to perform noxious weed control of targeted species.



Expansive stinkwort infestation in equipment yard prior to treatment

Treatment methods are chosen using best management practices to target nonnative species. This allows native plants to flourish and regain the foothold they once had. Applications of herbicides are used only when other methods, such as physical removal, are unavailable or ineffective. Post-emergent herbicide applications typically begin in April while plants are in the rosette stage and easiest to control, and may extend into October for certain targeted species. Pre-emergent work is done from the fall through the spring, depending on the species targeted and weather conditions. Applications of pre-emergent herbicides can often be a highly efficient control technique and, therefore, are an important tool in combating noxious weed species.

One of the primary noxious weed species targeted by the SCDA is stinkwort (*Dittrichia graveolens*). This species, a member of the Asteraceae family, is native to the Mediterranean and was first reported in California in 1984. Stinkwort is most commonly found in disturbed areas such as roadsides, levees, overgrazed rangeland, and gravel quarries. It prefers areas with full sun and can withstand a variety of climatic and environmental conditions which creates a high potential for dispersal. Management through livestock grazing is not viable, as the plant is not considered palatable to most animals. Although rare, livestock mortality can be caused by the barbed pappus bristles of the seeds puncturing the small intestine wall after ingestion. Allergic dermatitis can occur in humans who come into contact with stinkwort. When manually removing the plant, it is recommended to wear a long sleeve shirt and gloves to avoid direct contact with the plant.

Emergence of stinkwort seedlings normally occurs in late winter through early spring, but plants remain in the rosette stage as late as June. The majority of growth occurs from July through September, with flowering and seed production occurring from October through December. Mature plants may grow upwards of three feet tall with a dense branching pattern. The plant emits a strong aromatic odor and produces a sticky resin, which easily transfers onto surfaces with which it comes into contact. Stinkwort produces many yellow flowers, and a single plant can produce up to 20,000 seeds that may remain viable for three years or more. Seed dispersal commonly occurs through wind and water transport, but the sticky resin and barbed pappus enables seeds to easily attach to animals, humans, or equipment, aiding in the transport to other locations.

Treatment with a non-selective herbicide or broadleaf growth regulator has yielded effective results, but multiple applications are typically necessary during the growing season to ensure success. Due to the natural resins produced by the plant, a spray adjuvant is utilized in conjunction with a post-emergent herbicide in

order to allow better chemical absorption by the plant. In order to work effectively, pre-emergent herbicides are applied to the soil prior to a rain event, then left undisturbed. Rain, or additional watering, is required to incorporate the pre-emergent herbicide into the soil. The SCDA applies pre-emergent treatments to known stinkwort sites from January through March. Post-emergent applications start in mid-July when the plants begin to grow large enough to be identified, and last into October, ceasing when the plants are in widespread bloom and chemical treatment becomes less effective. Due to the extended life of the seed bank, treatment areas are revisited for multiple years to ensure successful control. Manual removal of stinkwort is possible due to a shallow root system and can be effective with small populations. However, care should be taken when manually removing the plant to avoid direct contact with one's skin, due to the potential for allergic reactions to occur. Once the plant has started to flower, seeds will typically be produced regardless of whether plants are pulled or treated with herbicide. When flowering has begun, plants are removed, bagged, and properly disposed of to prevent the dispersal of seeds.



Mature stinkwort plant after manual removal

More information on stinkwort can be obtained from the UCANR at:

<http://calag.ucanr.edu/Archive/?article=ca.v067n02p110>

More information on the SCDA's weed eradication program can be obtained at:

<https://www.co.shasta.ca.us/index/ag-wm/ag-programs/weed-eradication>

2020 Crop Report Questionnaire Now Available

Shasta County Department of Agriculture

Each year, every county agricultural commissioner in California is required to prepare a report of the condition, acreage, production, and value of the agricultural products in that county. In order to obtain this information, the Shasta County Department of Agriculture (SCDA) requests assistance from the agricultural community to provide the data necessary to complete the report. Any information given on this questionnaire is kept completely confidential as mandated by Government Code § 6254(e) and is strictly used to gather raw data on agricultural production within the county. All figures in the report reflect gross returns only and do not reflect net income of producers. The crop report is used for several purposes including, but not limited to, justifying water and irrigation needs, transportation and marketing facilities, disaster declarations, and to study labor requirements of an area. Economic studies of Shasta County typically include data from the Annual Crop & Livestock Report. Participation in the questionnaire is greatly appreciated, and the overall accuracy of the report depends on participation from the community. With a high turnout of participants submitting data, the report will be a true reflection of the robust agricultural industry in Shasta County.

Questionnaires are mailed to individuals and businesses already known to the SCDA, and a PDF version of the questionnaire is available on the SCDA website. Anyone who sells an agricultural commodity is encouraged to submit a questionnaire. This includes the sale of livestock by small producers (even if annual sales only represent a few head of animals) and nursery stock. Individual data collected from the questionnaire is not retained by the SCDA or distributed to any other entities. Data is solely used to document the aggregate statistics for the county. Responses to the questionnaire are strictly confidential, and all returned questionnaires are destroyed by the SCDA after relevant data is collected. For more information, please contact the SCDA at (530) 224-4949, or visit the SCDA website at <https://agwm.co.shasta.ca.us> to obtain a questionnaire.

New Carbaryl Restriction in Effect for Consumers

California Department of Pesticide Regulation and Shasta County Department of Agriculture



A recently adopted California regulation restricting general consumer use of pesticides containing the ingredient carbaryl took effect August 1, 2020. This regulation is intended to reduce residential exposures. With the exception of baits labeled for agricultural use, it designates all carbaryl products as California "restricted materials," meaning training, licensing, and permitting are required to buy or use them.

Introduced in the early 1960s under the brand name Sevin, it was commonly used around homes for controlling insects in lawns and gardens. While pest control professionals are trained on how to safely use pesticides, most residential users are not. California Department of Pesticide Regulation's (DPR) pesticide-illness data over the past decade shows the majority of carbaryl illnesses – some of which involved children under the age of 5 – were the result of misuse around the home. "Protecting human health is DPR's chief mission," explained DPR Director Val Dolcini. "Limiting access to only trained and licensed users will help reduce the risk of dangerous exposures to adults and children during home use."

Carbaryl products were removed from California retail store shelves on August 1, 2020 and are no longer available to consumers. It is now illegal for any person or business, except those holding a valid restricted materials permit issued by the County Agricultural Commissioner (CAC), to buy, possess or use carbaryl products. This includes landscape maintenance businesses, unless they hold a valid restricted materials permit issued by the CAC. Restricted materials permits will need to be obtained from the CAC for each county in which the restricted materials will be applied.

Consumers should contact their state or local hazardous waste disposal program or local solid waste collection service for information on proper disposal of unused products and containers. In addition to human hazards, carbaryl is potentially harmful to the environment. It is illegal to dispose of carbaryl products in sinks, toilets, storm drains or any body of water.

Individuals wanting more information on the new carbaryl restriction are encouraged to visit the DPR's information page concerning these restrictions at: https://www.cdpr.ca.gov/docs/whs/active_ingredient/carbaryl.htm

The SCDA would also like to remind commercial agricultural producers who apply pesticides that their restricted materials permits and operator ID numbers expire on December 31st of each calendar year. Those who have not renewed should call ahead for a renewal appointment as soon as possible. Private applicators whose last name begins with the letters R-Z will need to renew their private applicator certificates by either providing proof of continuing education hours or passing the required test available at the SCDA. All pest control businesses doing work for hire, including soliciting their services, will need to register with the County Agricultural Commissioner in all counties they expect to work in. This must be done prior to working in the county, and registration expires December 31st of each calendar year. Remote testing is now available to persons looking to obtain a qualified applicator certificate or qualified applicator license, or to add categories to an existing certificate/license. Individuals looking to obtain a new QAC or QAL, or to add categories to an existing QAC/QAL should contact the Department of Pesticide Regulation for more information.