

CONTINUING  
EDUCATION  
COURSES:

CLASS  
SCHEDULE

- Annual UCCE/  
Mendocino College  
IPM Seminar: No-  
vember 14, 2014
- Pear update with  
Rachel Elkins: De-  
cember 4, 2014,  
1-2 pm
- December 4, 2014  
2-4 pm
- December 9, 2014  
10 am-12 noon
- December 16, 2014  
6-8 pm

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# Agricultural Newsletter

MENDOCINO COUNTY

FALL 2014

## Agricultural Commissioner Update

Chuck Morse

It's a pleasure to present the 2014 Mendocino County Department of Agriculture Newsletter. It has been an interesting year, to say the least. The on-going drought has affected virtually all of our agricultural sectors and the data received from our drought survey in August confirmed substantial losses. After analyzing and submitting the data, Mendocino was granted a USDA Secretarial Disaster designation for drought on September 17<sup>th</sup>. Our access to federal assistance to cover losses related to the drought was scheduled to expire on September 23<sup>rd</sup>; this designation extends that deadline to May 15, 2015. Hopefully by that time, the "on-going drought" will not be a topic of discussion.

This issue will provide updates to programs you may already be familiar with, as well as introductions to programs you might not be aware of. Aaron Hult provides an update to our Pest Detection Insect Trapping program on page 2, and I summarize our activities concerning Light Brown Apple Moth on page 3. We are very grateful for the cooperation of both residents and farmers through-

out the county that facilitate our trappers placing and servicing the various traps we maintain.

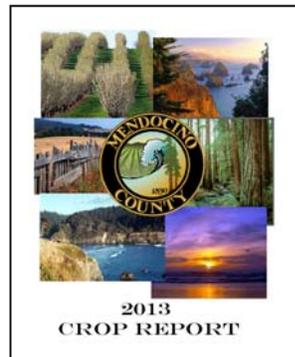
One of the very important functions carried out by our department is Weights and Measures testing. Our Weights and Measures division conducts the annual fruit frost thermometer testing for growers in mid-February, and continuously tests a variety of commercial weighing and measuring devices as they come due. The article by Andy Walker on page 12 will detail some of the division's work, with a focus on Liquid Petroleum Gas fuel meters.

On page 14, you will find brief biographies for our two recently hired biologists that

filled the vacancies left by Tashina Sanders in January 2014, and Dario Gotchet in October 2013. We're pleased to have Matt Daugherty and Andy Walker on board. Both are Mendocino natives and recent college graduates. They were immediately thrown into the Light Brown Apple Moth response and were invaluable in addressing the various tasks required for that program. If you happen to meet Matt or Andy, please join me in welcoming them.

I would like to thank all the producers that respond to the Crop Report questionnaires we mail out annually to gather the needed data for the crop report. The 2013 Crop Report was finished on October 16<sup>th</sup> and may be viewed on the Department's web page: <http://www.co.mendocino.ca.us/agriculture> under the "Crop Statistics" tab on the left-hand side of the page.

I hope you find this newsletter informative and I look forward to seeing many of you at our 2014 Grower Training courses in December.



The 2013 Crop Report is now available online

# Pest Detection Trapping

Aaron Hult

The general Pest Detection trapping program has been in place and overseen by the California Department of Food and Agriculture (CDFA) since the early 1980's. Insects targeted for detection by Mendocino County include exotic fruit flies (Mediterranean, melon, and oriental), Japanese beetle, light brown apple moth, and gypsy moth.

The primary responsibilities of any Pest Detection program are the early detection and prompt eradication of serious agricultural pests from California. This is accomplished through the operation of a statewide detection trapping program and special detection surveys. All of

the General Pest Detection duties are performed by a single individual, Agricultural Field Inspector (aka Trapper) Ray Hall. With 5 years' experience as a detection trapper, Ray deploys and services each trap based on the unique operational timeline and protocol for each individual insect.

*"The primary responsibilities of any Pest Detection program are the early detection and prompt eradication of serious agricultural pests from California"*

*-A. Hult*

## Glassy Winged Sharp Shooter

Aaron Hult

The Glassy-Winged Sharp Shooter (GWSS) trapping program is a jointly funded program, receiving funds from the grape growing industry and the federal government, and is run at the county level. GWSS can carry Pierce's Disease (PD), which if transmitted to grape vines is fatal.

In the late 1990's thousands of grape vines started dying mysteriously in Temecula California. After PD was discovered as the culprit and GWSS was found to be the vector/transmitter, California Assembly Bill 1394 was authored and passed in 2000. The Bill set up the Pierce's Disease/Glassy-Winged Sharpshooter Board (PD/

GWSS Board) and established the assessment rate to growers to help fund the program. Each year the PD/GWSS Board makes recommendations to CDFA for the assessment rate, and since its inception in 2001, the assessment rate has continued to go down from \$3 to \$.75 per \$1000 of grape sales. In total, the amount that the PD/GWSS Board has collected from the grape industry since its inception is just over \$45 million. These funds are used statewide to help offset GWSS trapping costs at the county level.

Mendocino County currently has one GWSS trapper, Agricultural Field Inspector Sheryl Greene, who has been with the program for

8 years. In residential areas, yellow panel sticky traps are placed in host plants at a maximum rate of 5 traps per square mile. The most common feeding host plants for GWSS are crepe myrtle, citrus, grape, privet, photinia, mulberry, xylosma, oleander, prunus, pear, peppertree, camellia, olive, pittosporum, and euonymus.

Traps are also placed at all nurseries that receive plants from counties that are infested with GWSS. To date, GWSS has not been detected in Mendocino County, which is a testament to how well implemented the program is state wide. For more information, go to [http://www.cdfa.ca.gov/pdcp/PD\\_GWSS\\_Board.html](http://www.cdfa.ca.gov/pdcp/PD_GWSS_Board.html).



GWSS Trap

# European Grapevine Moth



EGVM trap

Aaron Hult

The European Grapevine Moth (EGVM) trapping program wrapped up another successful year in Mendocino County with no finds. That makes no finds since the fall of 2010. Other counties had similar successes as well. State wide there was only one EGVM find and the existing quarantine boundary was

greatly reduced. Eradication is still the ultimate goal for this pest, and with the continued achievements and due diligence from the entire grape industry, that goal is entirely possible in coming years. More information can be found at <http://www.cdfa.ca.gov/plant/egvm/index.html>.

# Light Brown Apple Moth

Chuck Morse

The Light Brown Apple Moth (LBAM) made an appearance in Mendocino County in 2014, after a single male was trapped late last year. LBAM is one of the insects we regularly trap for in our Pest Detection trapping program. The single moth catch in 2013 mandated high density (delimitation) trapping starting April 1, 2014. We trapped a second male moth in April and then did not catch any more until June. The catch in June triggered the establishment of a quarantine in the greater Ukiah Valley and regulatory requirements for producers to move any host material for LBAM outside the quarantine area. News releases, updates, and informational meetings were used to keep the affected producers informed and to help with the issuance of compliance agreements to facilitate movement of host material. We trapped two more male moths in 2014; one was in the Fort Bragg area around mid-June and the other was in the Hopland area at the end of June. Each of these finds triggered high-density delimitation trapping in the four (4) square

miles around the find sites. As of the end of October, no additional male moths had been caught and the delimitations in Fort Bragg and Hopland have been removed. The Ukiah delimitation (inside the quarantine area) will be removed after November 18<sup>th</sup> if no more males are caught.

As we were responding to the quarantine and the additional male moth finds, LBAM was discovered on a different front. From June 25<sup>th</sup> to July 3<sup>rd</sup>, we had a total of seven (7) separate larval detections at five (5) different locations all relating to nursery stock that had been brought into the county. Significant investigative time was spent conducting inspections of the infested nursery stock that had come into the county. We were able to get treatments applied, detection traps set and pheromone dispensers deployed at the locations that were positive for LBAM larvae. Additional survey was conducted at all larval sites with negative results.

At the height of our detection efforts this year for LBAM, we had deployed and were servicing 496 traps. Additionally, we performed commodity inspections on each production location within 30 days of harvest to establish LBAM-free status on all fruit pro-

duced inside the quarantine area that was going to receivers outside the area.

While we have not trapped any additional LBAM this summer or fall, the possibility of another introduction from outside the county remains very real. Of significant concern and one of the many good reasons why we don't want LBAM to gain a foothold here in Mendocino is the fact that the numerous ornamental and native plant hosts for LBAM have allowed it to become permanently established in other areas of the state. For more information on the Light Brown Apple Moth, please visit the California Department of Food and Agriculture's pest profile site at: [http://www.cdfa.ca.gov/plant/pdep/target\\_pest\\_disease\\_profiles/LBAM\\_PestProfile.html](http://www.cdfa.ca.gov/plant/pdep/target_pest_disease_profiles/LBAM_PestProfile.html).



General Pest Detection Insect Trap, also used for LBAM

## Pesticide Use Monitoring Program

Diane Curry

Here we are at the close of another year. Pesticide activities are winding down with only a few herbicide applications left to make by year end. With that in mind it's a good idea to ask yourself the following questions about your pesticide program: Is my permit current and up to date? Does it expire at

the end of 2014? Do I need hours to keep my license current? Did I submit all my 2014 pesticide use reports (due monthly)? Have I signed up for a 2014 grower meeting? Can I benefit from compliance assistance?

Many thanks to those of you who have braved the world of online pesticide use reporting. CalAgPer-

mits continues to make user friendly upgrades and hopefully more of you will take advantage of online use reporting. Currently, Mendocino County ranks 8<sup>th</sup> in the state for the percentage of use being reported online. To facilitate online use reporting, we are happy to work with individuals one-on-one. Contact the office if you would like assistance.

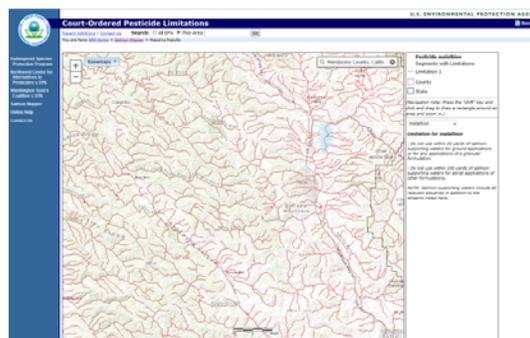
*“Currently, Mendocino County ranks 8th in the state for the percentage of use being reported online.”*  
-D. Curry

## Buffer Zones to Protect endangered or Threatened Steelhead and Pacific Salmon

Diane Curry

Litigation brought against EPA by Northwest Center for Alternatives to Pesticides and Others has resulted in the reinstatement of streamside no-spray buffer zones to protect endangered or threatened pacific salmon and steelhead in California, Oregon and Washington State. The no-spray buffer zones (20-yards for ground pesticide applications and 100-yards for aerial pesticide applications) are effective August 15, 2014 and will apply to: carbaryl, chlorpyrifos, diazinon, malathion and methomyl. These will remain in effect

until EPA implements any necessary protection for salmonids after consulting with the National Marine Fisheries Services. More information can be found at the following link: [\[endanger/litstatus/ncap-v-epa.html\]\(http://www.epa.gov/oppfead1/endanger/litstatus/ncap-v-epa.html\). To view where the no-spray buffer zones apply, access the \[Salmon Mapper\]\(http://www2.epa.gov/endangered-species/salmon-mapper\) at the following link: <http://www2.epa.gov/endangered-species/salmon-mapper>.](http://www.epa.gov/oppfead1/</a></p>
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Map of the greater Ukiah area with Malathion restricted waters in red; obtained from the EPA salmon-mapper link above.

## Second Generation Anticoagulant Rodenticides (SGAR's)

Diane Curry

As of July 1, 2014, new regulations went into effect classifying SGAR's as California restricted materials and are no longer available to California consumers. Products containing the active ingredients brodifacoum, bromadi-

olone, difenacoum, and difethi- alone can only be used by certified applicators.

These regulations came into effect after the CDFA Division of Pesticide Regulation (DPR) found that baits containing SGARs presented a hazard to nontarget wildlife. This change will significantly reduce the

potential for adverse impacts to the environment. Preliminary surveys of local retailers found that SGAR products have been removed from the shelves. More information can be found at the following link: <http://www.cdpr.ca.gov/docs/legbills/rulepkgs.htm>.

## Lorsban to Become a CA Restricted Material

Diane Curry

DPR proposes to amend section 6400(e) of Title 3, California Code of Regulations. The proposed action would designate the active ingredient chlorpyrifos as a state-restricted material when labeled for the production of an agricultural commodity. DPR is mandated to continuously evaluate currently registered pesticides. Over the past few years DPR has conducted testing which included ambient air concentrations, exposure incidents related to agricultural use and surface water sampling. This change in registration status of chlorpyrifos was based on DPR's and U.S. EPA's findings that chlorpyrifos has the propensity to move off-site in both air and surface water and has caused illnesses and surface water contamination due to off-site movement.

There are approximately 30 products currently registered in the state for use in agriculture; the most notable is Lorsban. According to use reports submitted by Mendocino growers, the use of Lorsban has declined in the last 7 years and there was no reported agricultural use in Mendocino county in 2012. According to Rachel Elkins, Pomologist for the University of California, use of Lorsban was mainly for control of leafrollers, which haven't been a problem for a long time, except very sporadically. Lorsban has largely been replaced by Success and Intrepid.

DPR's proposed regulation would mean that all chlorpyrifos products registered for production agricultural use must adhere to the standard requirements for all California restricted materials. This means:

- Applications must be made or supervised by a certified applicator.
- Purchase, possession, or use

requires the property operator to obtain a permit from the county agricultural commissioner.

- Businesses require a recommendation from a DPR licensed pest control adviser.

DPR began a 45-day comment period to allow public input on the proposed regulation beginning September 26 2014. For details see: [www.cdpr.ca.gov/docs/legbills/rulepkgs.htm](http://www.cdpr.ca.gov/docs/legbills/rulepkgs.htm)



Lorsban is used to control leaf rollers like this Fruittree leafroller larvae.

Photo by Jack Kelly Clark, University of California/Agriculture and Natural Resources.

# Pesticide Use Compliance and Inspections

Diane Curry

Now is a good time to review your pesticide safety program and correct any insufficiencies. With that in mind the following assistance is available through our office.

**Compliance Assistance Inspections** - These voluntary, non-enforcement visits offer you the opportunity to have a one-on-one assessment of your pesticide safety program with the understanding that non-compliances will not be documented, but must be corrected. Several operations took advantage of the compliance assistance inspections in 2014. Call the office to schedule an inspection with one of our PUE biologists.

**Grower Synopsis Sheets** - These sheets were developed to help you prepare for inspections and help keep you in compliance between inspections. The applicable laws and code sections are made simple and easy to understand. The following sheets are posted on our website under Pesticide Use Enforcement: Field Worker Safety, Pest Control Headquarter, and Pesticide Use Monitoring.

Due in part to the staffing changes and the detection of light brown apple moth in the county we did not reach the level of inspections in 2014 that we did in 2013. We now have two new biologists and are currently getting them trained to do pesticide use monitoring. The following chart shows the inspections conducted and non-compliances documented from 7/1/13 thru 9/1/2014:

Type	Number	Number of Non-compliances	Section
Fieldworker Inspections	1	1	6761.1 Application Specific display.
Application Inspections	9	1	6726. Emergency Medical Care Posting
Headquarter Inspections-Grower	3	7	6724(a) Written training program 6724(b-e)Handler Training 6739(a)(p)Written Respiratory Program. 6739(d)(s)Medical Evaluation 6739(e)(p) Fit Test Records
Dealer	3	1	6564 Appropriate Products Sold
Structural Fumigation	1	0	

We also received 9 pesticide illness investigations for Fiscal Year 13/14. Two of the nine were directly related to pesticide use in an agricultural setting. Out of those two, one resulted in multiple violations with fines imposed.

## 2014 Continuing Education Classes

This year’s continuing education classes will be held in the Mendocino County Department of Agriculture’s conference room at 890 N. Bush St. in Ukiah, on the corner of Low Gap Road and Bush Street. All growers who have private applicator certificates (tan cards) are welcome to attend one of the upcoming classes on pesticide laws and regulations given by the Mendocino County Agricultural Commissioner’s Office. Local pest control operators and all other persons involved with pesticide use are also invited. The classes are free. Attendees will receive 2 hours of continuing education credit in pesticide laws and regulations. *Those wishing to attend MUST sign up in advance for one of the following classes, by calling the Department of Agriculture at 463-4208.*

### Class Schedule

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<b>Pear Update***</b>	<b>Thursday</b>	<b>December 04, 2014</b>	<b>1:00PM – 2:00PM</b>
<b>Afternoon</b>	<b>Thursday</b>	<b>December 04, 2014</b>	<b>2:00PM- 4:00PM</b>
<b>Morning</b>	<b>Tuesday</b>	<b>December 9, 2014</b>	<b>10:00AM – 12:00PM</b>
<b>Evening</b>	<b>Tuesday</b>	<b>December 16, 2014</b>	<b>6:00PM – 8:00PM</b>

\*\*\*This year the Pear Update will be a separate meeting held on Thursday December 4, 2014 from 1:00PM to 2:00PM. Rachel Elkins with the UC Farm Advisors will be discussing pear related issues. This meeting will be limited to pear growers and those involved in pear production.

**Private Applicator Cards beginning with letters R-Z will expire December 31, 2014. Some permits and private applicator cards not falling into the R-Z letter range may also expire this year, so please check the expiration dates on both your permit and private applicator card.**

**If you hold a private applicator card that expires in 2014 and you do not have the 6 hours of continuing education required for renewal by December 31st, you will have to take the written exam. All other private applicator cardholders should be building up their hours each year to a total of six (6) hours of continuing education before the private applicator card expires.**

**Those that have received continuing education from other sources must send proof to the Mendocino County Department of Agriculture. A verification of attendance for each event is required in order to receive credit.**

**For more information, please call Diane Curry at 463-4208.**

# Pest Exclusion Program Update

Matt Daugherty

The Mendocino County Department of Agriculture conducts pest exclusion activities daily. The goal of this program is to keep exotic pests out of the county and to prevent the spread of pests that are already established in the state. The major functions of the pest exclusion program are to oversee the enforcement of quarantines, inspection of packages at parcel carrier terminals and the issuance of phytosanitary certificates for domestic and foreign exports.

Pest exclusion activities played a critical role in Mendocino's Light Brown Apple Moth (LBAM) incident this year. This activity was triggered by multiple LBAM finds around the county (see Table 1). In October of 2013, a single male was found in one of our detection traps near Perkins St. The two adult moths found in spring of this year prompted the establishment of a quarantine zone in the Ukiah valley. There were multiple pest exclusion protocols that were implemented from this quarantine. One of these was the issuance of compliance agreements to retail nurseries, growers, haulers and farmers market producers that fell within the quarantine boundary. Compliance agreements were also issued to shipping nurseries outside the quarantine boundary. There were numerous cropland traps deployed in vineyards around the county along with inspections within the quarantine boundary.

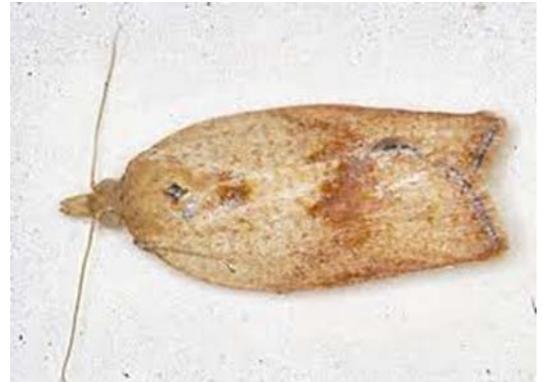
In addition to the adult LBAM finds, numerous larvae were detected. All of the larval finds were found from inspections at nurseries and properties with plant material that had originated in another county and was suspected to have LBAM. The result of these larval finds was increased detection efforts, focused treatments and pheromone deployment. Since July 3<sup>rd</sup> there have been no positive finds of LBAM adults or larvae in Mendocino County.

*"The goal of this program is to keep exotic pests out of the county and to prevent the spread of pests that are already established..."*

*-M. Daugherty*



LBAM Male



LBAM Female

DATE	LOCATION	CITY	LIFE STAGE
4-17-14*	880 S. Oak St.	Ukiah	Adult
6-11-14*	Hastings Rd.	Ukiah	Adult
6-18-14	400 Winifred St.	Fort Bragg	Adult
6-25-14	38660 S. Hwy 1	Gualala	Larva
6-25-14	38660 S. Hwy 1	Gualala	Larva
6-26-14	1094 Locust St.	Willits	Larva
6-26-14	1094 Locust St.	Willits	Larva
6-27-14	16100 N. Hwy 101	Willits	Larva
6-30-14	19815 Hwy 128	Boonville	Larva
6-30-14	282 Ralph Bettcher Rd.	Hopland	Adult
7-3-14	9001 Hwy 128	Philo	Larva

**Table 1: Positive Light Brown Apple Moth finds in 2014.**

## Virginia Creeper Leafhopper (*Erythroneura ziczac* Walsh)

Matt Daugherty

The Virginia Creeper Leafhopper (VCLH) has not expanded its range much from last year and is still concentrated in the region around Hopland. Virginia Creeper Leafhopper has shown some population increases compared to previous years, especially in organic vineyards. Generally speaking, organic vineyards main-

ly rely on biological control for dealing with pests. On the north coast, the bio-control agent (*Anagrus* sp.) that parasitizes VCLH is marginally effective. A population of *Anagrus* wasps has been found in Davis that could be more efficient at parasitizing VCLH. Berkeley researcher *Houston Wilson* is conducting studies to determine if this population of *Anagrus* could be released in Mendocino to enhance biological control of VCLH. VCLH is concerning to growers because of its ability to reproduce quickly in a short time period and if left uncontrolled, can defoliate an en-

tire vineyard.

**Identification:**

**Nymph:** Mature nymphs have four characteristic reddish brown spots on the dorsal side of the thorax (Fig. 1)

**Adult:** Adults are characterized by reddish-brown zig-zag patterns on the forewings (Fig. 2)



**Figure 1:** VCLH nymphs showing the characteristic reddish brown spots



**Figure 2:** Reddish-Brown markings on the forewings of a VCLH adult.

# Weed Eradication

Matt Daugherty

## **Purple loosestrife** (*Lythrum salicaria* L.)

Purple Loosestrife is a plant that belongs to the loosestrife family (Lythraceae) and is native to Eurasia. It has escaped cultivation and has become an invasive weed of wetlands and riparian habitats throughout North America. Despite its invasive nature, it is still occasionally sold through the nursery trade. The California Department of Food and Agriculture (CDFA) currently lists Purple loosestrife as a B rated pest (see table 2



Purple Loosestrife

for explanations on CDFA ratings). This attractive looking plant spreads rapidly and can compete vigorously with native plants for water and nutrients.

**Mendocino County distribution:** Purple loosestrife is currently contained to a few locations in Mendocino County.

## **Distaff Thistle** (*Carthamus lanatus* L.)

Distaff Thistle is a member of the sunflower family (Asteraceae) and is native to the Mediterranean region. Distaff Thistle is rated B by CDFA. Distaff Thistle is highly competitive with cereal crops and desirable rangeland species. The spiny foliage of the plant can injure the eyes and mouth and livestock as well.

**Mendocino County Distribution:** Distaff Thistle is fairly well contained in the county. With an increase in organic production, we are expecting possible population increases in certain areas. In our coastal mountains our goal is to keep Distaff Thistle contained south of Fish Rock Road. We will also continue to work with landowners across the county to control and limit the spread of distaff thistle.



Distaff Thistle

Rating	Explanation
<b>A</b>	A pest of known economic or environmental detriment that is <b>not</b> known to be established in California <b>or</b> is present in a limited distribution that allows for the possibility of eradication or containment.
<b>B</b>	A pest of known economic or environmental detriment <b>and</b> , if present in California, it is of limited distribution.

**Table 2:** CDFA pest ratings (partial listing)

### **Stinkwort** (*Dittrichia graveolans* L. Greuter)

Stinkwort is a weed that belongs to the sunflower family (Asteraceae) and is native to Europe. The plant has begun to expand its range rapidly in California and mainly inhabits disturbed places such as roadsides, pastures, fields, riparian woodlands, levees and washes. The plant is an erect annual that is very sticky, produces yellow flowers in the fall, and has a very pungent aroma (see figures 1 and 2). Stinkwort is currently not rated by CDFA but has a Cal-IPC rating of 'Moderate Alert'. Stinkwort has the ability to spread quickly and overtake productive agricultural lands.

**Mendocino County distribution:** In 2014 we continued to find and treat new infestations throughout the county. The department is considering its options with this increase in finds. While eradication is preferable, we may need to adopt a containment strategy in some locations. We would encourage the citizens of the county to keep an eye out for this invasive weed. If you suspect you have seen Stinkwort, please bring a sample into the Department of Agriculture for identification.

For more information on Stinkwort visit: [http://www.cal-ipc.org/ip/management/plant\\_profiles/Dittrichia\\_graveolens.php](http://www.cal-ipc.org/ip/management/plant_profiles/Dittrichia_graveolens.php).



Whole Stinkwort Plant



Stinkwort Flower

### **Skeleton Weed** (*Chondrilla juncea* L.)

Skeleton Weed is also a member of the sunflower family (Asteraceae) and is native to southern Europe. Skeleton Weed has an A rating by CDFA and is listed as a noxious weed in other states as well. This plant is highly competitive with native vegetation for water and nutrients and its persistent flower stalks can bind up harvest machinery. One characteristic that makes skeleton weed so invasive is a single plant can produce 15,000-20,000 seeds per season.

**Mendocino County Distribution:** Skeleton weed is well contained to a single location on Highway 20 a couple miles west of the Mendocino-Lake county line. The population has not expanded its range to anywhere else in the county.



Skeleton Weed

# Weights and Measures: Working to Protect the Consumer

Andy Walker

Have you ever wondered if there was anyone out there making sure the pumps at the gas station are accurate? Is the scale at the grocery store weighing your produce correctly? Or, is anyone making sure that your 5 gallon propane tank is actually getting 5 gallons? Actually there is! Mendocino County Weights and Measures, a division of the Agricultural Department, is hard at work conducting routine testing of various measuring and weighing devices. These devices vary from propane dispensing stations, truck scales, counter scales at grocery stores, gas pumps, and livestock scales just to name a few. This article highlights some of the key programs and testing done by weights and measures officials to promote fair competition among businesses and consumer protection in Mendocino County.

Weights and Measures inspectors test every gas pump in Mendocino County annually for accuracy. To pass and become sealed by the county for that year, each grade at each pump station is tested. To conduct this test, five gallons of gas are dispensed into an accurate

five gallon can (prover). A gauge at the top of the prover measures in cubic inches with the "zero" point being five gallons. Looking at the level of gas on the gauge, the inspector determines if the pump is dispensing within the allowable tolerances. Any pump found out of tolerance requires repair by a registered service agent. While conducting this test, inspectors are verifying the gas station is in compliance with proper petroleum labeling laws as well, including displaying price per gallon on both the street sign and at the pump.

One interesting program included in weights and measures is price verification; making sure the price you're charged matches the advertised price. These inspections are done at businesses that use a point-of-sale (POS) system. A POS system is a cash register system that uses a price look up (PLU) to pull up merchandise that is either scanned or entered into the computer using a stock keeping unit (SKU) or a universal product code (UPC). The department is currently looking into equipment to make these inspections more efficient.

Another program under the umbrella of weights and measures is scale testing. All commercial scales that are involved in consumer transactions are tested and sealed by weights and measures once a year. A few of the types of scales tested include heavy capacity truck scales, grocery computing scales, and counter scales. Platform scales are another important device in Mendocino county which are used during grape and pear harvest. To test platform scales, two 500 pound standard blocks are lowered on to the scale using a crane truck. After testing the middle of the scale, the blocks are then moved to each corner of the scale to test the load cells. This is called a shift test. Making sure platform scales are weighing these commodities correctly is crucial to fair trade and the local economy.

Hopefully this short introduction into our weights and measures program was insightful and interesting. Next time you are at the gas pump, buying groceries, or refilling your propane tank, know that county Weights and Measures inspectors are working hard to promote fair trade and consumer protection.

*"...know that county Weights and Measures inspectors are working hard to promote fair trade and consumer protection."*

## In the Spotlight: Propane Trucks

Andy Walker

For many residents of Mendocino County, burning propane to run appliances and keep houses warm throughout the winter is a necessity. Propane companies in Mendocino County deliver the gas in special trucks to residences throughout the county. It is the job of weights and measures inspectors to test the sophisticated propane delivery systems on these trucks for accuracy. So how is this done?

To begin with, propane is a gas delivered in the liquid state. To achieve a constant liquid phase, a pressurized closed system prover is used. For propane truck testing, the truck's main delivery line is connected to the prover. Then, two hoses going out of the prover, one for vapor and one for liquid are attached to the truck. These hoses are used to pump the propane back into the truck after the test is done. When all hoses are connected, the test is ready to start. 100 gallons of propane are pumped at full speed into the prover, about 60 gallons/minute, but this varies between trucks. The inspector watches a gauge on the prover, and when it reaches 100 gallons the test is complete. The number on the prover is then compared to the number of

gallons on the truck's meter. To pass and become sealed, every truck must pass a one percent error rate. That is, based on the prover reading and our calculations for temperature and pressure compensations, the truck meter should read 100 gallons plus/minus 1 gallon.

gest advantage of having our own prover is that we can test these meters when it's least impactful to the industry, usually in the hot summer months when propane usage is reduced. "Before receiving our own prover in 2011, we were lucky if we got one week out of the entire year to test propane trucks. Having our own



Mendocino County's Liquid Petroleum Gas (LPG) Prover (left) being used to test a propane delivery truck.

In the past, the department was renting a neighboring county's prover to test the 38 trucks in the county. In 2011, the department purchased its own prover which has been in continuous use since. The big-

prover has turned a poorly functioning program into one where we are testing every truck annually," says senior weights and measures inspector Ray Harrie.



**Mendocino County  
Department of Agriculture  
Weights and Measures**

890 N. Bush St.  
Ukiah CA 95482

Phone: 707-463-4208

Fax: 707-463-0240

E-mail: [agcomm@co.mendocino.ca.us](mailto:agcomm@co.mendocino.ca.us)

[www.co.mendocino.ca.us/agriculture](http://www.co.mendocino.ca.us/agriculture)

**Mission Statement**

To serve the citizens of Mendocino County by promoting agriculture, fostering public confidence in the marketplace through our inspection programs, protecting the environment and the public by regulating and mitigating pesticide use, and protecting against alien and exotic pests through eradication and preventing introduction of new pest species.

**Office Hours:**

**Monday through Friday**

**8 am –12 pm and 1pm to 5 pm**

**Closed Mondays from 3 to 5 pm for staff meetings**

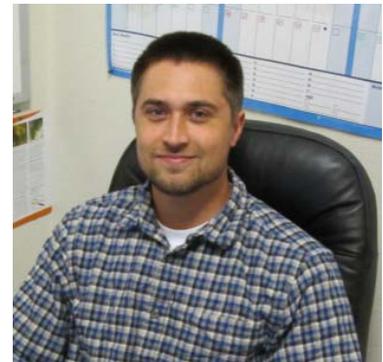
## Introducing...

At the end of May, 2014, we were fortunate to hire two new Agricultural/Measurement Standards Specialists (commonly known as inspectors or biologists); Andy Walker and Matt Daugherty. Both Matt and Andy are already proving to be valuable assets to our department. They began working just three weeks before the LBAM quarantine was established, and they were thrown into a trial by fire; learning and executing the requirements of the two LBAM programs simultaneously. Without them on board, our ability to respond properly to the quarantine would have been incredibly difficult. As you see them around the County and in the office, please join us in welcoming them to our department.



**Andy Walker**

Andy grew up in Ukiah, graduating from Ukiah High School in 2008, Andy attended UC Davis for a year before transferring to Santa Rosa Junior College to complete general education courses and play soccer. In 2011, he accepted a 2 year soccer scholarship to Lyon College in Batesville, Ar. While at Lyon, Andy studied cell and developmental biology, leading to a Bachelor's Degree in Biology in 2013. After college, Andy returned to Ukiah and worked at Alpha Analytical Labs, Inc. for a year before joining the Agricultural department as a biologist.



**Matt Daugherty**

Matt grew up in Ukiah, graduating from Ukiah High in 2006. After completing an A.S. degree in Horticulture, Matt transferred to Sonoma State University and graduated in 2013 with a Bachelors degree in Biology. Matt has eight years' experience in the Agricultural field, including working at Blue Sky Nursery, the Mendocino College Ag. Department, and the Sonoma State Herbarium. His main interests are collecting and identifying insects and plants.