



# ANIMAL SERVICES NEWS



## Community service

By Captain Richard Shore

We all think of community service as helping at a food bank or event where we help large numbers of people. It may not always be that way. I would like to take this time to thank the members of our Live-stock community with the help we received on February 22, 2018.

For those of you not aware of the incident, let me explain what hap-pened. On February 22, 2018 at about 9:00 am, a cattle truck driving on Interstate 8 approaching Gila Bend, caught fire and pulled over along the highway. The driver feared for the cattle in the trailer so he let them out. There were cattle fleeing from the fire running in and

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## SECC Milking Contest



Come join us on **Thurs. March 22nd 11:30 am—1:00 pm** to cheer on Director Mark Killian as he competes against other department directors to prove his cow milking skills.

The event will take place at the  
Arizona State  
Capitol House Lawn,  
1700 W. Washington

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## Community service *cont. from page 1*

among traffic. Luckily, there were no accidents involving these running cattle and traffic traveling at speeds of 65MPH or greater.



Along with the Department of Public Safety, Arizona Department of Transportation, local Fire Department and the Department of Agriculture we had numerous community members arriving on the scene. I do not know how they found out about the incident, but they responded with three trucks, trailers and horses to help. The local cowboys were: Pat Lauderdale, Robert Gonzales and Chon Gonzales. There were numerous other people that assisted, but their names were not obtained. Two local dairies and their employees helped with rounding up the loose cattle and penning them until a new truck and trailer could come to load them.

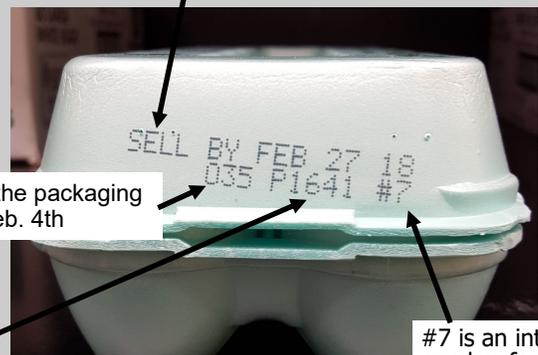
The Arizona Department of Agriculture has limited resources when it comes to these types of incidents and relies on our industry partners to help the community. All but one animal was able to be saved. If not for the hard work of all involved this incident could have been worse. The Department would like to give a special thanks to the local cowboys that came out to help.

## A few notes about eggs

You might have heard in the news about current legislation to extend the sell by date requirement. The current shelf life for Grade AA and Grade A is a maximum of 24 days and is required to be printed on the carton.

Did you know you that in addition to the sell by date, the date the egg was processed is also printed on the egg carton?

Sell By means the last day the eggs are allowed to be sold at the retail store. It has to be formatted alpha numerical and may not exceed 24 days from the pack day.



035 is the packaging date Feb. 4th

P1641 is the processing plant where the eggs were packaged. In this case, the eggs were processed at Ross-Medford Farms, LLC New Weston, OH 45348. Numbers issued to Arizona plants are P1294, P1711, P2000, P2015, P2030.

#7 is an internal number for the processing plant to identify packaging lines and not a regulatory requirement

Picture by: Teresa Ruiz

Here is what the numbers on an egg carton mean. All cartons, overwrap, and types of consumer packages require legible lot numbering on the consumer package. The lot number is the consecutive day of the year in which the eggs were packed into the carton, and consists of three digits, such as 042, 155, 267, etc. Since the lot number represents the consecutive day of the year, eggs packed into the container on January 1<sup>st</sup> would be listed as 001. [View the Day of the Year chart \(pdf\)](#)

Additionally, consumer packages require the facility or plant number to be listed on the consumer package. The facility or plant number is preceded by a "P" with three or four digits listed, such as P-1711, P-2030, or P-1294. [View the plant directory of USDA voluntary shell egg grading facilities](#)

## Office of special investigations

The Office of Special Investigations, does not have any current open cattle theft cases at this time. In the past 30 days, there were four cases which have been closed. One was a Forgery and fraudulent schemes case in which one suspect has been arrested DR#C17055719. The second was a civil matter involving a possible horse theft DR#C17065623, and the third one was an ongoing cattle theft case DR#2016-4-2351. The last case involved a suspicious situation involving the death of a calf due to possible suspect contact, no DR# can be provided. If you have any questions or would like to speak with the Special Investigations Unit, please call 602-364-0907.



## ASD staff help with the Department's marketing activities

Did you know that the estimated value of Arizona's total agricultural exports in 2015 was \$1.4 billion? To learn other facts about Arizona's agricultural export and import markets, please see the attachments.

## A day in the life of a dairy inspector

By Marisela Cruz

A Day of Dairy: Out of Power and a Milk Shower!

Starting the day off very early at a large milk processing plant, where recent stormy Arizona weather has caused a power outage and equipment to malfunction. As a result, the milk pasteurization equipment needs to be recalibrated. State dairy inspectors are trained to conduct critical public health safety testing of pasteurizers and maintain regulatory seals.



One of the tests requires the thermometers to be checked to verify they meet required pasteurization temperatures. This involves a stove and a pot of hot water with constant agitation, which can easily be interpreted from a distance as stirring a pot of soup! Once the milk plant's pasteurizer is deemed to be in compliance, the equipment is sealed, and we're off to a dairy farm!

The dairy farm is where the cows are milked daily, then the milk is pumped into insulated hauling tankers, and transported to the milk plant for processing. It is crucial that the milk is sanitarly sampled and pumped to ensure quality and safety of the product. State dairy inspectors evaluate milk tanker drivers to make sure the driver is performing the procedures according to the Pasteurized Milk Ordinance. Milk is also required to be kept cool below 45 degrees and the driver is responsible for checking the temperature of the milk prior to transferring. An outlet valve located on the dairy farm milk tank is a quick way to check the temperature with a thermometer, but beware! Large tanks or silos have the capacity to hold thousands of gallons of milk and can shoot out really fast through these small valve openings at the bottom. If the drivers are not careful, they can end up getting a milk facial or showered in milk! Once the milk is properly transported and the samples tested, it can then be processed into freshly bottled milk for cookies, or made into ice cream, the perfect treat on a hot Arizona day.

## Meat and Poultry Inspection, What we do

The Meat and Poultry Inspection (MPI) Program is a federal-state cooperative program, funded 50% from the state General Fund and 50% by USDA / Food Safety Inspection Service (FSIS). The program oversees the slaughter and processing of amenable meat animals and poultry which are for official inspection prior to sale to the public. Operating to help ensure both food safety and truth in labeling to consumers, inspectors visit regulated facilities on a daily basis. The program authority is established by state statutes and rules, the federal meat inspection act, and the federal poultry products inspection act.

State MPI personnel monitor general plant and equipment sanitation, processing sanitation, good manufacturing practices during production, ante mortem and post mortem inspection at slaughter, humane handling, Hazard Analysis Critical Control Point (HACCP) implementation, multi-ingredient formulation, the use of approved labeling, net weights, and perform laboratory sampling programs as requested. They also verify compliance with state and federal regulations prior to allowing the inspected and passed triangle shaped “mark of inspection” to be applied to applicable products.

Each day a plant operates, an AZMPI employee makes at least one unannounced visit to review production activity. If discrepancies are found, they are documented and then discussed with plant management to determine what corrective actions will be taken to ensure that no unwholesome or mislabeled product leaves the plant. In slaughter plants, an AZMPI Inspector observes each animal presented for slaughter both alive and at various stages during the carcass dressing procedure looking for any pathology that may be present.

Unfit and/or unwholesome carcasses and parts are removed from the human food chain and de-characterized for inedible purposes. Humane Handling is strictly enforced to ensure no animal is mistreated or improperly stunned at slaughter. Sanitation is observed and verified each day a plant oper-



ates either by a pre-operational check of facility and all equipment prior to the start of operations and /or operational sanitation checks to verify sanitation is maintained during production.

HACCP verification is performed by reviewing the HACCP plan and all supporting documentation. Direct observation or review of records for critical limits at all Critical Control Points. Corrective actions are taken when a deviation occurs. Verification and reassessment is performed as required by regulation.

Labels are reviewed to show that they reflect the product within is actually as the label states and that the label meets all labeling requirements as per regulation including approval and allergen declaration.

Formulation is observed to verify the product is being made to meet product standards and is being made as approved.

Net weights are verified on certified scales weighing random lots of finished product to ensure compliance.

Product samples are taken in selected establishments and delivered to the State Agriculture Laboratory to be analyzed for pathogens of concern. All information is then entered by the inspectors into a computer data base system called the Public Health Information System (PHIS).

## Equine herpes virus

Equine Herpes Virus is often times a mild disease in horses and is caused by EHV-1. When this virus infects a horse, there is a time that the horse is often shedding the virus in nasal secretions with or without clinical signs. If the horse gets a high viral load in the blood, then there is an increased chance that this horse will become neurological. We say these horses have Equine Herpesvirus Myeloencephalopathy (EHM). Often times these horses are still shedding virus into the environment. *Non-neuropathic EHV-1 strain* and *Neuropathic EHV-1 strain* classifications are somewhat confusing as both strains can lead to neurologic involvement.

This disease has broken out in 5 racetracks around the US. There are also cases showing up of horses that have been to rodeo type events here in Arizona as well as training facilities in Wyoming, to name a few.

It is recommended that if your horse is showing signs of disease to not to take it to an event. Horse owners should work with your veterinarian when it comes to vaccinations recommendations for your equine companion.

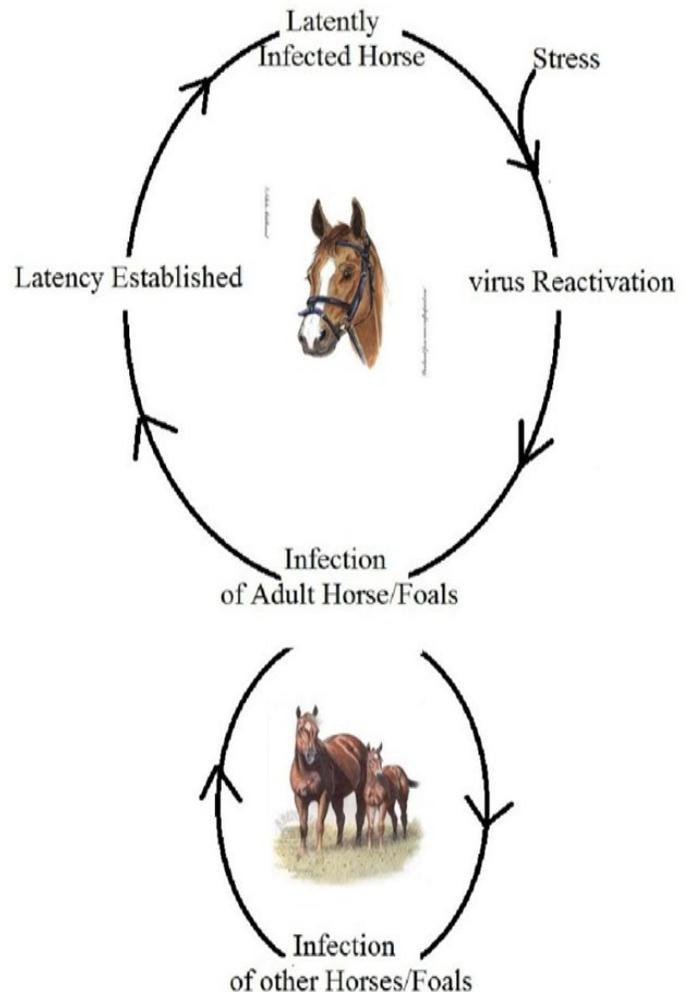
Also think twice before sharing tack, buckets or grooming supplies as these can spread the virus, and practice good biosecurity.

### More information on Equine Herpesvirus Myeloencephalopathy

**Disease Type:** This disease is caused by the EHV-1 virus which is common in the horse population. In extremely rare cases, EHV-4 can develop into EHM.

**Transmission:** EHV-1 is spread from horse to horse through contact with nasal discharge or spread as aerosol droplets. Horses can also contract the virus by coming into contact with contaminated surfaces such as stalls, water, feed, tack, and transport vehicles. Humans can spread the virus from horse to horse by contaminated hands and clothing.

**Frequency:** Although EHV-1 and EHV-4 are a relatively common cause of a mild respiratory disease,



EHM, the neurologic form caused by either EHV-1 or EHV-4, is not common.

**Incubation period:** Ranges from 2 to 10 days. Horses can shed the virus during the incubation period.

**Carrier status:** Infected horses are carriers and can shed the virus even when showing no clinical signs.

**Latency:** EHV is a viral disease that most horses have been infected with at some point in their life. It is unknown why this virus produces the neurological form in some horses. Horses that have had EHV-1 may be carriers and the virus may be latent and re-occur under periods of stress such as transport or a new activity.

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## Equine herpes virus *cont. from page 5*

**Severity:** EHM is life threatening.

### **Clinical signs:**

- Fever-This virus typically causes a biphasic (two phase) fever. The horse will have fever on day 1 or 2 and again on day 6 or 7. Neurological signs may not present until the second fever. Some horses may not develop a fever.
- Nasal discharge
- Depression
- Incoordination
- Hind limb weakness
- Loss of tail tone
- Loss of bladder tone-urine dribbling or inability to urinate
- Dog sitting position
- Leaning against a fence or wall to maintain balance
- Recumbency-inability to rise

**Diagnosis:** The diagnosis is made by having a veterinarian collect nasal swabs and whole blood collected from the horse. Horses with neurologic signs which test positive for EHV-1 are considered positive for EHM.

**Treatment:** There is no cure for EHM. Supportive care is administered including the use of nonsteroidal anti-inflammatory drugs (NSAIDS) such as phenylbutazone (Bute) or flunixin meglumine (Banamine) to reduce fever, inflammation, and pain. Corticosteroids have been used, but there is no evidence of benefit. Antiviral drugs such as acyclovir

and valacyclovir have been used, but their value in horses with EHV infection is unknown.

**Prognosis:** Prognosis for horses who test positive for EHV and then develop neurologic signs of EHM is often poor with fatality as high as 30%. In rare cases, horses with neurologic signs can recover from the infection but may retain neurologic deficits.

**Prevention:** Currently, there is no USDA licensed EHV-1 vaccine which is proven to protect against the neurological disease associated with EHV-1. The best method of protection is always to maintain current EHV vaccinations on all horses on your property and to follow correct biosecurity protocol when bringing new horses onto your premises, when travelling, or during any activity where horses may come together.

**Biosecurity:** EHV-1, and rarely EHV-4, has the potential to cause EHM so biosecurity measures appropriate for EHV-1 should be taken. EHV-1 is spread via aerosol particles from nasal discharge or from contaminated surfaces including people, clothing, feed and water, implements, and stalls; isolation of affected or exposed horses is critical to preventing the spread of the virus. Proper biosecurity measures include extensive cleaning and disinfection of surfaces and equipment that come in contact with affected horses. Individuals treating or coming into contact with infected horses need to follow appropriate disinfection protocols when handling multiple horses (Go to: <http://equinediseasecc.org/biosecurity>).



## Contact Us

- Dairy: (602) 542-4189
- Dispatch: (623) 445-0281
- Egg: (602) 542-0884
- Meat & Poultry: (602) 542-6398
- Self-Inspection: (602) 542-6407
- State Vet's Office: (602) 542-4293

## 2016 Top Arizona Commodities

Commodity	Acres Harvested	Value of Production (\$1,000)
Lettuce	72,600	\$920,707
Cattle & Calves	N/A	\$514,051
Alfalfa Hay	280,000	\$366,016
Spinach	11,200	\$93,139
Broccoli	9,300	\$72,205
Cauliflower	4,700	\$67,342
Pecans	N/A	\$67,208
Wheat	103,000	\$65,988
Cantaloupes	15,900	\$63,155
Cabbage	3,800	\$51,196
Corn for Grain	50,000	\$49,988
Watermelon	5,500	\$35,251
Barley	16,000	\$8,315
Chile Peppers	1,600	\$4,455
Cotton	129,000	N/A

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**4,788,000 lbs**  
of **milk products**  
were produced  
in 2016



## 2016 National Ranks

Commodity	Rank	% of U.S.
Romaine Lettuce	2	29.9
Spinach	2	28.3
Cantaloupe	2	27.1
Head Lettuce	2	26.7
Leaf Lettuce	2	17.7
Cauliflower	2	12.7
Broccoli	2	5
American Pima Cotton	3	34
Spring Duram Wheat	3	9.1
Pecans	4	9.2
Chile Peppers	4	2.6
Cabbage	6	7.1
Watermelon	7	6.1
Alfalfa Hay	9	4.1
Upland Cotton	9	2.3
Livestock & Livestock Products		% of U.S.
Commodity	Rank	% of U.S.
Angora Goat	2	23
Mohair	2	15.63
Sheep & Lambs	11	2.5
Milk Production	13	2.25
Meat & Other Goats	19	1.25
Hogs & Pigs	26	N/A
Cattle & Calves	31	1

Sources: USDA NASS Arizona Annual Bulletin, 2015-2016; Census of Agriculture, 2012  
Images Courtesy of: Mellon Farms; flaticon.com



**Arizona Department of Agriculture**  
1688 West Adams Street, Phoenix, AZ 85007  
Phone: (602) 542-4373  
<https://agriculture.az.gov>



## Agriculture Facts 2017



## Agriculture in Arizona

Arizona agriculture is an essential part of our economy and is rooted in our state's history. With close to 20,000 farms and ranches, the Arizona agricultural industry has a **\$23.3 Billion impact** on the state's economy. Our climate allows for a year-round growing season, resulting in Arizona ranking top ten in the nation in the production of 17 different commodities which include head lettuce and pima cotton.



Arizona is the **winter lettuce** capital of the world. **71 Million cartons of lettuce** was produced November-March, 2015

## 2016 Arizona Farms & Farmland

Number of Farms & Ranches	19,600
Farm & Ranch Acreage	25,900
Average Size of Farm/Ranch	1,321



**98% of Arizona dairies** are **family-owned** and operated



**300,000 gallons** of **wine** was produced in Cochise, Santa Cruz, and Yavapai Counties in 2015



In 2015, the estimated value of **Arizona's total agricultural exports** was **\$1.4 Billion**

## 2016 Top Arizona Exports

Commodity	\$(Millions)
Processed Veggies	\$314.3
Fresh Veggies	\$162.2
Cotton	\$104.5
Dairy Products	\$98.1
Beef & Veal	\$67.4
Fresh Fruits	\$61.7
Tree Nuts	\$60.5
Processed Fruits	\$58.3
Wheat	\$41.3
Feeds	\$40.4
Processed Grain Products	\$18.2
Hides & Skins	\$16.8
Pork	\$15
Corn	\$8.3
Other	\$364.1
<b>Total Exports</b>	<b>\$1,454.4</b>

**Arizona Beef** has a **\$1.7 Billion** total contribution to state output and a **\$521 Million export value**, **43% exports** out of Arizona



## Total Cash Receipts

Year	Dollars (1,000)
2016	\$4,143,179
2015	\$4,191,784
2014	\$4,398,614
2013	\$4,288,667
2012	\$4,076,705
2011	\$4,342,697

## 2016 Cash Receipts Breakdown

Animals & Products Cash Receipts	\$1,518,122
Crops Cash Receipts	\$2,625,057

## Livestock Inventory

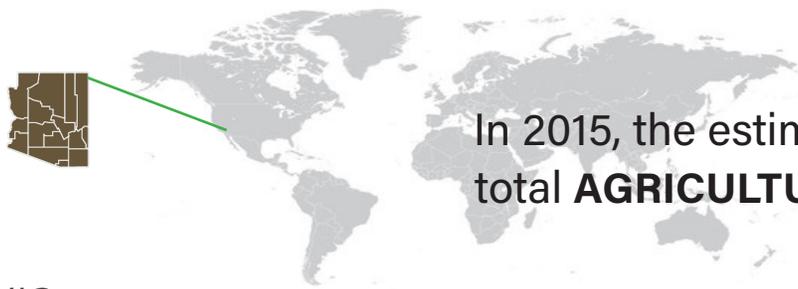
Type	Head
Cattle (Jan, 2017)	1,603,000
Goats (Jan, 2017)	280,000
Sheep & Lambs (Jan, 2017)	130,000
Hogs (Dec, 2016)	115,000



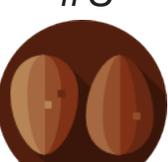
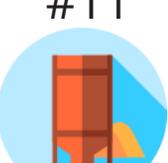
Arizona's egg industry is part of a **\$17.1 Billion impact** on the economy



# ARIZONA'S AGRICULTURAL EXPORTS TOP 15



In 2015, the estimated value of **ARIZONA'S** total **AGRICULTURAL EXPORTS** was **\$1.4B**

- #1  Other Plant Products
- #2  Processed Veggies
- #3  Fresh Veggies
- #4  Cotton
- #5  Dairy Products
- #6  Beef & Veal
- #7  Fresh Fruits
- #8  Tree Nuts
- #9  Processed Fruits
- #10  Wheat
- #11  Feeds & Other Grains
- #12  Other Livestock
- #13  Processed Grain Products
- #14  Hides & Skins
- #15  Pork

## TOP EXPORTS (2016 value)

Commodity	Value	Top Markets
Other Plant Products	\$364M	Mexico, Canada, China, Saudi Arabia, Netherlands
Processed Vegetables	\$314M	Canada, Mexico, Spain, Netherlands
Fresh Vegetables	\$162M	Canada, Mexico, Japan, Netherlands, South Korea, Spain
Cotton	\$104M	China, Thailand, Vietnam, Mexico, Bangladesh
Dairy Products	\$98M	Mexico, South Korea, Canada, France, Panama, Brazil, Morocco

## ARIZONA'S AGRICULTURAL IMPORTS TOP 5

- #1  Tomatoes
- #2  Peppers
- #3  Pumpkins, Squash, Gourds
- #4  Cucumbers
- #5  Watermelons

Sources: USDA, ERS, State Export Data; United States Census Bureau  
 Images by flaticon.com