



Winter 2011

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# Plant Industry Division Newsletter



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## A Note From Plant Industry's Regional Manager, Ed Foster

Welcome to the third issue of the Nevada Department of Agriculture's Plant Industry Division Newsletter. The Plant Industry Division is proud to publish this newsletter as a way to keep in contact with related industries and also share with fellow Nevadans the major accomplishments and future projects of the Plant Industry Division.

The big news since our last newsletter is that Nevada has a new Governor, Brian Sandoval, and NDOA has a new Director, Jim Barbee. The NDOA Plant Industry Division is looking forward to working with both of these dynamic new leaders!

The NDOA Plant Industry Division would also like to give a big welcome to all the new Nevada legislators. Additionally, we would like to thank all those legislators who attended the Las Vegas BBQ at the NDOA office this past December. The NDOA Plant Industry Division recognizes the importance of having on-going conversation between state legislators and state departments. We invite all legislators to visit our office to meet with our talented employees and to discuss the many and varied programs that are coordinated within the division. Now, more than ever, is a time for all state employees to work together in order to meet the challenges of our current economic conditions.

This winter has been full of surprises and changes within the department. Although the state budget is tight and the number of Plant Industry Division personnel is at an all-time low, the NDOA Plant Industry Division is committed to serving the public, farmers and state in a variety of ways. As our newsletters show, our division is truly diverse. Testing groundwater for pesticide contamination, ensuring products sold from Nevada growers or nurseries are healthy and disease free, identifying insects and controlling insect and plant pests are only a few of the important responsibilities of the Plant Industry Division.

The programs of the Plant Industry Division are benefiting not only Nevada farmers, but the general public as well. NDOA Plant Industry employees are eager to begin another successful field season as soon as the weather warms and the mountain snow melts. We thank all those who take the time to look through this newsletter which highlights important aspects of 2010 and the new items to look for 2011. Lastly, we hope that this newsletter reminds Nevada legislators and residents across the state to remember, in Nevada, "PEOPLE GROW THINGS HERE!!"

## The New NDOA Sparks Office Building

The Nevada Department of Agriculture is proud to be settled into the new office located at 405 South 21st Street in Sparks, Nevada. Although there are a lot of open offices and cubicles still waiting to be filled when the state's economy recovers, employees are hard at work in many of the new labs, greenhouse and conference room facilities within the new building. The building overall is impressive in its appearance, structure, lay-out, and green technology advancements. It is equipped with offices, cubicles, 5 labs, a greenhouse, and more. Each day the labs are bustling with excitement as the chemists and plant pathologists process samples to check for toxic chemicals diseases. In addition the animal disease lab continually processes animal samples and surveys for dangerous diseases.

ployees a greater ability to do more tasks, but it also has its own aesthetic appeal in the landscaping in front and around the building. In fact, the Nevada Department of Agriculture is proud to announce that the beautiful landscaping around the Sparks office won "Best Public Works Landscaping" through the...

**READ MORE ON PAGE 2!**



Greenhouse at the Nevada Department of Agriculture

Not only does the new building bring em-

...Builders Association of Northern Nevada BANN-ER Awards of 2010. Peggy McKie, Agriculturist IV, was instrumental in selecting water efficient plant species that are planted in front and around the building. The landscaping was installed by Lovett Landscaping, who received the award. Chris Gabcas, Lovett Landscaping Foreman, presented the award to the NDOA as a way to kick off the new year at the NDOA Sparks Office (Fig. 2).

Currently, the NDOA Sparks Office is serving as a useful resource by providing available meeting rooms for various entities. It is a workplace full of technology, enabling the Nevada Department of Agriculture to continue improving its ability to keep the people and lands of Nevada safe and healthy for the public and agricultural producers. We invite all legislators and anyone interested to tour the Sparks building and meet the Plant Industry team.

**For more information regarding a tour of the building please contact Ed Foster at 775-353-3711 or [efoster@agri.state.nv.us](mailto:efoster@agri.state.nv.us)**



Figure 2: Peggy McKie, NDOA Agriculturist IV, and Chris Gabcas, Lovett Landscaping foreman with the landscaping award for the NDOA Sparks Office.

## Nevada Department of Agriculture Programs Assist One of Nevada's Most Successful Producers: Peri & Sons Farms

By: Jamie Greer, Agricultural Inspector II

Although Nevada is known as a state with large expanses of desert and an overall dry climate, it still is home to a thriving agricultural industry. Across the state there are hundreds of farmers who provide valuable farm-fresh produce to Nevada residents, people across the nation and worldwide. Peri & Sons Farms, headquartered in Yerington, Nevada, is a perfect example of a Nevadan agricultural business that, in spite of current economic conditions, continues to boom and provide high quality food products to people around and across the globe.



David Peri, president/CEO of Peri & Sons Farms inspects newly-harvested, medium-sized, red onions from one of the company's many fields in Yerington, Nevada

Beginning in 1979, Peri & Sons Farms has grown distinctive, superior-quality, fresh and delicious, pesticide free and organic produce in Yerington, Nevada. Founder David Peri's farming heritage began in Lockwood, Nevada. He saw an opportunity for growth and prosperity growing onions in the fruitful Yerington soil. Due to David Peri and his wife, Pamela's, passion for farming the company has made its name with Peri & Sons Onions. Their acreage of farmed land in Nevada has doubled many times over since the farm's establishment. Consequently, in 2007 the farm expanded its growing acreage and facilities into California. The headquarters of the company remains in

Nevada, however, with the extension into California, Peri and Sons Farms is now able to grow and provide produce to their distributors all year around.

In addition to owning and operating Peri & Sons Farms, David Peri also shares ownership in Nevada Fresh Pak in Yerington, Nevada which grows romaine, spring mix and baby spinach lettuces. However, the Peri & Sons Farms specialty has always been onions. White, red, yellow, sweet, organic and conventional onions are grown, packed and shipped

from Yerington, Nevada. The size of the Yerington facility is large and very impressive to tour. In addition to the 8,000 acres that are farmed for onions and other produce; they also have 54 large onion storing sheds disbursed throughout the Mason Valley. Each shed is packed to the brim with onions during the busy harvesting and packing season. If one is brave enough to open the doors to these storage sheds, you will be faced with a towering pile of onions up to 12 feet high and many feet long. The amount of onions stored in the sheds and the processing facility in Yerington is truly massive. Peri & Sons Farms grows, packs and ships an astonishing 300 million pounds of onions a year.

Growing onions in Mason Valley and shipping them from its base location in Nevada during the months of September through April has proven to be very successful for Peri & Sons Farms. The onions grow well in the dry cool night temperatures and elevation of Yerington, Nevada. In addition, Peri & Sons Farms has adequate access to good quality surface water and well water at their location in Yerington, Nevada. All of the onions are started off as seedlings and normally watered by drip irrigation early on. As the growth of the onions continues, sprinkler watering techniques are used until the onions are ready to be harvested and put into the storage sheds before processing. During the Nevada harvesting season, approximately 50 large trucks are fully filled and are shipped out of the Yerington facility each day. Across the United States, Peri & Sons Farms onions are sold and shipped through more than 20 distributors and national chains such as Wal-mart, Whole Foods, and Raleys. Moreover, Peri & Sons Farms onions are sold and shipped to numerous distributors throughout Canada, Mexico, the Pacific Rim, Australia, Jamaica, Central America, Italy, Spain and other regions worldwide.

Inspections performed by the Nevada Department of Agriculture help facilitate the export of Peri & Sons Farms' onions to their overseas customers. During the growing season, department inspectors walk through onion fields throughout the Mason Valley searching for certain insect pests, diseases and nematodes. By certifying the fields as free of specific pests, the Nevada Department of Agriculture assists Peri & Sons Farms and other Nevada onion growers to sell their products internationally. Without these documented in-season field inspections performed by the NDOA many countries would not allow onions from Nevada to be imported.

Additional services provided by the Nevada Department of Agriculture

**Peri & Sons Farms, based in Yerington, Nevada, “grow, pack, and ship an astonishing 300 million pounds of onions a year”**

to Peri & Sons Farms and other Nevada onion growers are federal export certificates and inspections to meet the USDA grade standards (USDA No. 1, USDA No. 2, etc.). Export certificates and grade certificates are issued by the Nevada Department of Agriculture under a cooperative agreement with the United States Department of Agriculture (USDA). Recently the Nevada Department of Agriculture transitioned to USDA’s web-based Phytosanitary Certificate Issuance and Tracking System, also known as PCIT. This allows onion growers, like Peri and Sons Farms, to apply for export certificates online. Due to the large volume of onions exported by Peri and Sons Farms, Nevada On-

ion, and Snyder onion, the Nevada Department of Agriculture has one inspector, David Herrand assigned full time to the Mason Valley area during the busy shipping season.

In recent years, increased concerns about food safety prompted Peri & Sons Farms to establish full traceability for all the onions they grow. This means that for every Peri & Sons Farms’ onion sold, complete records are maintained to trace that onion from the field through shipping and to the customer. In addition to the marketing advantage of full traceability, Peri & Sons Farms’ onions are chosen by multiple distributors worldwide due to their consistent good taste and quality. Throughout the years, David Peri has also been dedicated to testing new varieties of onions and seeds to ensure the best types of onions are grown at Peri & Sons Farms. According to Peri & Sons Farms, distributors reject less than 1% of their onions! Peri & Sons Farms is a top-notch farming operation that provides a high quality product for Nevadans and others worldwide to enjoy.

Not only does Peri & Sons Farms provide food to the world, but they also commit themselves to reaching out to the local community. Pamela and David Peri established a connection to the Boys and Girls Club of Mason Valley and Peri & Sons Farms continues to be a major supporter of the organization. In 2008 Peri & Sons Farms even received a “From the Heart” award from the national Boys and Girls Club Association in Atlanta, Georgia. On the Peri & Sons Farms website David Peri states, “We love this area and hope to farm here for many years to come. We take great pride in being a part of this community and hope that Peri & Sons Farms can continue to thrive and help sustain the economy in this valley”.

Even though Peri & Sons Farms is an international company, they are very aware that Nevada growers and producers, like themselves, are not always identified as a significant part of the economy of the state as a whole. Brad Johnston, chief strategy officer and general counsel of

Peri & Sons Farms, is concerned about that disconnect, “Agriculture has important direct and indirect economic benefits for the state as a whole, not just the rural areas.” Johnston continued, “During the harvest season Peri & Sons Farms will employ approximately 1500 people in our Yerington facility, 200 of which are full-time, year around permanent employees. We are the biggest employer in Lyon County, Nevada.” Johnston also stressed that those involved in Nevada agriculture need to be more pro-active in approaching Nevada legislators and informing them of producers’ issues. “Peri & Sons

Farms plans to continue to improve education and understanding between Nevada policy makers, the Nevada public, and Nevada agricultural producers.”

As for the near future, Peri & Sons Farms plans to continue expanding the boundaries of conventional ideas about Nevada agriculture. They remain committed to providing the world’s best quality onions, and when it comes to Nevada Fresh Pak, David plans to increase the amount of leafy greens and vegetables grown and will continue to experiment with new crops and new varieties. As Nevada Fresh Pak expands into the production of other crops, the Nevada Department of Agriculture programs which support them must also adjust accordingly. Chuck Moses, acting Plant Industry Administrator, says, “The Nevada Department of Agriculture is the only state agency which provides specific inspection and certification services necessary for Nevada growers like Peri & Sons Farms to export their products nationally and worldwide. The Nevada Department of Agriculture is dedicated to serve Nevada growers to the best of our ability; however, with its shrinking budget and fewer professional staff members, our department will be challenged to meet the needs of Nevada growers in coming years.”

For more information regarding Peri & Sons Farms please visit their website at <http://www.periandsons.com/>. For information regarding export certification at the NDOA please contact Peggy McKie at 775-353-3672 or [pgmckie@agri.state.nv.us](mailto:pgmckie@agri.state.nv.us)



Burlap bags of newly-harvested, organic onions are picked up and emptied into trucks bound for the company’s local storage sheds.



David Herrand, NDOA Inspector at Peri and Sons Farms



From left to right: Jessica Peri, Peter Ng and Tiffani Creedon take a look at some recently-bagged “Purple Passion” red onions in one of the Yerington sheds

# Thinking of Turning Organic? Nevada's Organic Certification Program in 2011

By: Steve Marty, Agriculturalist IV

## Food Processing Facility Organic Certification Requirements:

- ◆ No use of GMOs or irradiation

- ◆ No co-mingling or contamination of organic products during processing

- ◆ You must implement an Organic Handling Plan with proactive sanitation and facility pest management practices

- ◆ You must use organic agricultural ingredients in "organic" products when commercially available

- ◆ You must use the approved label claims for:
  - "100% organic"
  - "Organic" (at least 95% organic ingredients)
  - "Made with organic ingredients" (at least 70% organic ingredients)

- ◆ You must maintain buffer zones around your farm, depending on your risk of contamination and have no residues of prohibited substances exceeding 5% of the EPA tolerance

The Nevada Department of Agriculture (NDOA) is accredited by USDA to offer organic certification services to eligible agricultural producers and processing operations in Nevada. In order to be marketed as organic in the U.S., agricultural products must be produced and processed according to USDA National Organic Program (NOP) standards. USDA-accredited certifiers such as NDOA are responsible for verifying that the standards are met. Although the USDA NOP organic certification standards are complex, they can essentially be boiled down to a few key points (See surrounding circles). Nevada's certified-organic producers are able to capitalize on a value-added niche market that continues to grow despite economic pressures. Similarly, certified-organic production and processing is one of the few facets of Nevada agriculture that has continued to grow and diversify during these tough economic times. Many of our certified-organic producers are farming intensively on small acreage to produce organic vegetables, fruits, herbs, and other specialty crops that are in high demand in local markets. Others are growing high quality organic alfalfa hay, wheat, barley, and other grain products which are destined for domestic and/or international markets. Certified processors offer organic tea, coffee, pistachios, walnuts, spices, and more to both local consumers and national distributors. NDOA is able to offer organic certification services at a price our growers and processors can afford, and NDOA has once again secured federal cost-share funds for 2011, which are used to reimburse up to 75% of the annual cost of certification. NDOA and Nevada's certified-organic growers and processors are looking forward to another great year for an industry which provides nutritional, environmental, and social benefits that Nevadans stand behind.

**If you would like to become certified organic or have questions or comments regarding Nevada's Organic Certification Program please contact Steve Marty at 775-353-3773 or [s\\_marty@agri.state.nv.us](mailto:s_marty@agri.state.nv.us).**

## Crop Farms Organic Certification Requirements:

- ◆ You must not use sewage sludge or irradiation and follow the restrictions on raw manure and compost use

- ◆ You cannot use any prohibited substances while certified organic

- ◆ You cannot use any genetically engineered organisms (GMOs)

- ◆ You must implement an Organic System Plan, with proactive fertility systems, conservation measures, environmentally sound manure, weed, disease, and pest management practices, and soil building crop rotation systems

- ◆ You must use organic seeds, when commercially available and use organic seedlings for annual crops

- ◆ You must have 3 years with no application of prohibited materials (synthetic fertilizers, pesticides, or GMOs) prior to harvest of your first certified organic crop

- ◆ You must use natural inputs and/or approved synthetic substances on the nationally approved list.



## Integrated Pest Management and Successful Pest Control

By: Jon Carpenter, Environmental Scientist II



**“ A cooperative IPM project between the NDOA and the Clark County School District was effective at eliminating a roof rat population at Fremont Middle School in Las Vegas”**



First of all, what is Integrated Pest Management? Also known as IPM, Integrated Pest Management is an effective and environmentally sensitive approach to managing pests that relies on a combination of common sense practices. The goal of IPM is simple: effectively and safely control pests and use the least amount of pesticides while doing it. Chemical weed killers, insecticides, and rodent baits are all pesticides that are used against various pests including insects, rodents, and weeds.

Just about everybody has used IPM at one time or another. For a good example of IPM let's consider the common house mouse. In order to survive mice need the same things that we do: food, water, and shelter. Eliminate one or preferably all of these things and you are practicing IPM. Have you ever plugged a hole that mice were using to enter your home? Have you eliminated food and water sources by cleaning up food waste or repairing leaky pipes? Have you stored pet or livestock feed in heavy duty mouse proof containers? Have you used snap traps or rodent baits? Maybe you bought a cat. If you did all or a combination of these things then you practiced IPM and most likely solved your mouse problem. It's really that simple and yes, pesticides such as rodent baits do play a role in IPM. If you relied on the poison alone then you weren't using IPM and you probably still have mice.

The concept of IPM has been around a long time and it is used to manage a variety of pests in many environments including large scale agricultural operations and food processing facilities, to home gardens, and school cafeterias.

The Nevada Department of Agriculture (NDOA) supports and encourages the use of IPM at ongoing pesticide applicator training and continuing education programs for licensed and certified pest control professionals. In addition, NDOA works with school districts to educate the faculty and staff about IPM practices which will help reduce or eliminate pesticide use in schools. The school IPM project is intended to control pests and, at the same time, reduce pesticide exposure to staff and students.

A cooperative IPM project between NDOA and the Clark County School District was effective at eliminating a roof rat population at Fremont middle school in Las Vegas. The school, which is located in a neighborhood where roof rats are common, became infested and the kitchen was actually closed down by the Clark County Health District in 2005 due to the rat problem. School district officials contacted NDOA for assistance and both agencies worked together to create an IPM plan which included trapping, sanitation, exclusion and the limited use of rodenticide bait. After the IPM program was implemented routine monitoring showed that the rat population had been eliminated by trapping and baiting. Sanitation and exclusion measures prevented new rats from moving in. The project was successful and the kitchen was allowed to re-open.

**If you have questions about IPM or would like to know more about the NDOA IPM school project please contact Jon Carpenter at (775) 353-3715 or [jcarp@agri.state.nv.us](mailto:jcarp@agri.state.nv.us).**

## Bed Bugs in Nevada

By: Jeff Knight, State Entomologist

As an entomologist in Nevada for almost thirty years I have seen bed bugs go from an interesting oddity to a common place occurrence. In the early 1980's the Nevada Department of Agriculture would see only a sample or two of bed bugs submitted each year and they were always associated with what was referred to as "flea bag" motels. Now I see a bed bug in at least one sample every week or two. These samples come from every economic level of hotel and often from residences.

Concern for bed bug infestations is valid, since the bed bug is a parasite that feeds on human blood. Generally, bed bugs are nocturnal and feed while their host is asleep. During non-feeding periods, bed bugs will hide in cracks and crevices in close proximity to human hosts including mattresses, bed frames, headboards, box springs, behind wall hangings, behind torn wall-paper, inside bedroom furniture or other tight hiding places. Surprisingly, it only takes a bed bug about 5 to 10 minutes to finish a meal. The bites are painless and the host is usually unaware they are being bitten. In addition, bed bugs can survive for over 6 months without feeding on any host at all.

The main upsurge of bed bug infestation findings over the last few years in Nevada and across the United States has been attributed to a variety of causes. The most common and scientifically proven cause is an in-



crease in the resistance of bed bugs to our commonly used pesticides. Some other factors that have contributed to the rise in bed bug sightings include an upswing in world travel, "quick and dirty" pest control, and the economy. In some cases, hotels are very reluctant to spend money on pest control in rooms with "no bugs" but for effective control the rooms surrounding infested rooms must be treated as though they were infested.

Teaching proper and thorough control procedures to pest control operators as well as hotel managers has been a main topic at most of the continuing education activities put on by the Nevada Department of Agriculture. Over the past several years the Nevada Department of Agriculture has worked with local health departments to come up with a set of guidelines for bed bug control and management. These guidelines are distributed to all interested parties having to deal with the pest in one way or another. Workshops and lectures have also been given to hotels, pest control companies

and health departments on bed bug identification and control by the Nevada Department of Agriculture. Proper identification is essential with this insect since there are three other closely related species. Adult bed bugs are reddish brown in color, about 7 mm long, egg-shaped, and are flat top to bottom...

**Read More on Page 6!**

## Bed Bugs in Nevada Continued From Page 5

Female bed bugs lay 1 to 5 eggs after each blood meal and can lay a total of 113 eggs during its lifetime of approximately 9 to 18 months. Eggs are white in color, approximately 1 mm in length, and are glued to the surface that they are laid on. Eggs are found in crevices and hidden surfaces where the adult bed bugs prefer to stay during non-feeding periods. The eggs will hatch within 6 to 10 days after being laid.

Closely related species to the bed bug also can be associated with humans, but have drastically different control procedures. A species of bed bug versus another related bug species can only be separated by an entomologist familiar with the species. This makes it essential to send a sample into the Nevada Department of Agriculture for proper identification.

In addition, it is highly recommended to take various precautions in order to prevent bed bugs from settling into your home. First, when traveling, thoroughly inspect hotel rooms and mattresses for evidence of bed bugs before you move all your belongings into the room. Evidence of bed bug activity includes, noticing a pattern of

waking up with red, itchy bug bites 3 mornings in a row; dark spotting of walls, mattresses, or other possible hiding places; and small blood spotting on bed sheets. Also it is advised to keep clothing and suitcases off of hotel room floors as much as possible. Next, it is recommended that, if possible, you do not buy used mattresses or bedroom furniture. Used mattresses and bedroom furniture are common venues for new bed bugs to get into new homes. Taking the above steps are suggested in order to lower your chances of transferring bed bugs into your home. If there is a visual sighting of a bed bug or similar bug in appearance, the pest should be collected in a zip lock bag and turned into the Nevada Department of Agriculture's Plant Industry Division Entomology Lab.

While it is vital to take all recommended prevention measures, an accurate identification and proper control procedures are also essential for successfully eliminating bed bug infestations in Nevada.

**If you would like more information regarding bed bugs or the Entomology Department at the NDOA please contact Jeff Knight at 775-353-3767 or [jknight@agri.state.nv.us](mailto:jknight@agri.state.nv.us)**

## Nevada Department of Agriculture ARRA Program

By: Jamie Greer, Agriculturalist II

In June of 2009 the Nevada Department of Agriculture (NDOA) was awarded funding from the United States and Private Forestry Service (USFS) Program under the American Recovery and Reinvestment Act (ARRA). The ARRA program through the NDOA is dedicated to noxious weed and fuels removal, burn area rehabilitation, and habitat restoration. In order to reach these objectives, the Nevada Department of Agriculture partnered with various entities within Washoe County, the Carson Watershed, and Clark County. Funds were allocated to the above partners and then distributed to a variety of contractors to conduct projects to improve valuable habitat and recreation areas across the state of Nevada. Not only is the ARRA program dedicated to improve valuable Nevada ecosystems, but also has provided many Nevadans with jobs

Overall, through the NDOA ARRA Program 79 people/positions have been created or retained in Washoe County alone. Washoe County has hired three consultants, including Resource Concepts Inc., Western Botanical Services Inc., and JBR Environmental Consultants, from the

Washoe County and Carson areas to develop restoration plans on Washoe County fire sites. The fire sites include valuable areas, such as, Arrowcreek, Red Rock, Hawken, Peavine, Belli Ranch, and Martis. Implementation contracts were also awarded to construction, landscape, and restoration companies to complete the required tasks on the various sites. Contracts were awarded to Kelley Erosion Control Inc., Soil Tech, Garden Shop, Peri Landscaping, Sierra Fire Protection District, and the Sierra Business Council.

The Nevada Department of Agriculture and Washoe County were very pleased and excited to see construction begin on six of the seven project sites in the spring/summer of 2010. The sites were bustling with field crews

and the amount of work accomplished over the past year is impressive. To date, the following has been accomplished on the sites in Washoe County: 89 acres of defensible space has been cleared to prevent neighboring homes from being destroyed in future fires, more than 80 dead or fire damaged trees have been removed, five temporary stream crossing have been designed and installed, water bars, rock and toe-slope protection devices have been installed, 247 acres of open land have been treated for weed infestations, 1,114 native shrub species have been planted, 285 new trees have been planted, and 176 acres of land have been re-seeded with native species. All in all, each project is noteworthy and the combined impact of the restoration efforts through the ARRA program on Washoe County land and the surrounding areas is expected to be massive. A large amount of work is planned for Spring 2011 and crews are eager to continue restoring recreation areas and open lands around the Reno area. In addition, monitoring of the sites will be conducted by the Nevada Department of Agriculture to show success rates of the projects on reducing the negative invasive plant infestations that pose a fire risk to neighboring properties.

At the same time, the Carson Watershed ARRA projects have preserved and created 24 jobs in the Carson area. The projects have been implemented by crews from Douglas, Carson, Lyon and Churchill counties encompassing more than five Cooperative Weed Management Areas. The project itself involves a large amount of work along the Carson River corridor. The general goal of the Carson Watershed ARRA projects is to conduct fuels reduction to reduce fire frequency and rehabilitate stream banks for habitat and bank stability. After a busy field season in 2010 the project is more than half way done. Crews began work through the winter of 2009 to remove decadent debris and noxious weeds along the river in the above counties. In the Spring of 2010 on-the-ground treatment and mapping began. As of today, 500 acres of fuels reduction/weed treatments have been completed and approximately 8,500 acres of surrounding Carson River Watershed lands have been surveyed and mapped for invasive plants and noxious weed species. The work performed by the Carson Watershed crews is very labor intensive and the Nevada Department of Agriculture is appreciative of the diligence of the crews involved. In the upcoming 2011 field season the Carson Watershed ARRA crews are expected to continue treatment and restoration work along the river. The work accomplished will greatly improve the health and sustainability of the Cottonwood Gallery Forests and the Carson River which is a major resource for agriculture and public use in northern Nevada.



Hand planting of native shrubs at the Arrowcreek Restoration site in Washoe Valley

Lastly, the Clark County ARRA projects have retained or created approximately 26 positions. The primary goal of this project is to reduce the threat of wildland fires on riparian lands in Clark County. Specifically, efforts are focused along the lower Las Vegas Wash, tributaries to the Las Vegas Wash within the Las Vegas Valley, along the Muddy River in the Upper and Lower Moapa Valleys and along the Colorado River in Clark County. Specific plants targeted for removal include salt cedar, common reed, quailbush, and California palm (*Washingtonia filifera*). A secondary goal is to ensure that riparian lands do not become ecologically degraded as a consequence of clearing and flooding activities. Clearing activities will leave the landscape void of vegetation and therefore susceptible to soil erosion or undesirable species encroachment. In order to accomplish this goal, some of the susceptible areas will be revegetated with a planting design that minimizes future fire risk.

With the NDOA ARRA program funds, work has been done throughout the Warm Springs Natural Area, Big Bend Conservation Area, Clark County Wetlands Park, and Desert Rose Golf Course. For each site Fred Philips Consulting Firm was contracted to develop fuels reduction and treatment plans. In total, across all of the project sites 141 acres of unwanted, high fire potential infested areas have been cleared and treated. Currently and all throughout the 2011 season, field crews from Native Resources LLC will continue to do fuels reduction projects and begin planting new native plant species within the cleared areas. Re-



Fuels reduction and log felling at the Hawken Fire Site in Washoe Valley

vegetation is crucial in order for the Clark County ARRA project goals to be reached and ensure future sustainability for the valuable project sites from fire and invasive weed infestation damage.

All in all, the Nevada Department of Agriculture is pleased to have received funding resources from the American Recovery and Reinvestment Act. The ARRA funds have enabled the Nevada Department of Agriculture to increase their own work capabilities and have allowed the NDOA to establish priceless partnerships with many other agencies and contractors throughout Nevada. Although budget concerns loom in state, the ARRA funding and NDOA ARRA Program has preserved multiple positions which will be of great importance in the 2011 field season. The Nevada Department of Agriculture expects another successful season ahead for the ARRA projects. Program coordinator, Tina Mudd, encourages all legislators to attend project tours that are currently being planned for early this summer. In addition, the Nevada Department of Agriculture expects additional impressive field season restoration results and work accomplishments in the future.

**For more information regarding the NDOA ARRA Program please contact Tina Mudd at 775-353-3670 or [tmudd@agri.state.nv.us](mailto:tmudd@agri.state.nv.us)**



Spray crews at the Arrowcreek Restoration Site in Washoe Valley



### **SAVE THE DATE!**

## **Nevada's Small Farm Conference**

The Nevada Small Farm Conference presented by the Western Nevada College Specialty Crop Institute is set to occur on March 10-12<sup>th</sup> of 2011. The goal of the 2011 Nevada Small Farms Conference is to connect Nevada's farmers and consumers to improve the economic and physical health of our farms and communities. Join us for three days of educational workshops, round table discussions, and networking opportunities. The Nevada Department of Agriculture Specialty Crop Block Grant Program funded through the USDA will be providing and supplementing a portion of the funds for educational speakers on the topics of value-added processing, viticulture, soils & composting, building a food distribution system, crop seasonality, hoop houses, school garden/education programs, farm to school programs and more! A farm tour and Friday night food tasting will also be made available to participants. The Nevada Small Farms Conference is open to anyone interested and the Nevada Department of Agriculture encourages all to attend in order to understand a little more about where your food comes from!

The basic schedule of events is as follows:

**Thursday, March 10th**

Pre-conference workshops

**Friday and Saturday March 11th and 12th**

Three conference tracks to include professional speakers on the topics of soil fertility and composting, hoop houses, egg grading and labeling, beekeeping, business planning and marketing, and much more.

**Saturday, March 12th Only**

Community Education Day! Come learn about school gardens and education, urban farms, community gardens, and more!

**Detailed conference information can be found at [www.wnc.edu/sci](http://www.wnc.edu/sci) and information regarding registration can be acquired through Ann Louhela at 775-351-2551 or [louhela@wnc.edu](mailto:louhela@wnc.edu).**

**KNOW YOUR FARMER, KNOW YOUR FOOD!**

## Nevada Department of Agriculture

**Sparks Office Address:**  
405 South 21st Street  
Sparks, NV 89431-5557

Phone: (775) 353-3600  
Fax: (775) 353-3618

**Las Vegas Office Address:**  
2300 McLeod Street  
Las Vegas, NV 89104

Phone: (702) 486-4690  
Fax: (702) 486-4695

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Nevada Department of  
**AGRICULTURE**

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State of Nevada  
DEPARTMENT OF AGRICULTURE  
405 South 21st Street  
Sparks, NV 89431-5557  
4552-36