



Staff

- In the South, Jay Steele retired in September and Scott Cichowlaz retried in November. Both Agriculturist III positions have been opened for recruitment.
- In the North, Bret Allen has accepted a position with NDOT and his last day with the Department of Agriculture is December 1, 2017.
- We hired Pamela Willard to fill the Environmental Scientist II position under the direction of Meghan Brown. We are currently in the processes of recruiting for the Conservation Staff Specialist II.
- We are recruiting for an Agricultural Inspector III which became vacant when Jake Dick accepted a position with FSMA/Drought Initiative. And an Agriculturist II position under Food Safety.

Regulations

We have several changes to the Nevada Administrative Code. They are itemized on the agenda so we will not cover them at this time.

Chemistry

No significant Updates

Entomology

- During the quarter surveys for Japanese beetle, gypsy moth, exotic woodborers, Asian defoliators, Khapra beetle, brown marmorated stink bug, and light trapping for native and exotic insects were completed. All were negative at this time for target species, except brown marmorated stink bug was found in Nevada for the first time. Single specimens were found at two locations in Washoe County. The imported fire ant survey in southern Nevada is still underway and exotic woodborer samples are still being processed.
- The entomologist attended the National Entomological Collections Network meeting and the National Entomological Society of America meeting in Denver.
- The entomologist also attended a meeting of LCB for the finalization of changes in the apiary regulations as it pertains to Africanized honey bee in southern Nevada.
- 78 specimens were submitted for identifications (includes photo submissions), seven lectures and two insect identification hands on workshops and the entomology staff manned an informational booths at three events.
- An article on paper wasps was written for the Nevada Pest Management Association Magazine.

Plant Pathology

• A powdery mildew disease was recently detected from medical marijuana plants in a cannabis cultivation facility. Using a DNA barcode technique, the fungal pathogen was identified as a species of *Erysiphe* genus. This is the first confirmed identification of *Erysiphe* pathogen from a cannabis crop. Powdery mildew disease is a nuisance for

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indoor cannabis cultivation and is difficult to control. The specific identification of this fungus will help growers to select a more targeted fungicide to manage the disease.

- Another disease called *Phytophthora* crown rot was detected from banana yucca plants in a nursery. This is the first detection of *Phytophthora* disease from banana yucca, a native desert plant in the southwestern United States. Further inspections and eradication will be conducted in affected nurseries.
- The Nematology lab has completed nematode extraction from approximately 3,000 pounds of soil samples. The extracted nematodes are being identified by the plant pathologist to determine the presence/absence of a list of harmful nematodes regulated by foreign countries. The data will help to clear up international phytosanitary barriers for the export of Nevada agricultural commodities.
- Disease assessment for all onion crops in the 2017 season was completed. Pink root, *Botrytis* neck rot, and *Fusarium* basal rot are the major diseases found in the fields. No field was found to have white rot disease in the 2017 season.
- The Plant Pathology Program began to conduct FFY17 *Phytophthora ramorum* nursery survey, cyst nematode survey, Solanaceous crop disease survey, and CAPS phytoplasma disease survey. All these surveys are funded by the USDA Farm Bill Program or CAPS program.
- A first detector training workshop was held in the XXI Desert Green Conference to train more green industry professionals in how and what to look for exotic plant pathogens and pests. This is a part of the National Plant Diagnostic Network program for safeguarding US agriculture.

Pest Control Operations Licensing and Enforcement Program

- Pest Control educational talks.
 - October 12, 13 Desert Green: Ron Balsamo, Scott Cichowlaz
 - o November 13 PAC-UNCE: Ron Balsamo
 - o November 29 Univar-CAD: Suzanne Suter
 - o December 7 Target "Last Chance" Workshop: Ron Balsamo
 - o December 18 CTN-EDU: Ron Balsamo
- Completion of final draft of Aerial and Agricultural Ground Manual update: October 23
- Relicensing Packets (567) sent to licensed pest control companies Nov 2 (for 2018)

EPA

- Staff attended the PERC (Pesticide Education Resource Collaborative) advisory committee meeting on November 2-3, in Phoenix Arizona. PERC has been charged with developing outreach and training material for the U.S. EPA.
- Staff organized and presented during a RUP Training Seminar held in cooperation with UNR Cooperative Extension and teleconferenced to many locations across the state. The





training was held on November 13 and certification exams were given on the 14th. In addition, staff participated in the Desert Green Conference (10/18/2017) and planning for the Nevada Landscape Association Conference (1/11//18) and Cultivator Workshop on 2/21/18.

- Staff met with Washoe and Clark County School District staff to discuss IPM funding and activities which are taking place utilizing these funds.
- Pesticide waste events were held in both Sparks and Las Vegas and approximately 14,300 lbs. of waste and recycling of empty plastic pesticide containers.
- Ground and surface water samples were collected in both Southern and Northern Nevada to be submitted to the NDA Pesticide Laboratory for pesticide residue analysis. The results of the analysis have not been reported to date.
- Staff continued to conduct consultation visits to marijuana cultivation establishments to discuss pesticide application rules.

Nursery

Wrapping up the inspection season and currently assessing fees to see if a partial position
could be supported in Las Vegas to cover more nurseries (nearly 1200 nurseries in NV
with only two staff to cover).

Shipping Point/USDA Onion Grading

- Just completed annual USDA audit. No significant non-conformities.
- Potential in Southern Nevada to provide market inspection services if food distribution facilities express interest in contract services. This would require extensive training and a cooperative agreement with USDA, however if they demand is present, could be a service opportunity for NDA.
- Sheryl Hunnewell received her USDA license for providing onion grading services.
- Four staff are being recommended to APHIS to go through training that will approve them to issue federal phytosanitary certificates and perform state export inspections to prevent quarantined pests from.

Food Safety Modernization Act, Produce Safety Grant

Staff have been collaborating with FDA in reviewing water standards under the FSMA, PSR. A meeting with growers and the walker river irrigation district is anticipated once the irrigation water standards are finalized by FDA to discuss options for obtaining water testing data. The pilot for the Farm Inventory system is anticipated in the next 60-90 days which will allow compliance data of farms to be reviewed, identifying farms that will be required to comply under FDA requirements. NAC workshop was held on NAC 576.128 to further clarify requirements for all produce farms selling products to complete the farm registration aka "producer certificate" registration. Organic growers were previously exempt since their products are verified during their organic inspection, however the organic certification data on the National Organic Program webpage is not sufficient for identifying who must comply, which is why NAC is being changed





to require their registration (they will remain exempt from the \$50 fee since they pay for their organic certification costs). A budget revision from unused funds in FY 17 (due to a shortened grant year) was accepted by FDA to go towards creating produce safety training videos that can be used during NDA trainings and by farm managers as they train staff on best practices.

Producer Certificate (NAC 583)

Requirements for egg producers have been further defined during NAC Workshop on NAC 583. The objective is to align egg producer requirements with federal requirements as deemed feasible for Nevada egg producers. Poultry requirements were also discussed during the workshop (more information can be provided by Anna Vickrey).

Specialty Crop Grant

Ten projects were awarded grant funding by USDA which includes projects in Northern and Southern Nevada. Projects accepted include next generation farmer training, crop/market research, youth education on specialty crop production, production education at tribal reservations, and Specialty crop event coordination to improve local crop sales.

Drought Initiative Grant Program

Jake Dick was hired to establish and manage the state drought initiative funding available for FY 18. A Request for Proposal document was created and applications are due mid-November that work towards improving water conservation practices by ag producers in Nevada.

Seed Program

- 1) The information provided below illustrates accomplishments of the Nevada Department of Agriculture's Seed Program from the date range of October 2017 December 2017.
 - The seed program has been nominated to host the Western Regional AOSCA meeting occurring April of 2018. Preparations are ongoing to host 10 state seed representatives in Lake Tahoe, NV.
 - The program manager has succeeded in bringing multiple new native seed vendors
 into state to begin certification services and heighten the level of native seed quality
 that will be used for restoration efforts.
 - A total of 99 native collection applications have been received for the 2017 fall collection season and the seed program will Source ID certify these collection sites to ensure purity levels. This is up from 4 applications the year.
 - The seed program manager intends to hire new personnel to focus on development of the native seed program will determine new management strategies to account for the high level of program interest.
 - The seed program will begin conducting "winter grow outs" on potato seed for certification potential.
 - This will require greenhouse refurbishment to account for new crop production to ensure seed crops are lacking generational infections.

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- Program staff has been involved with numerous education events, teaching elementary school kids about the intricacies of agricultural seed production.
- The program is creating new resources to educate the industry on providable services, such as; seed testing, crop health assessments, native seed certification, and crop marketing tools.
- New certification standards have been developed to begin accepting industrial hemp varieties into certification programs for seed production.
- NAC 587 has been amended to incorporate new seed law allowing for the use of a
 wide area of beneficial pesticides to increase production yields, at the request of the
 industry.
- The program manager continues to meet with federal and state counterparts regarding potential cooperative agreements.
 - Discussions have been ongoing concerning the development of a Foundation Seed Program, to be managed by the State Department of Agriculture.
 - Increase the availability of high quality seed stock for varietal opportunities.
- 2) The information provided below illustrates accomplishments of the Nevada Department of Agriculture's Industrial Hemp Research and Development Program from the date range of October 2017 December 2017.
 - The industrial hemp program is foreseeing expansion into the 2018 season due to the impact of SB 396.
 - NAC 557 language has been drafted and will go to hearing November 29, 2017 to inform the industry about the NDA's ability to begin licensing growers, producers, and handlers of industrial hemp.
 - The program is accepting calls related to licensure of processing/handling facilities for industrial hemp.
 - All inspections on outdoor grow operations have been finalized and reports have been sent.
 - o Zero operations tested above 0.3% delta-9 THC and had to be destroyed.
 - The program manager has joined a national task force for program administration with the intent to bring nation-wide solidarity into Nevada's program.
 - One industrial hemp variety is being considered for seed certification, which will bring new domestic seed options into the industry.
 - New application formats are being developed to address the requirements of NAC 557 amendments via NV SB 396.
 - A grower's meeting is being planned for January/February of 2018 to clarify aspects of the new program administration.
 - The program manager has been awarded the title of "outstanding leadership of the Nevada hemp industry" by the Nevada Hemp Association.

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- New strategies are being developed to allow for more program efficiency and agency collaboration efforts (NV Department of Taxation).
- 3) The information provided below illustrates accomplishments of the Nevada Department of Agriculture's *Allium* Quarantine Program from the date range of October 2017 December 2017.
 - Research, in collaboration with the Desert Research Institute, is ongoing related to the study of white rot and potential bio-control agents.
 - The program manager is attending a garlic and onion symposium in February to discuss protocol and control options for white rot infected fields.
 - The program is considering appointing a full-time employee to assist with program inspections.
 - Greenhouse studies are occurring to track disease progression and identifiable aspects of white rot infections in garlic (*Allium sativum*).

Noxious Weeds

- 1) Submitted NAC revisions for changes to the noxious weeds list. Posted workshop date scheduled for December 14th held at UNR Cooperative Extension offices around the state. Written comments accepted at Sgephart@agri.nv.gov up to and days following workshop (see attached posting and draft revisions).
- 2) Three biocontrol releases done using newly approved fungal rust on Canada thistle (Pussinia punctiformis). Sites selected for release in Douglas, Elko, and White Pine County's. Sites will be monitored twice annually over four years to verify effectiveness. Any private landowners interested in participating in further releases please contact, Sean Gephart.
- 3) Noxious weeds program coordinator released a Request for Proposals within the USFS Cooperative Weed Management funding grant in the sum of \$35,000 (see RFP attached). Proposals will be accepted until EOB December 8th.
- 4) Noxious weeds staff attended and provided presentations at the North American Invasive Species Management Association's annual conference held in Reno.

Rangeland Health

- 1. Stockmanship clinic
 - Coached a one week clinic to improve grazing distribution through Stockmanship
 - Worked collaboratively with BLM and NRST
- 2. Reseeding projects
 - Working with Northern Nevada Stewardship Group to reseed in burned areas that have high potential for erosion





- 3. Request for proposal
 - Created an RFP for over \$387,000 for large projects to enhance or restore Sage Grouse habitat
- 4. Fire Tours
 - Actively involved with Elko BLM in developing plans for post fire restoration