
Division Overview

Pending matters of significance

- Crop programs
 - Hemp litigation:
 - The division is currently working through the hearing process with several growers. These center around disposal plans and communication with the department.
 - USDA's Agricultural Marketing Service (AMS) is reviewing and approving State plans. The NDA is currently working on the Nevada State Hemp Plan, which will be submitted to USDA this spring. Elements of the state plan include:
 - Testing procedures
 - Data collection
 - Disposal of plants and products
 - Enforcement procedures for violations of the Hemp Program
 - Annual inspections of hemp producers
 - Information sharing for law enforcement and the secretary of agriculture
 - State certification of resources and personnel necessary to administer the state Hemp Program
- Pesticide Programs
 - On December 30, 2019, R154-17 (modifications to pest control applicator licensure, definitions, fines and application device/service container labeling requirements) was on the Legislative Commission's agenda to be heard for approval. NDA staff and two board members were present to provide background and justification for final adoption. After public comment and questions/comments from committee members, R154-17 was deferred. Currently there is still opposition from the Nevada Pest Management Association. The department is working with LCB to get R154-17 on the next agenda to get resolution for the department and industry.
 - The delay of R154-17's final adoption is not only postponing critical revisions to container labeling, but it is delaying NDA's submittal of our state certification plan required by the U.S. EPA. The primary responsibility of implementing the Certification of Pesticide Applicator's Rule (40 CFR 171) is granted to individual states in lieu of EPA (Nevada has been granted this authority). This process ensures national consistency and minimum standards (which were recently made stronger) for people applying pesticides. Because R154-17 includes field categories and testing, the delay is affecting the draft of the required state plan.
- Quarantine Programs
 - Mormon Cricket and grasshopper Survey and Control
 - A meeting was held with Humboldt County Commissioners to discuss and plan for the 2020 Mormon cricket program in that area. Public meetings

were held the week of February 24th at numerous locations in northern Nevada for this program. A presentation of the expected infestation and possible treatment areas will be given at the meetings. Coordinating meetings have also been held with USDA APHIS Plant Protection and Quarantine and the BLM regarding this year's possible treatment areas.

Partnership activities

- Pesticide Programs
 - U.S. Geological Survey (USGS)
 - NDA staff renewed the annual joint funding agreement with USGS to implement the ongoing program to monitor the occurrence of pesticides in water resources in Nevada. Since 2013, significant data has been collected from surface water sampling along the Humboldt, Carson and Walker Rivers. The 2020 project will consist of developing informational fact sheets based on the data collected from the above-mentioned locations.
- Natural Resource Programs
 - County Planners
 - In recognition that noxious weeds were not a standard of consideration during the site development approval process, the noxious weeds coordinator sent a letter to the county planners throughout the state requesting an opportunity to meet and discuss how noxious weeds may be considered during the process. Since mailing, the noxious weeds coordinator received invitation and met with county planners from Elko, Churchill, and Lyon counties.
 - Native American Tribes
 - On-going communication with Duck Water Shoshone Tribe, Natural Resources Division Manager, Annette George to develop a training event covering weed ID, grasshopper control, revegetation seed selection, and pesticide safety. The developed training event is tentatively scheduled for spring of 2020 at the Duck Water Natural Resources Building.
 - Nevada Farm Bureau
 - Collaboration between NDA and Nevada Farm Bureau representative, Kyle Reber is on-going while developing a Noxious Weeds training event for producers in Dyer. The training was originally requested by Esmeralda County Commissioner and Dyer farmer, Ralph Keys after the noxious weeds' coordinator provided a presentation to the county commission. By having it in Dyer helps them acquire CEUs needed to maintain their pesticide certifications.
 - Nevada Native Seed Partnership
 - The seed certification program has been working diligently with the Nevada Native Seed Partnership (NNSP) to finalize publication of a Nevada-specific Seed Strategy. The intent is to append this document to the Nevada Shared Stewardship agreement to promote the importance of using locally adapted, native, seed in rangeland restoration projects, especially those impacted by wildfire. The NNSP is a collaboration between state, federal and non-government organizations.

- Quarantine Programs
 - University of Maryland
 - Plant Pathology is collaborating to identify various fungal and bacterial pathogens causing hemp diseases in the United States. The efforts will help to understand the diseases and their management.
 - University of New Mexico and Utah State University
 - Plant pathology is partnering to develop a Western US Hemp IPM Program, so the knowledge obtained through the working group helps hemp producers to manage hemp diseases and pests.
- Chemistry
 - EPA
 - The chemistry laboratory will host EPA sponsored 2020 National Pesticide Workshop in the NDA Chemistry lab in early June. This is the first time NDA has hosted this workshop. Over 12 state pesticide chemists across the US will be in attendance. Lab equipment manufacturing professionals are also invited to attend during the training to demonstrate how to best utilize the lab instrumentation as well.

Program Updates

- Crop Programs
 - Substantial growth was experienced in the number of growers in the hemp program (please refer to chart below for year over year growth of registered growers). We also saw significant growth from 2018 to 2019 in the number of handlers from 47 to 61 and seed producers from 16 to 47. Over 400 hemp samples (from August through mid-December) have been analyzed by NDA’s chemistry lab for THC concentrations, to establish state and federal compliance for those crops. Of those samples, 13.49% were above allowable limits, thus considered marijuana requiring crop disposal. Based on farmer-reported data, this is an estimated 446.44 acres.

Year over year Growth of Registered Hemp Growers in Nevada

2018 Applied Area =	1,880.06	235,688.00
2018 Planted* =	1,128.00	141,413.00
2018 Growers =	115	
**2019 Applied Area =	14,112.66	1,372,083.00
**2019 Planted =	4,917.54	266,668.00
**2019 Growers =	216	

**2018 planted area is approximate based upon observations during field inspections.*

***2019 data as of 12/18/2019.*

- Export Certification Program
 - Continued growth in onion exports to Canada. Industry wide exports have grown from 6,660,927 pounds shipped in FY 2019 to 7,053,465 pounds through December for FY 2020 with 2.5 months of the shipping season remaining.
- Seed Certification Program

- The seed certification program finished the 2019 season a total of 166 site inspections were performed, designating wildland collected seed as “source identified.” In 2018 a total of 167 sites were source identified. The BLM requires source identified certification for any potential seed purchases.
- Quarantine Programs
 - Pathology program submitted semi-annual accomplishment reports of FY19 survey projects to the USDA. Since July 1, 2019, the lab has collected:
 - 2,262 plant and soil samples
 - 1,926 samples analyzed for various exotic pathogens and nematodes
 - Plant pathology lab found a hemp crop infected by a list of species of fungi, oomycetes and bacteria. The crop failed due to the disease complex. This new finding suggests that existing disease pressure in the field be a potential challenge for sustainable outdoor hemp production.
 - Entomology 2019 surveys for exotic insect pests were completed and samples analyzed. Over 3,780 samples were collected from traps for 23 exotic pests. All were negative. This represents over 10,000 identifications.
- Chemistry
 - Hemp samples collected:
 - 2018 – 140 samples
 - 2019 – 427 samples
 - THC analysis updates –
 - Between Oct. 18 to Oct. 30, total 100 marijuana samples were analyzed for its total %THC, %THC and %THC-A. All samples were collected from 10 licensed private laboratories throughout state.
 - From July 1 to December 31, 2019, total 410 hemp samples have been analyzed for its total %THC, %THC & %THC-A, of which 49 samples of total %THC have failed the 0.34% total potential THC cutoff.

Industry Impact

- The Interim Final Rule for Establishment of a Domestic Hemp Production Program under the 2018 Farm Bill was released September 31, 2019. The NDA submitted several comments regarding parts of the rule that have the potential to significantly impact program administration and production of hemp in Nevada. When the final rule is promulgated there will be clarifications and direction to the department and growers on topics, which have been unclear or undefined. Some of these include:
 - The proposed sampling method of just the flowering portion
 - The proposed 15-day requirement between sample and harvest
 - Negligent producer classification
 - Lab accreditation requirement
 - Law enforcement outreach
 - Crop testing (total potential THC)
 - The definition of disposal
- In partnership with the Nevada Department of Transportation (NDOT), the noxious weeds program filled the NDOT-funded Agriculturist III position hired to review weed mitigation plans submitted to NDOT for highway construction projects and to train NDOT maintenance staff on how to identify and control noxious weed species. The

position is stationed in the Sparks NDA office and is supervised by the department's noxious weeds coordinator. The position was filled January 13, and the incumbent has already gotten started reviewing one mitigation plan and coordinating new training materials and requirements for NDOT staff. The resulting actions and plans created from this position will help stop the spread of noxious weeds around roadways and help NDOT properly treat sites along our Nevada roadways.

- Pesticides and drones: The demand of unmanned aerial vehicles ("UAV" or "drones") for pest control purposes has increased exponentially over the past several months. Relatively new uses for UAVs in pest control for both agricultural pests and noxious weeds. Compared to a traditional fixed wing aircraft, a UAV can fly lower, is significantly smaller, and can hover in place for extended periods of time. These enhance the precision, speed, and safety of pesticide applications. NDA staff is currently working with industry and reviewing state regulations and pesticide labels to determine when and if UAVs can be used to apply pesticides in Nevada.