



In This Issue...

President's Message 1-2

AZ SRM BOD Contact Info and Website 2

Arizona Summer Meeting Flyer 3

Arizona Summer Meeting Agenda 4

Director North Report *JD Eddy* 5

Seasonal UA Extension Job Advertisement 5

USDA Northeast AZ Drought Responsive Seeding Strategy 6-7

S. Clark Martin Scholarship Recipient 8

Call for Award Nominations 8

Arizona Section Membership 9

Calendar of Events 10

Featured Quote:

Good things on the land happen over time and are seldom the result of a single encounter.

— *J.R. Bell,*
North Carolina Legislator

President's Message

Andrew Brischke

G'day Rangers,

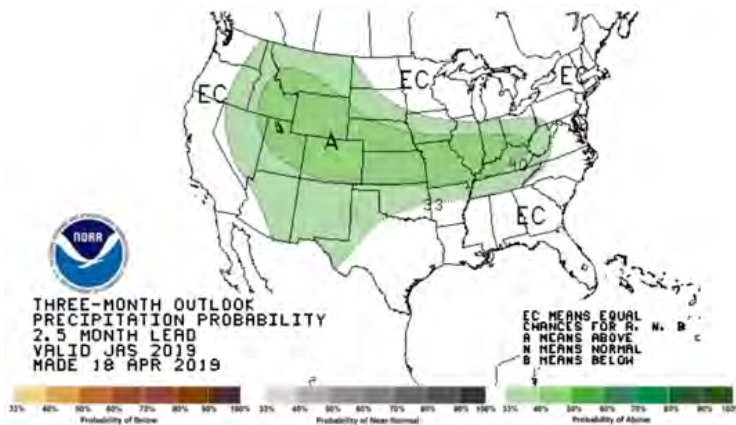
I'll start off this newsletter with the seemingly obligatory weather/climate report from my area: What a difference a year makes! At this time last year we were in one of the most severe droughts in recent memory.

Areas throughout Arizona ranged from D2 (Severe Drought) to large swales of D4 (Exceptional Drought). This year we've had a relatively wet winter and spring throughout much of AZ including snow in the higher elevations, at the end of May no less. I hope that this year's precipitation in your area has been effective and you find your range ready to accept the optimistic summer monsoon outlook. It would be nice to string two (or more) consecutive wet



seasons together and hopefully see some recovery from the devastating drought last year.

Next, on behalf of the AZ SRM Board



of Directors, I'd like to invite you to our summer meeting in Show Low, AZ, August 14 - 16. I'll try not to steal AZSRM VP Erin Thomas' thunder but I have seen a preview of the summer agenda and it looks to be packed with valuable information. AZSRM is also hosting a bonus precipitation workshop during the day on Wednesday. I'm really looking forward to the meeting and I hope you are as well.

Speaking of our Section and the meeting, I am hoping to reach two goals by the end of the summer meeting. Last newsletter I mentioned our parent society has declared this year's theme as "The Year of the Section" and one way to increase the

Continued on Page 2...



President's Message

...Continued from Page 1 strength and value of our Section is through committee work. Below you will find a list of our Section's committees and the Chairs of those committees. Almost all of these are committees of one if it isn't vacant, and a committee of one is hardly a committee at all. You can find descriptions of these committees on our website at: <http://azrangelands.org/docs/AZSRMGUIDELINESRevAug2010.pdf>. I encourage each of you to review these committees and volunteer to serve so we can have these filled by the close of the summer meeting.

Committee	Chair
Public Relations, Recreation, Outreach	Vacant
Newsletter	Kelsey Landreville
Honors and Awards	Jason Martin
Auction and Fundraising	Vacant
Membership	Joey Dahms
Nominations and Elections	Vacant
Activities	Vacant
Youth Activities	Vacant
NRCWAY	Kim McReynolds
Ranchers	Alanna Lonsdale
Scholarship	Vacant
Historian	Willie Sommers
Science	Vacant
Bylaws, Articles of Incorporation, Guidelines	Vacant
Young Professionals	Brett Myers
Native Range	Erin Thomas

Which brings me to my second goal for the summer meeting: Our Website. It should not come as a surprise that our website needs an update. Before I move on, I would like to thank Jeff Schalaus for maintaining and updating our current website for all these years. I'm not even sure how long he has been doing this but, once again, Thank You, Jeff. The Board has decided to establish an AZSRM Website Task Group which will be charged with developing the creative look and some of the functionality of the new website. The Board has approved funding to hire a consultant to work with the Task Group to build the website including moving the legacy information over to the new website. If you find yourself to be on the more creative side or have the technical capability to help design and build a new AZSRM website, we are looking for you to help with this incredibly important project. Please contact me (brischke@cals.arizona.edu) or any of the Board if you are interested in joining the AZSRM Website Task Group. My hope is to have the Task Group established before the summer meeting so the group can hit the ground running.

Thank you for your commitment to AZSRM,

Andrew Brischke
President, Arizona Section—Society for Range Mgmt.

2019 Arizona Section Board of Directors and Website

President

Andrew Brischke
Brischke@cals.arizona.edu

Past President

Iric Burden
Iric.Burden@az.usda.gov

Director North

JD Eddy
JEddy@azgfd.gov

U of A Chapter President

Brian Kopyy
UofATierraSeca@gmail.com

President-Elect

Erin Thomas
Erin.Thomas@usda.gov

Secretary Treasurer

Ashley Hall
AshleyS3@email.arizona.edu

Director South

Alisha Phipps
Alisha.Phipps@az.usda.gov

ASU Chapter President

Sharon Maurer
Sharon.Maurer@hotmail.com

Vice President

Emilio Carrillo
Emilio.Carrillo@az.usda.gov

Director North

Joshua Grace
JGrace1@email.arizona.edu

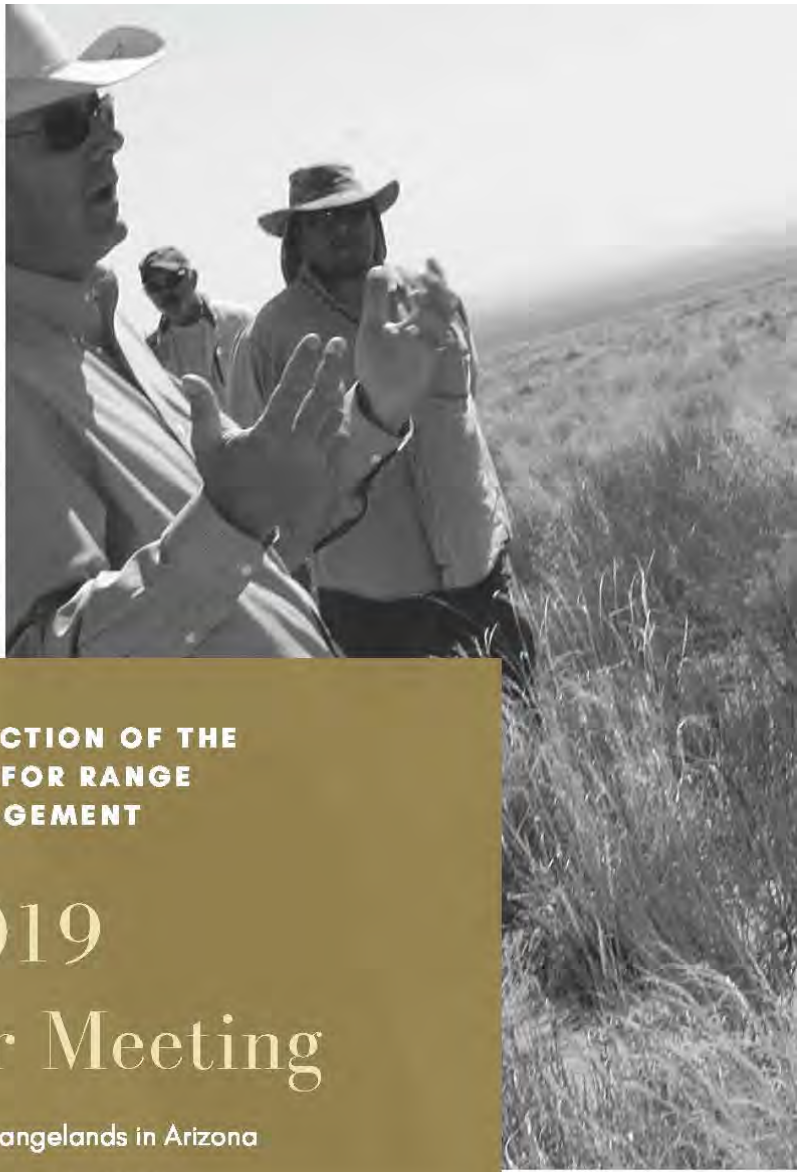
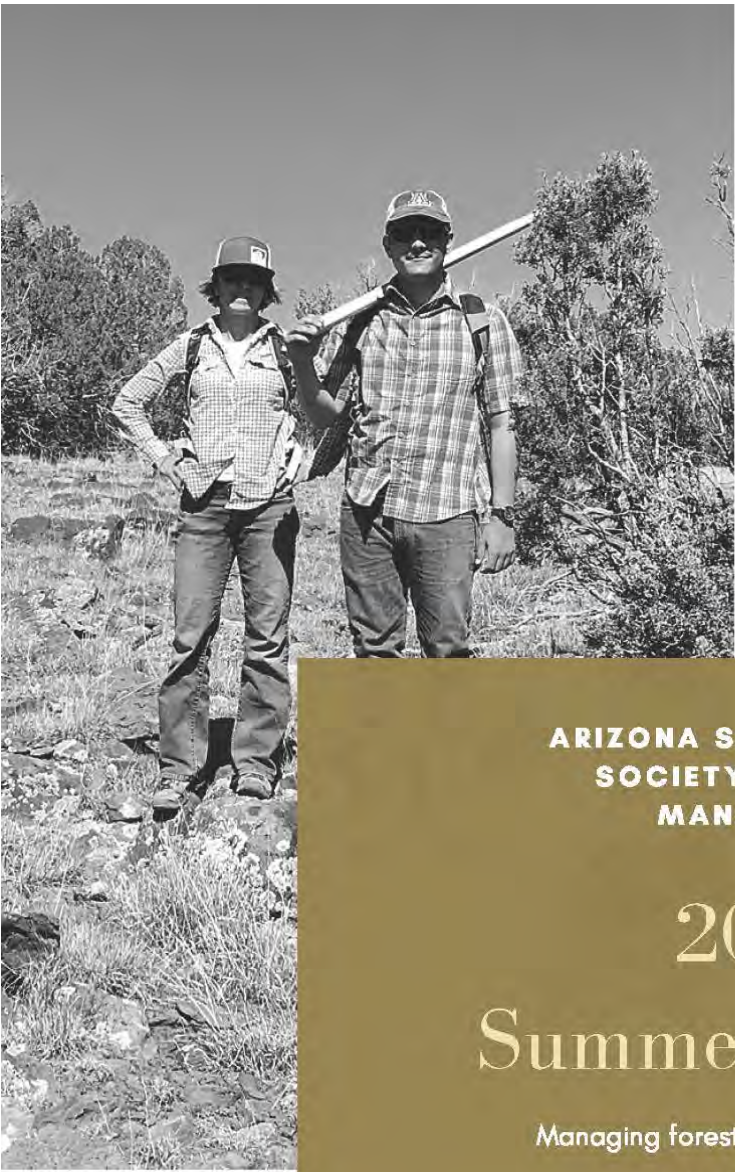
Director South

Kent Curley
Kent.Curley@az.usda.gov

Arizona Section Website

www.azrangelands.org/





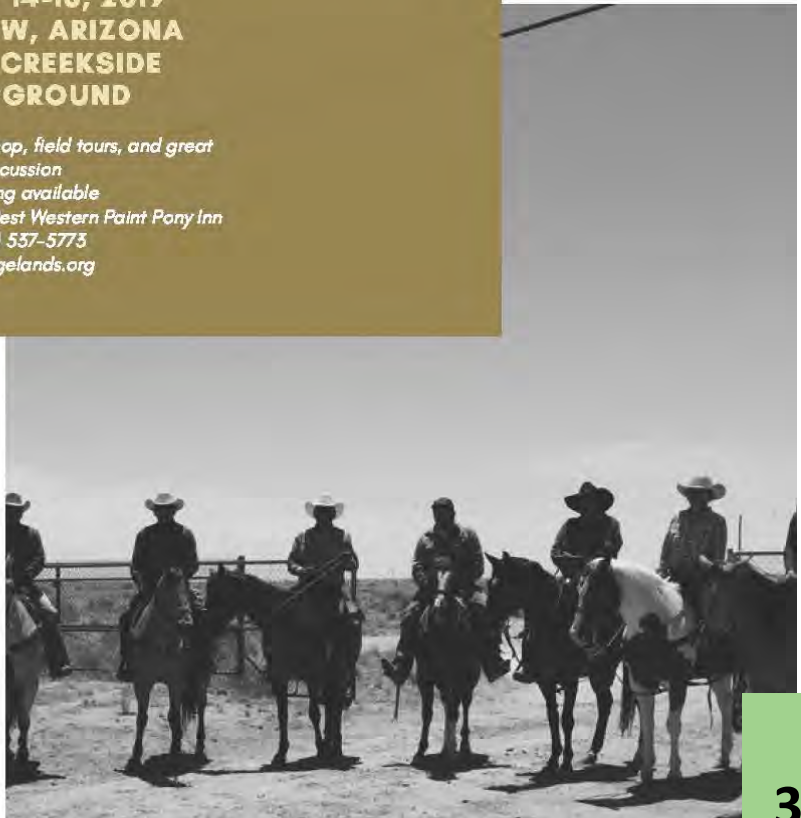
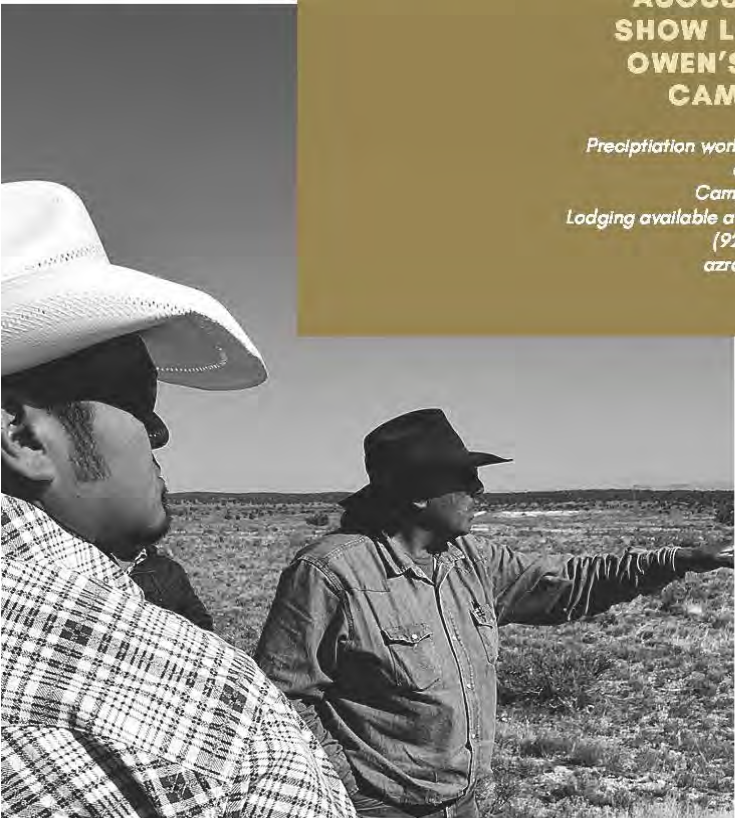
ARIZONA SECTION OF THE
SOCIETY FOR RANGE
MANAGEMENT

2019 Summer Meeting

Managing forest rangelands in Arizona

AUGUST 14-16, 2019
SHOW LOW, ARIZONA
OWEN'S CREEKSIDE
CAMPGROUND

*Precipitation workshop, field tours, and great
discussion*
Camping available
Lodging available at Best Western Paint Pony Inn
(928) 537-5773
azrangelands.org



Summer Meeting Agenda

AZ Section- Society for Range Management:

2019 Summer Meeting—August 14-16, 2019

Owen's Creekside Campground

Show Low, AZ



Wednesday (8/14)

Rangeland Precipitation Workshop, Presented by UA Cooperative Extension

Arizona Game and Fish Department, Region 2

2878 E. White Mountain Blvd.

Pinetop, AZ

Thursday (8/15)

Field Tour: Managing Forested Rangelands

Apache-Sitgreaves National Forest

Black Mesa Ranger District

Heber-Overgaard, AZ

9:00 am – 4:00 pm

Feral Horse Mgmt. & Perspectives

Post-Fire Grazing Mgmt.

Big Game Wildlife and Habitat Mgmt.

Friday (8/16)

Field Tour: Managing Forested Rangelands

Apache-Sitgreaves National Forest

Lakeside Ranger District

Lakeside, AZ

4 Forest Restoration Initiative

Wood Products Tour

Small Business Tour



Director North Report—*J.D. Eddy*

This is my first opportunity to address you as the new Director North for the Arizona chapter of SRM. Thank you for this opportunity and I look forward to continuing conservation work in the state through all of you. It has been my experience that when we all work together we all benefit: ranchers, livestock, habitat, and wildlife alike. Coordinating efforts for the betterment of all is my goal as your newly elected director and as a land-owner relations program specialist for Arizona Game and Fish Dept.

It has been a great year so far for moisture here in the White Mountains. Spring wet weather has assisted in delaying both fire season and some of our nuisance wildlife calls well beyond when we would expect to be concerned with them during the last couple years. We are also looking great for the current fishing season. In fact, with recent rains, we are still seeing many of our local lakes spilling. As we wrap up calving season for the year, we should keep an eye out for increased insect activity given all this much needed moisture. High populations of these critters could result in additional plague or other outbreaks here in the northern regions of the state. It has also been a banner year for mustards and other valuable, but potentially problematic species of plants. Good rotations are an excellent tool for avoiding too much utilization of these species as we look for much of the range to begin some recovery after last years drought. It will be interesting to see what this years moisture does for our landscapes. Although it will take some years for any significant recovery to occur, this season is a welcome reprieve from our historic drought conditions here in the northern part of Arizona.

We are also looking forward to another great year in conservation here in northern Arizona with new cycles of funding occurring and additional rains helping to make this last years programs a continued success. Partnerships continue to be very important in our efforts to conserve range and wildlife areas for the betterment of everyone involved. We continue to work to develop creative and sustainable practices with the many challenges that affect our rangelands. In this effort, partnerships continue to play a vital role. As we work together to address the many challenges to our respective fields I hope to continue developing creative solutions to problems and I welcome any input or insight you may have to these many issues.

Along these lines, we are looking forward to a great summer meeting to be held here in the White Mountain area. We will have a nice, convenient base camp here in Show Low with multiple site visits to be conducted throughout the Apache Sitgreaves National Forest. None of this could be possible without partnerships with many federal, state, and tribal agencies, and, of course, the Arizona Section of the Society for Range Management. We look forward to continuing to develop additional partnerships with all of our local landowners, lessees, and permittees as we all work to conserve this great land as its stewards. I look forward to seeing you then.

Yours in conservation,

J.D. Eddy

Are you looking for a seasonal rangeland monitoring position?

University of Arizona Gila County Cooperative Extension is hiring a contract position to assist with rangeland monitoring on the Tonto National Forest from September 2019 to March 2020. Preferred skills include: plant identification and knowledge of monitoring techniques (dry weight rank, frequency, fetch utilization). Work is primarily outdoors and involves standing and hiking; it also involves driving 4WD vehicles/ATVs over rough terrain, exposure to variable environmental conditions, and occasional overnight camping in remote locations. Personnel can be paid \$17-\$20 an hour, depending on experience. If interested, email your resume to Ashley Hall at AshleyS3@email.arizona.edu.



Northeastern Arizona Drought Responsive Seeding Strategy

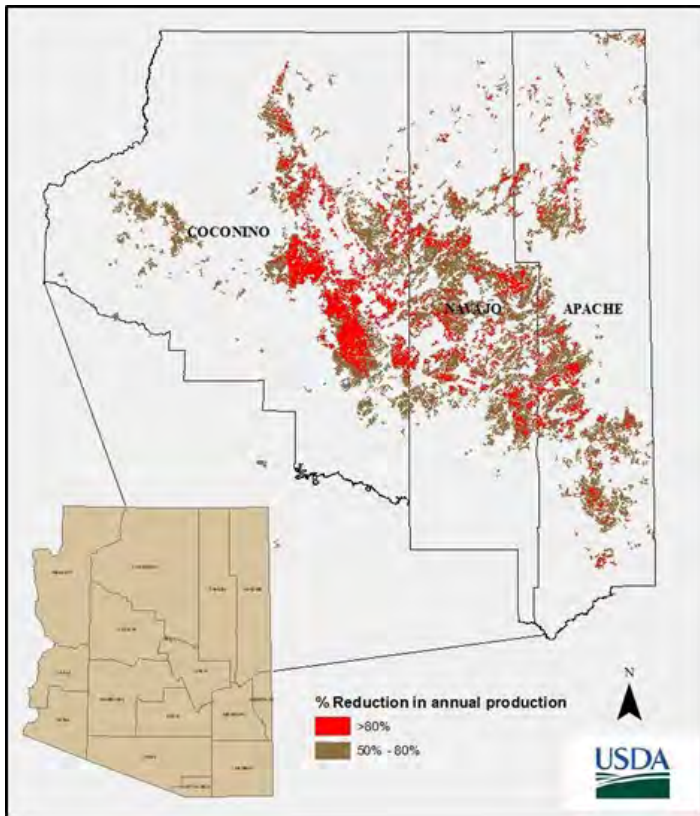


Figure 1: Map depicting areas identified as having >50% reduction in annual vegetative production.

Introduction

Northeastern Arizona experienced a devastating drought beginning in mid-2017 and it remains to be seen if an end is near. In March 2019, four counties were declared as primary natural disaster areas (Coconino, Apache, Navajo and Greenlee) (USDA-FSA 2019). Large scale herbaceous/shrub/tree mortality and/or severe reductions in annual production are now apparent (Map 1). In response to the current conditions, the “NE Arizona Drought Responsive Seeding Strategy” has been developed. This strategy has utilized a technology that quantifies the severity and extent of the drought effects and proposes a responsive alternative.

The southern region of the Colorado Plateau, like the rest of the plateau, has been influenced by drought, fire and humans. There have been five severe, multi-year drought events in the western United States in the 20th century: The 1930’s “Dust Bowl”, the 1950’s Southwest drought, and the 1980, 1988, and 2002 droughts (Cook et al. 2007). The predicted droughts to come are too far exceed the severity of any other drought in

the 20th and 21st century (Schwinning et al. 2008). Beginning in the summer of 2017, the NE portion of Arizona entered drought with slightly below normal monsoonal moisture followed by one of the most severe winter droughts the region has experienced. The Little Colorado and Verde watersheds experienced 20% of normal precipitation around the Flagstaff, Arizona area while the eastern portion of the state received 0-10% of normal precipitation (SNOTEL data report, 2018). The scant winter moisture was then followed by another severe lack of monsoonal moisture during the summer of 2018. The National Drought Monitor reported Apache, Coconino and Navajo counties were in D4 drought sta-

	D4	D3	D2	D1	D0
Apache County	25	35	39	93	98
Coconino County	15	35	41	69	97
Navajo County	25	35	39	69	98

Source: <https://droughtmonitor.unl.edu/>

tus for extensive periods of time (analysis ended in October 2018) (Table 1).

The mean departure of production (vegetative pounds per acre) for 2018 compared to the last 34-years (1984-2017) average was forty-two percent (42%). Over three and a half million acres (~3,850,000 acres) have been identified as having 50 – 100% reduction in vegetative production compared to a 34 year mean ([Rangeland Production Monitoring Service](#)).

Droughts are projected to increase in frequency and severity throughout the United States, especially in the Southwestern U.S., potentially leading to degraded conditions such as: Air Quality (increased particulate matter from wind erosion, increased particulate matter causing snow pack to melt more rapidly in the Colorado Rockies) along with issues caused by sheet and rill erosion. Current management paradigms and responses are not embracing this reality. Rapid response teams are sent in after natural disasters such as hurricanes and tornados to provide relief while the United States Forest Service reseeds immediately after catastrophic wildfire as part of the Burned Area Emergency Response (BAER) procedures. In the rangeland and agricultural sectors, economic aid due to drought effects does occur, but rarely is it implemented as a conservation strategy, despite the strong need for this action. *Continued on page 7...*



Northeastern Arizona Drought Responsive Seeding Strategy

...Continued from Page 6

Reseeding following severe droughts, like those being experienced in the Southwest, is a critical step towards being more responsive, requires precise implementation and must be economically feasible.

Methodology

Rangeland Production Monitoring Service (RPMS)

The Rangeland Production Monitoring Service (RPMS) provides estimates of annual production from 1984 to present day and can estimate annual production across over 600 million acres of U.S. rangelands. In addition, the RPMS provides in-season estimates of expected yield. Using RPMS, approximately 3.7 million acres (out of 12 million) of severely underperforming vegetative production were identified in the three-county NE Arizona region and are considered the boundary of the project area (figure 1). A protocol was developed to only analyze the greatest affected areas (50-80% and >80% reductions in vegetative production) and in contiguous blocks greater than five hundred acres (>500 acres).

Aerial Rangeland Seeding

The project area encompasses a diversity of land ownership. Areas affected by the drought fall on Tribal Reservations, State lands, various Public Lands and Private. The one common thread across the project area is large scale die offs of native vegetation and/or severely reduced productivity that increases the risk of soil loss, particulate matter and non-native species invasion. To combat the increased risk, the Tucson Plant Material Center has provided options for seeding within the impacted areas. Two distinct breaks in precipitation occur (6-10 inch and 10-14 inch). The PMC has recommended seeds for both precipitation zones that are cost effective, readily available on the open market and have the best chances of success.

In Summary

This was a collaborative effort between the USDA Natural Resources Conservation Service and USDA Forest Service that developed a responsive strategy to rapidly changing environments. The current planning and funding mechanisms can be slow. As a result, opportunities to address critical resource needs are typically missed. Current technology can more rapidly identify and quantify extent and severity

drought effects, thus, allowing land stewards to adapt to changing conditions. The intent is to keep the process simple and as cost effective as possible. Vegetative response is dynamic, and this strategy will be adaptive to conditions from year to year. Some areas may not need to be treated in future year(s) due to positive vegetative responses to favorable environmental conditions.

Literature Cited

Cook, E. R., C. A. Woodhouse, C. M. Eakin, D. M. Meko, and D. W. Stahle. 2004. Long-term aridity changes in the western United States. *Science* 306:1015–1018.

Natural Resource Conservation Service. Arizona SNOTEL Report. April 2018. <https://www.nrcs.usda.gov/wps/portal/nrcs/az/snow/>

Reeves, M. C. Last visited 2019. Rangeland Production Monitoring Service. Rocky Mountain Research Station. <https://www.fs.fed.us/rmrs/projects/development-rangeland-production-monitoring-service-could-improve-rangeland-management>.

Schwinning, S., J. Belnap, D. R. Bowling, and J. R. Ehleringer. 2008. Sensitivity of the Colorado Plateau to change: climate, ecosystems, and society. *Ecology and Society* 13(2): 28. [online] URL: <http://www.ecologyandsociety.org/vol13/iss2/art28/>.

USDA-FSA. 2019. USDA designates four Arizona Counties as Primary Natural Disaster Areas. Release #0033.19. https://www.fsa.usda.gov/news-room/emergency-designations/2019/ed_2019_0328_rel_0033

United States Drought Monitor – Arizona, July 2017 – October 2018. The National Drought Mitigation Center, University of Nebraska-Lincoln. Lincoln Nebraska. <https://droughtmonitor.unl.edu/>

United States Geological Survey document: “Colorado Plateau Province. Geological Provinces of the United States. Retrieved 03/18/2019



Student Scholarship Recipient

2019 S. Clark Martin Scholarship Recipient: Brittany Allen from Arizona State University

Brittany Allen, a student at Arizona State University of Arizona received the S. Clark Martin Memorial Scholarship for the highest score among the Arizona Section students competing in the contest at the annual meeting of the Society for Range Management in Minneapolis, MN in February 2019. As a first time contestant, she placed 3rd out of 31 contestants in the Extemporaneous Speaking Contest. The award includes \$300 from the Arizona Section.

Brittany was born in Central Texas and lived in various states in the United States as her father was in the military, lastly arriving in Southern Arizona in 2009. She became interested in rangeland management under the influence of her passionate professor, Eddie Alford, Ph.D. Dr. Alford's direction set an exemplary example of land management. She is interested in habitat management, ecology of the southwest, and has a passion for ecological systems from the environmental processes to the animal consumer. Brittany will graduate this spring from Arizona State University with honors designation and then will begin a master program. Brittany enjoys horseback riding, nature viewing and hiking, camping, adventures with her brother and family, and constantly learning new skills.



Call for 2019 Award Nominations!

Each year, the Arizona Section awards hardworking individuals and groups for their accomplishments in rangeland ecology and management. These awards are reliant on nominations from YOU, the membership.

Contact the Awards Committee Chair, Jason Martin at jmartin@blm.gov for questions, to submit nominations, and to acquire nomination criteria for the Range Manager of the Year, Professional and Technical Guidance, Outstanding Service, and Outstanding Young Professional Awards. Special recognition awards are also welcome!

Nominations are due October 31, 2019



Arizona Section Membership

Membership in the Society for Range Management is open to anyone engaged in or interested in any aspect of the study, management, or use of rangelands.

Membership rights and privileges include: voting, committee service, nomination and election to offices, access to Rangelands journal and SRM News, discounted prices for meeting registration fees, and invaluable networking, information sharing, and professional development.

ARIZONA SECTION MEMBERSHIP

We currently have 124 primary members with an additional 23 who claim Arizona as their secondary Section, for **a total of 147 active members.**

Our Section is strong, but it has the potential to be much stronger. Back in 1994, we had double the members—a total of 292.

We now challenge YOU to recruit at least one new member by the end of the year! It all starts with a simple conversation starter: “Are you going to the Arizona SRM Summer Meeting in Show Low this year?”

Prospective members should know about the fun they are missing when the range enthusiasts unite! And importantly about the information sharing that occurs at our meetings.

Membership information can be found at the following website:

<https://srm.allenpress.com/srm/MEMBERSHIP.aspx>



CALENDAR OF EVENTS

2019

June 22	Science on the Sonoita Plain Symposium, Sonoita Fairgrounds (Contact Larry Fisher at Lafisher@email.arizona.edu)
July 10	Quail Forever and AZ Game and Fish Dept Habitat Partnership Committees (HPC) Workshop, UofA, Tucson
July 15-19	Natural Resources Conservation Workshop for Arizona Youth, James 4H Camp (kimm@cals.arizona.edu)
July 23-24	Annual Southwest Noxious, Invasive Plant Short Course, San Juan College, Farmington, NM (Contact Larry Howery at Lhowery@ag.arizona.edu)
July 25-27	Arizona Cattlemen's Association Summer Convention, Wekopa Resort, Fountain Hills, AZ
August 01	Beginning Rancher Workshop, Location TBD, Northeastern, AZ (Contact jgrace1@email.arizona.edu)
August 09	Beginning Rancher Workshop Series: Land Acquisition and Business Planning, Florida Canyon Research Center, Santa Rita Experimental Range, AZ (Contact Ashley Wright at awright134@email.arizona.edu)
August 14	Rangeland Precipitation Monitoring Workshop, Pinetop-Lakeside, AZ (Contact jgrace1@email.arizona.edu)
August 14-16	Arizona SRM Summer Meeting, Show Low, AZ (Contact Erin Thomas at Erin.Thomas@usda.gov)
August 27	Beginning Rancher Workshop, Payson, AZ (Free! Contact Ashley Hall at ashleys3@email.arizona.edu)
September 03	Ranch Estate Planning Class, Springerville, AZ (Contact Joshua Grace at jgrace1@email.arizona.edu)
September 03	Ranch Estate Planning Class, Pinetop-Lakeside, AZ (Contact Joshua Grace at jgrace1@email.arizona.edu)
September 20	Beginning Rancher Workshop Series: Ranch Funding Programs from USDA, NRCS, FSA and others, Location TBD (Contact Ashley Wright at awright134@email.arizona.edu)
November 8-10	2019 Annual Society for Ecological Restoration SW Chapter Conference, Tucson, AZ

2020

January 15-17	Arizona Section SRM Winter Meeting, Bisbee, AZ (Tentative dates)
February 16-20	Annual SRM Conference - <i>A New Look: Transformation & Translation</i> , Denver, CO

Kelsey (Hawkes) Landreville
School of Natural Resources and the Environment
University of Arizona
Environment and Natural Resources 2 Building
1064 E. Lowell Street
Tucson, AZ 85721

