Southeastern Arizona Range and Livestock News July 2016

THE UNIVERSITY OF ARIZONA | COLLEGE OF AGRICULTURE AND LIFE SCIENCES | COOPERATIVE EXTENSION

Serving Cochise, Graham, Greenlee, Pima, and Santa Cruz Counties

Featured Plant: Hall's Panic Grass

Panicum hallii Vasey

Description

Growth habit: A rather small, tufted perennial bunchgrass with numerous leaves

Color: Light green to bluish green.

Leaves: Often clustered at the base of the plant, thin and curling with age to resemble papery shavings. Leaf blades are usually up to 1/4 inch wide and 2 to 8 inches long.

Inflorescence: Flowers and seeds are borne on erect, branched, slender stems. The spikelets, which are scattered along the seedhead branches, have the appearance of small nutlets.

Season: Warm Season

Origin: Native

Occurrence

Widely scattered and locally abundant through much of the desert grassland from about 2,500 to 5,700 feet. Has been found in Coconino, Yavapai, Greenlee, Gila, Pinal, Cochise, Pima and Santa Cruz counties.

Forage Value

Highly palatable, and for this reason, rather inclined to be overgrazed even when associated grasses are properly utilized. Because of the general softness and thinness of the leaves, and the tendency for some green leaves to be present much of the year, Hall's panic grass remains moderately to highly palatable even after plants have cured.

Grazing Management

Because it usually makes up a minor portion of the perennial grasses on any range, few ranges can be managed to maintain this grass. It is quite palatable and may be damaged by a degree of grazing that does not harm the associated grasses.

From: *Arizona Range Grasses: Their Description, Forage Value, and Grazing Management*. 2003. GB Ruyle and DJ Young (Editors). Arizona Cooperative Extension AZ1272.

Citation for line drawing: USDA-NRCS PLANTS Database / Hitchcock, A.S. (rev. A. Chase). 1950. Manual of the grasses of the United States. USDA Miscellaneous Publication No. 200. Washington, DC.

Inside this Issue

You can find this as well as past newsletters in full color with live links at our website: http://uacals.org/3xp

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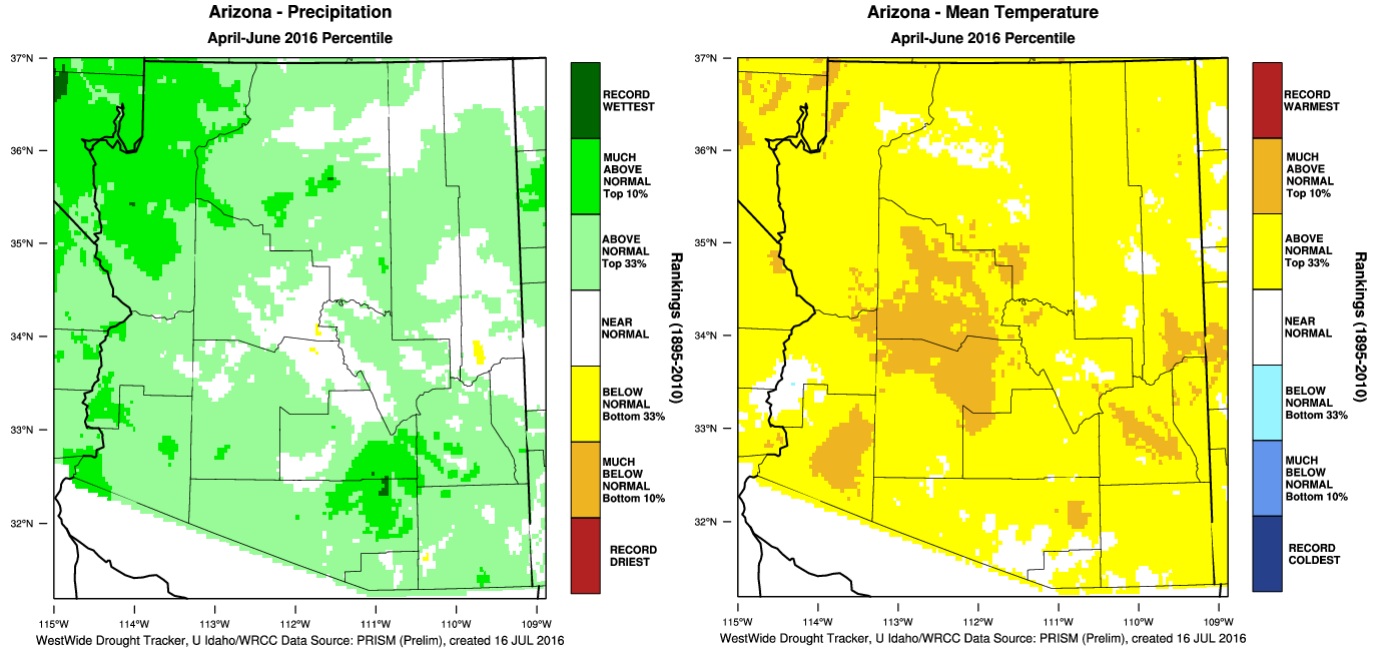
Southeast Arizona Seasonal Climate Summary: Summer 2016

July 19, 2016 - After an unusually dry winter and early spring across southeast Arizona, especially given the strong El Niño event was underway, conditions improved slightly with some precipitation falling across the region in early April. The ridge of high pressure that dominated the weather of the southwest U.S. throughout the winter, weakened allowing a series of low pressure systems to traverse across the southern part of the state in early April bringing total precipitation amounts of anywhere to 0.25" to 1". These weather systems in early April pretty much marked the end of the winter precipitation season with the remainder of the month seeing a transition into warming spring temperatures and windy conditions with passing storms to the north.

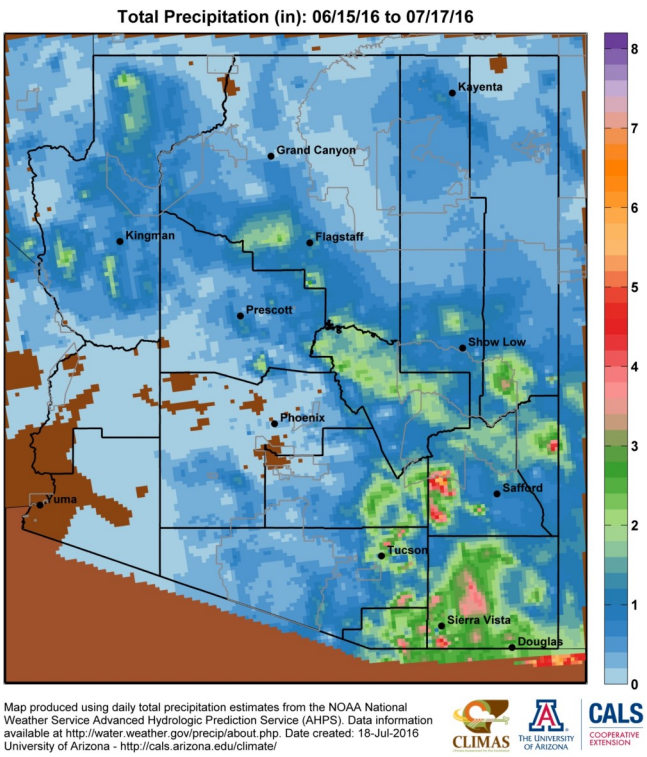
A relatively persistent trough of low pressure across the western U.S. kept temperatures near to below-average across much of the Southwest throughout the month of May. Conditions were dry, but not unusually so, given that May is one of the driest months of the year on average for southeast Arizona. Temperatures climbed quickly to above-average levels in early June as the monsoon ridge of high pressure built north into the region out of Mexico. An unusual early June precipitation event also occurred around June 10th as a weak frontal system from the west interacted with early season monsoon moisture to the south sparking off thunderstorms and locally heavy rainfall across southeast Arizona. True monsoon activity arrived the last week of the month after a blistering record heat wave plagued the region for several days.

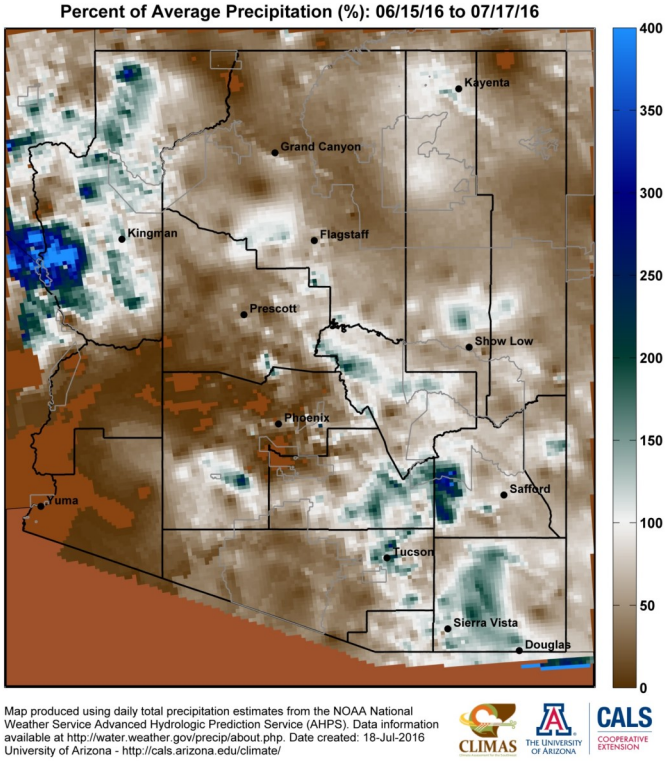


April – June precipitation and temperature rankings from the WestWide Drought Tracker

(http://www.wrcc.dri.edu/wwdt/)

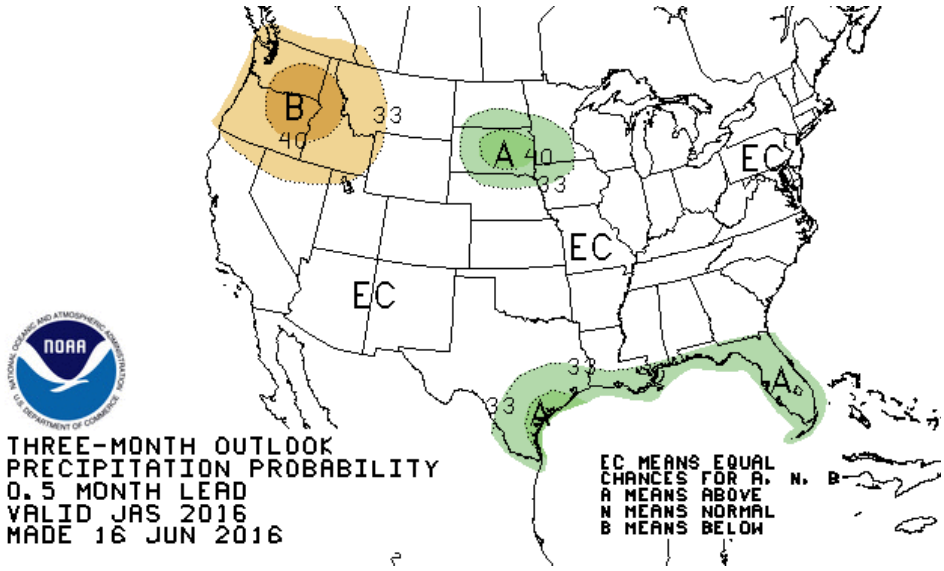
More information available at :
http://cals.arizona.edu/climate
http://www.climas.arizona.edu
Questions /comments? Contact Mike Crimmins, crimmins@email.arizona.edu





Much of southeast Arizona has benefitted from the early monsoon season start in late June with much of Cochise County observing average to above-average precipitation over the past 30 days. Areas to the north and west have observed much less precipitation so far this monsoon season. The most frequent and reliable precipitation has been along the border in southern Cochise and Santa Cruz counties. More monsoon season precipitation monitoring maps with daily updates are available at http://cals.arizona.edu/climate/misc/monsoon/az_monsoon.html. Additional maps including maximum daily precipitation, daily intensity and frequency of precipitation are available.

The July-August-September seasonal precipitation outlook issued by the NOAA Climate Prediction Center in mid-June depicts an 'equal chances' forecast for all of the southwest U.S. This indicates equal chances of observing below, above, or normal total precipitation over the summer monsoon season. An equal chances outlook is issued when there are not any clear forecast signals to suggest that wetter or drier conditions may prevail throughout the season. This lack of forecast is not unusual for the Southwest during the summer monsoon season. Forecast models used in the creation of seasonal outlooks struggle during the summer season and do not benefit from larger-scale climate signals like those provided during the winter season with El Niño and La Niña events. Predictability is low even from day to day during the monsoon season with respect to precipitation patterns. A handful of widespread precipitation events driven by upper level disturbances and/or decaying tropical storms could quickly shift seasonal totals to above-average levels and may still be in the cards for this season.



Veterinary Feed Directive Changes for Arizona Livestock Producers

Ashley Wright, Dan Faulkner, and Peder Cuneo

What is a VFD and how does it affect me as a producer?

Beginning January 1, 2017 some feed medications that were previously available over the counter will now require a VFD to obtain and use. These directives have been common in the swine industry, but now they will affect a much broader section of the livestock industry. A VFD is similar to a prescription from your veterinarian. A prescription is used for oral, topical, or injectable medications while a VFD applies to medications added to feed products. In the same way your vet would write you a prescription for certain medications indicating the animal(s), dosages, route and duration of administration your vet will now need to write a VFD for medicated feed products that fall under this new regulation.

Do I need a VFD to obtain injectable antibiotics or vaccines?

No. Injectable antibiotics, vaccines, and other medications that are currently available for purchase over-the-counter are not included in the new VFD rule. These items will still be available for purchase by producers without the need for a VFD or prescription. The VFD rule is an effort to combat human antibiotic resistance, therefore it only applies to some types of antimicrobial feed products that are medically important to humans.

Which feed products ARE included under the VFD ruling?

Antibiotics that are used in feed for therapeutic uses (to treat or prevent disease) **and** that are considered important for human medicine will fall under the new VFD guidelines. Antibiotics that are used in feed to treat or prevent disease but **are not** considered important for human medicine will remain available over-the-counter without a VFD. Under the new VFD rules, antibiotics that are used in feed only for growth promoting purposes will no longer be authorized for use, and companies will be withdrawing that claim from their labels. The full list of medications that will require a VFD order can be found here:

http://www.fda.gov/AnimalVeterinary/DevelopmentApprovalProcess/ucm482107.htm

Which feed products ARE NOT included under the VFD ruling?

Antimicrobial drugs that are not considered medically important in human medicine are not affected by the new VFD ruling. These include:

- Bacitracin
- Bambermycins
- Carbadox
- Ionophores (monensin, lasalocid, etc.)

In addition, some drugs are not antimicrobials and therefore are also not affected. These include:

- Coccidiostats (i.e. Amprollium, Diclazuril)
- Beta agonists (i.e. Ractopamine, Zilpaterol)
- Anthelmintics (i.e. Fenbendazole, Ivermectin)

What is a "combination VFD drug"?

A "combination VFD drug" is an approved combination of drugs for use in animal feed to treat or prevent disease. If any one of the drugs in the combination falls under VFD rules, the entire combination will require a VFD order from a licensed veterinarian.

What information is included on a VFD?

The VFD issued by your veterinarian must be written (non-verbal) and may be transmitted electronically. Blank VFD forms that meet FDA criteria are available from the American Veterinary Medical Association (AVMA) to your veterinarian. To be valid, the VFD order must contain all of the information listed below:

- Client's name, address, and telephone number
- Veterinarian's name, address, telephone number, license number, and the state issuing the license
- Location of the animals
- VFD date of issue
- VFD expiration (may be up to six months or the expiration date of the product, whichever occurs first)
- Name of VFD drug(s)
- Species and production class of animals to be fed the VFD product
- Level of VFD drug and duration of use
- Reason for VFD drug usage
- Feeding instructions with withdrawal times
- Special instructions and cautionary statements
- Number of authorized refills (determined by the drug being used)
- The statement: "Use of feed containing this veterinary feed directive (VFD) drug in a manner other than as directed on the labeling (extra label use), is not permitted."
- Affirmation of intent for combination VFD drugs
- Veterinarians signature

Can I use any Veterinarian to get a VFD?

You can use any licensed veterinarian that has a valid veterinarian-client-patient relationship with you and your livestock.

What is a valid veterinarian-client patient relationship (VCPR)?

The state of Arizona defines a valid Veterinarian Client Patient Relationship as follows (from A.R.S. § 32-2201):

"Veterinarian Client Patient Relationship" means all of the following:

(a) The veterinarian has assumed the responsibility for making medical judgments regarding the animal's health and need for medical treatment and the client, owner or caretaker has agreed to follow the veterinarian's instructions.
(b) The veterinarian has sufficient knowledge of the animal to initiate at least a general or preliminary diagnosis of the animal's medical condition. Sufficient knowledge is obtained when the veterinarian has recently seen and is personally acquainted with the keeping and caring of the animal as a result of examining the animal, when the veterinarian makes medically appropriate and timely visits to the premises where the animal is kept or when a veterinarian affiliated with the practice has reviewed the medical record of such examinations or visits.
(c) The veterinarian is readily available for a follow-up evaluation or the veterinarian has arranged for either of the following:
(i.) Emergency coverage
(ii.) Continuing care and treatment by another veterinarian who has access to the animal's medical records

How do I obtain feed products under a VFD and what responsibilities do I have as a Producer?

Your veterinarian will issue three copies of a VFD: one for their records, one for the feed distributor (i.e. feed manufacturer, feed distributor, or retail store), and one for you, the producer. Once the feed distributor has a copy of a valid VFD they can distribute the product directly to you. All parties must retain records of VFD orders for a minimum of two years. Feed distributors must also retain sales receipts and distribution records for two years and present them to FDA inspectors upon request. Producers who obtain a legal VFD order are obligated to follow all label and veterinarian directions on both the product and the VFD order. This includes complying with all dosage requirements, animals to be treated, and duration of use. Extra label use of a VFD medication is not permitted, therefore a veterinarian may not write a VFD order that is not consistent with the product's labeled instructions (e.g. dosage, duration of administration, route of administration, and species).

Further information regarding VFD compliance and procedures is available at the resources listed below, or by contacting your veterinarian.

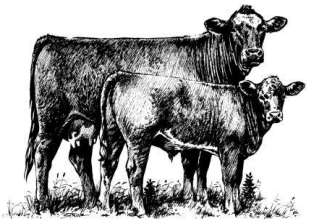
References:

Stokka, Gerald, Charlie Stoltenow, and Neil Dyer. *Understanding the Veterinary Feed Directive*. Publication no. V1719. North Dakota State U Extension Service, 2014. Print.

"VFD." *College of Veterinary Medicine - Cornell University*. Cornell University College of Veterinary Medicine, 2014. Web. 28 Mar. 2016. https://ahdc.vet.cornell.edu/programs/NYSCHAP/nysvfrp/vfd.cfm

"Veterinary Feed Directive (VFD)." *U.S. Food and Drug Administration*. Web. 28 Mar. 2016. http://www.fda.gov/AnimalVeterinary/DevelopmentApprovalProcess/ucm071807.htm

Preconditioning Calves: Why Should We?



As a rancher, your product is the healthy calf you produce. The demand for preconditioned calves and the premium placed on them has continued to increase. The stress placed on a young calf (branding, castration, weaning, and shipping) work against his immune system and affect his future growth and performance. Preconditioning programs work to minimize the stress on a young calf and increase his immunity to the pathogens he will encounter in the feedlot. Ranches who use a preconditioning program not only add value to the animals they are selling, they increase their reputation for producing healthy, thriving animals.

Preconditioning programs have a two pronged approach: a health program and a weaning period. The health program is made up of vaccinations, castration, dehorning, and parasite control. The types of vaccines (killed vs modified live) and timing of dosages will be dependent upon each ranches facilities, management strategies, and weaning period. Calves are often vaccinated at branding and again at weaning. A University of Arizona study looked at over 4,000 steers and heifers (avg. weight 500 lbs.) sold at auctions and direct sales in Arizona and found that on average calves who have simply received vaccinations netted $30-$40 per head more than their unvaccinated peers.

The weaning period is the time between weaning and shipping calves. The minimum recommended time between weaning and shipping is 21 days. This is the time it takes for vaccinations given at weaning to develop peak efficacy to protect calves during and after shipping. Vaccinations given during a time of high stress will be less effective in stimulating immunity: an already overstressed immune system is unable to mount the proper response to a vaccination.

Data from the New Mexico Ranch to Rail program showed that steers weaned 41+ days before entering the feedlot generated greater net income during finishing, supporting the extended 45-day preconditioning period. In addition, calves allowed a preconditioning period between shipping and weaning will be heavier at sale time with decreased shrink. The preconditioning period you choose may be dictated by your operation's facilities and resources, but any separation of weaning and shipping is certainly better than nothing.

Preconditioning calves is not just an economic issue, it's also a welfare issue. Public perception of our industry is important: the public ultimately purchases our product. Calves that have been preconditioned have been shown to have one-third reduced incidence of disease and one-half incidence of death than non-preconditioned animals. This reduces the use of antibiotics to treat sick animals, increases public perception, and ultimately can increase the profitability for both the rancher and the feeder.

Today, many of our local livestock auctions are emphasizing calf vaccination and preconditioning programs at the time of sale. Your veterinarian can advise you on recommended vaccinations and developing a program that will work for your ranch and its resources. Always follow Arizona Beef Quality Assurance practices.

Resources:

Cleere, J. (2005). Value Added Calf (VAC) – Vaccination Programs. *TAMU Department of Animal Science Extension Beef Cattle Specialists.* Retrieved from http://animalscience.tamu.edu/wp-content/uploads/sites/14/2012/04/beef-vac-vaccination.pdf

Mathis, C. P., Loest, C. A., & Carter, B. (n.d.). Preconditioning Beef Calves. *637*. *New Mexico State University Cooperative Extension Service.* Retrieved from http://aces.nmsu.edu/pubs/_circulars/CR-637.pdf

Powell, J. (n.d.). Livestock Health Series: Preconditioning Programs for Beef Calves. *University of Arkansas Division of Agriculture.* Retrieved from http://www.uaex.edu/publications/pdf/FSA-3074.pdf

Introduction to Ecological Sites

(Contributed by Andrew Brischke, Mohave County Cooperative Extension)

An ecological site is defined as a kind of land with specific physical characteristics which differs from other kinds of land in its ability to produce distinctive kinds and amounts of vegetation and in its response to management (Task Group 1998).

Any rangeland inventory, monitoring, analysis and assessment of the monitoring data require the knowledge of these individual ecological sites and their interrelationships to one another on the landscape (USDA-NRCS 2008). Ecological Site Descriptions provide information describing the interrelationships among soils, vegetation and land management. Ecological Site Descriptions can help to assess the condition of current resources, assess management opportunities and predict the outcome of management decisions.

An ecological site may support several different plant community types at different locations or times. These plant communities may differ in species composition, life forms or other attributes. The choice of community type as a management goal on any particular site depends on the goals of the operation (Task Group 1995). The vegetation community goal is often referred to as the desired plant community. The desired plant community is defined as: of the several plant communities that may occupy a site, the one that has been identified through a management plan to best meet the plan's objectives for the site. It must protect the site as a minimum (Task Group 1998). Obviously if both ecological and productivity based assessments are to be rated relative to potential, the potential must be defined (Smith 2003). The potential of rangeland to produce vegetation is determined primarily by climate and soil. Given a general climatic pattern, soil properties reflect the integrated effects of topography, geology and geomorphic and land use history, thus determining the ability of the land to supply moisture and nutrients to plants (Task Group 1995). The Society for Range Management Task Group (1995) recommends that rangelands are to be classified into ecological sites as a basis for rangeland inventories, assessments and extrapolation of research and management experience.

The NRCS (2008) presents Ecological Site Description information in four major categories. The first category describes the site characteristics; it identifies the site and describes the physiographic, climate, soil and water features associated with the site. The second category describes the plant communities; it describes the ecological dynamics and the common plant communities comprising the various vegetation states. The disturbances that cause a shift from one state to another are also presented. The third category includes interpretive information pertinent to the use and

management of the site. And finally, the fourth section provides sources of information and data utilized in developing the site description and the relationship of the site to other sites. Perhaps one of the most critical features within Ecological Sites Descriptions are the State and Transition Models that identify patterns and mechanisms of ecosystem response to natural and management decisions (Bestelmeyer et al. 2003). (To be continued . . .)

Bestelmeyer, B. T., Brown, J. R., Havstad, K. M., Alexander, R., Chavez, G., and Herrick, J. E. 2003. Development and use of state-and-transition models for rangelands. Journal of range management. 114-126.

Smith, E. L. 2003. Evaluation of the range condition concept. Rangelands. 3-6.

Task Group (Society for Range Management Task Group on Unity in Concepts and Terminology Committee). 1995. New concepts for assessment of rangeland condition. Journal of Range Management 48:271–282.

Task Group (Society for Range Management Task Group on Unity in Concepts and Terminology Committee). 1998. Glossary of terms used in range management, 4th Ed., Society for Range Management, Denver, CO.

USDA-NRCS 2008. Ecological Sites: Understanding the landscape. Available online at: http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1043492.pdf

What's Happening

August 2nd - Solar and Alternate Energy for Farmers and Ranchers, Douglas

August 10th - Upcoming EPD and Bull Selection Workshop, Willcox
Please join us August 10, 2016 at the Valley Telecom Group (752 E. Maley Street, Willcox) for an afternoon workshop! Topics to be discussed include the results of a recent feeder calf survey, bull selection, understanding EPDs and EPD indices, and using EPDs and heterosis to improve your genetics. Contact the Cochise County Cooperative Extension office at 520-384-3594 to register, or visit https://extension.arizona.edu/epd-and-bull-selection-workshop for more information.

August 17-19 - AZSRM Meeting, Chiricahua Mountains - http://azrangelands.org/

September 13th - Drone Workshop, Safford

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