Approximately 80 percent of all calves lost at birth are anatomically normal. Most of them die because of injuries or suffocation resulting from calving or delayed calving. Knowing when and how to assist (or more importantly, when the situation calls for the timely attention of an experienced veterinarian) can make a big difference in the calf crop from year to year. Reproductive losses, which affect the percent calf crop weaned each year, are very high in the first two weeks of life and are second only to losses due to failure to conceive!

The first step to a successful calving season is recognizing a normal calving. As long as the calf is normally presented, the vast majority of animals will give birth without assistance. Recognizing a normal calving that does not require assistance can be as important as knowing when calving is abnormal and requires assistance.

The most likely animals on the farm to have problems are first calf heifers. Less than 2% of calving difficulties occur in mature cows. Special attention should be given to young heifers, which are also more apt to tire quickly, especially if they are in sub-optimal body condition.

Tips on when and how to assist the cow rule of thumb (Assist after 30 minutes of no progress.):

- Cleanliness is a must. Introduction of bacteria by equipment or arms of the person assisting can reduce fertility by delaying return to estrus and lowering conception.
- Wash and disinfect equipment, arms and perineal area (anus and vulva).
- Do NOT use liquid soap as a lubricant. It breaks down the natural lubricant of the cow. Methylcellulose based lube is best. You can also use cooking oil, mineral oil, or vaseline.
- Calving area should be 12 square feet minimum, covered, well lit, and well bedded.

Some other tips from Dr. Randle:

It is best for a cow to lay on her left side so that the rumen lays under, and not on top, of the calf. Always set the cow back up after birth to avoid bloat.

Breath births and/or uterine fatigue are often characterized by a cow that acts like she wants to calve, then stops and grazes for a while, repeating this behavior several times. Call for assistance!

Finally, note that penicillin is not a long-acting treatment. One dose of penicillin only lasts approximately six hours in the bloodstream. Longer acting, broad spectrum antibiotics are available from your veterinarian and should be used with his/her guidance.

SAND DROPSEED

Sporobolus cryptandrus (Torr.) A. Gray

Description

Growth habit: Perennial bunchgrass, 1½ to 4 feet tall. The stems are erect at the base, but curve at the top. A ring of stiff, short hairs encircles the stem at the junction of the leaf blade and stalk.

Color: Bluish-green curing to a light straw yellow.

Leaves: Four to 12 inches long and 1/4 inch wide. The old leaves become frayed by the wind and “flag” out at right angles to the stem.

Inflorescence: Inflorescences are branched but narrow, purplish, often entirely enclosed by the upper leaves. A large number of very small, hard seeds mature in late summer.

Occurrence

Throughout the state between elevations of 200 to 7,000 feet. As its name implies, sand dropseed usually grows on sandy areas. It is not restricted to sandy sites, however, but may be encountered on a wide variety of soils.
Forage Value

Sand dropseed varies in palatability from one region to another. In most of Arizona it is generally classed as fair to good forage. After it is mature it is generally poor forage for most grazing purposes. It begins growth later than most of the grasses with which it grows. Some of the lighter soil areas in southeastern Arizona support a mixture of sand dropseed and blue grama. Although blue grama has the higher palatability, the sand dropseed is taken quite readily.

Grazing Management

Sand dropseed will increase under moderate use on ranges where the original perennial grasses have been killed. Under heavy use it will also be killed. Because of its low palatability when dry, this grass is best grazed during summer when it is green. Moderate utilization levels and periodic growing season deferment are suggested to maintain stands.

Sand dropseed has been reseeded on light, sandy soils more successfully than most grasses. The seeds are extremely small and many of them sift down into the soil where they germinate.

Where Do You Monitor?

By George Ruyle, UA Specialist/Professor, Range Management

In most situations it is feasible to monitor a few locations on only a small part of the ranch or allotment. Consequently, selection of the areas to be monitored should be done carefully to ensure that useful information is obtained. Interpretation of the results from monitoring selected locations in terms of management effects on the whole management unit is then a matter of judgment. Deciding where to monitor may be the most important decision made during the process of planning a monitoring program. Once you decide on the exact monitoring locations make sure you adequately represent what is happening on that site.

When choosing monitoring locations the concepts of vegetation communities, ecological sites, and key areas, may be applied. Plant communities are groups of plants dominated by a few species, while other species are more scarce and some only occur occasionally. These plant communities repeat themselves across the landscape and are described by noting which plants are dominant, which are common and which are rare. Each particular kind of soil and site is generally suited to a select list of locally available plants, and these are found growing together, wherever those physical conditions are repeated. The concept of ecological sites or range sites was developed to help interpret plant community observations. Ecological sites designate a kind of rangeland, a classification of land capability. They are areas of land that are capable of producing similar plant communities in terms of kinds, and amounts of particular plant species and response to management. The concept relates to land production capabilities and is important for the interpretation of monitoring data.

Once you have the major plant communities and range sites identified, key areas are selected for actual monitoring. A key area is a small portion of a range selected as a monitoring point to represent larger units of the ranch. The key area concept can be used to get maximum amounts of information from a minimum of monitoring locations. Key areas should be sensitive to management changes and represent the most important ecological sites within the unit.

When selecting potential monitoring locations you should consider such things as seasonal grazing patterns, major ecological sites, locations of improvements, and personal knowledge. Areas chosen should be large and uniform so that whatever monitoring method used can stay on one ecological site within the same range condition.

Other characteristics of key areas include the following. Key areas should:

- represent larger areas of the ranch or allotment.
- represent areas that provide significant amounts of forage.
- be accessible to grazing animals.
- not be near water or other areas of animal concentration.
- not be immediately next to roads or trails.
- be located on a single ecological (range) site.
- have at least a remnant population of the desired forage species.
- have some potential to change in a reasonable amount of time.
- not be in an area affected by heavy brush or weed encroachment.

In addition to general monitoring sites on key areas, two other situations warrant possible consideration. These are critical areas and comparison areas. Critical areas are those areas with exceptional resource values or unusual susceptibility to disturbance. These might include riparian areas, habitat areas for threatened and endangered species, visually sensitive areas, wetlands, or areas with highly unstable soils. Comparison areas are areas which have been protected from livestock grazing or other impacts and show “natural” fluctuations in vegetation due to weather or other influences.
February 2, 2006 – The early winter period has been exceptionally dry and warm for southeast Arizona. December 2005 was the 7th driest since 1948 with a climate division average of 0.07 inches of precipitation for the southeast corner of the state. Temperatures were also warm with an average monthly temperature several degrees above average at 48.4 °F. December 2005 was the 7th warmest December on record since 1948. Dry and warm conditions have continued through January exacerbating short-term drought conditions. Douglas, Arizona reported a total of 0.10 inches of rainfall which is close to 1 inch below average. The National Weather Service also reports that Tucson received no measurable rainfall in January 2006. This has only happened nine times in the instrumental record and is the first time since 1972. Below average rainfall back through the fall has made this the driest September-January period on record for Tucson.

Forecasts for the upcoming early-spring season (March-April-May) from the Climate Prediction Center indicate that the southwest U.S. will see above normal temperatures with an increased chance of below average precipitation. A trend in above normal temperatures is expected to continue leading to the above normal temperature forecast. The precipitation forecast is based on the recent development of La Nina conditions in the equatorial Pacific Ocean. Weak La Nina conditions have been in place for several months now and may be in part responsible for the strong and persistent ridge of high pressure that has been in place over the southwest United States. La Nina conditions are expected to continue through the spring, but have their greatest impact on southwest U.S. winter precipitation amounts. The drier-than-average forecast is relying on the strong ridge pattern and weak La Nina conditions to persist, causing late winter/early spring precipitation amounts in March and April to be below-average. (More information at http://www.noaanews.noaa.gov/stories2006/s2572.htm/)


Declining PDSI values from continued below-average monthly precipitation

Exceptionally dry conditions over the last four months have caused short-term drought conditions to intensify. The brief return to positive (wet) PDSI values from winter 2005 precipitation has been reversed by recent negative precipitation anomalies. Below-average fall 2005 and early winter 2006 precipitation amounts have brought PDSI values below -2 indicating very dry conditions.
Late fall/early winter precipitation amounts for the November-December period were less than 10% of normal across most counties of southeast Arizona. Pima and Santa Cruz counties received the least amount of precipitation with amounts at 1% of average for the period. Areas of Cochise County received slightly more precipitation, but were still way below average in the 4-11% range (percent of normal precipitation for the Nov-Dec period).

The 2 to 10 month windows show precipitation amounts between 1 and 2 standard deviations below average. These values indicate exceptionally dry conditions since winter 2005 and highlight the impact of both below average summer 2005 and winter 2005/06 precipitation amounts on short-term drought conditions. Long-term drought conditions have also intensified in the 3 to 6 year window (36 to 72 months) with SPI values from -1 to -1.5.

The March-April-May seasonal forecast from the Climate Prediction Center depicts a slight increase in chances of below-average precipitation for southeast Arizona. This forecast means that there is a 40% chance of below-average precipitation, a 33% chance of average, and a 26% chance of above-average precipitation for the March-April-May period. The slight shift in probabilities towards below-average precipitation is due to the development of weak La Nina conditions in the equatorial Pacific Ocean.
Riparian areas in Arizona are unique and special places. They provide recreational opportunities, habitat and travel corridors for wildlife, influence water quality and quantity, and many other values. Join us for a day of learning about Arizona’s riparian areas and how they function.

Workshop Agenda

8:00-8:30  Registration
8:30-9:00  History & Definition of Riparian Areas
Dr. George Zaimes, University of Arizona Cooperative Extension
9:00-9:30  Characterization of Riparian Areas
Dr. Mary Nichols, USDA Agricultural Research Service
9:30-10:00  Fluvial Processes in Riparian Areas
Dr. Mary Nichols
10:00-10:30  BREAK
10:30-11:00  Hydrological Processes in Riparian Areas
Dr. Mary Nichols
11:00-11:30  Biological Processes in Riparian Areas
Dr. Doug Green, Arizona State University
11:30-12:00  Climatic Processes in Riparian Areas
Dr. Mike Crimmins, University of Arizona Cooperative Extension
12:00-1:00  LUNCH
1:00-2:00  Human Alteration in Riparian Areas
Dr. George Zaimes
2:00-2:30  Future Riparian Area Education and Research
Kim McReynolds, UA Cochise County Cooperative Extension
2:30-2:45  Wrap Up
Dr. George Zaimes

The workshop is sponsored by the University of Arizona Cooperative Extension, along with speakers from the USDA Agricultural Research Service and Arizona State University. Lunch and handouts are included in the registration fee of $20.00. Please pre-register by February 28th. If you are unable to make this workshop, another is scheduled for March 3 in Thatcher. Call for details.

Riparian Workshop Registration

Name: ____________________________ Phone: ________________

Number attending ______ x $20 = $ _______

Mail checks payable to The University of Arizona to: Riparian Workshop, Cooperative Extension, 3241 N. Grand Ave., Suite 6, Nogales, AZ 85621-3917. Questions? Call Dean Fish, (520) 281-2994 or email dfish@cals.arizona.edu.