Poisonous Plants and Range Management

During a spring like we have this year in southeastern Arizona, poisonous plants are already on our mind. At the “Livestock Losses in Arizona” workshop held in December 2003, Dr. Phil Ogden (retired UA Professor) gave some advice to participants based on his many years of working throughout Arizona as a Rangeland Specialist. He pointed out since all ranches are different (the land, plants, how they are managed, etc.), each person needs to know specifics for their own ranch. Dr. Ogden outlined several steps to take in assessing possible poisonous plant problems.

**Step 1** - Write down a list of species that occur on your ranch that could be poisonous.

**Step 2** - Go back to your records and get as much history as you can of death loss and low production on the ranch (again, put it down in writing). Confirm known poisoning deaths versus assumed poisoning.

**Step 3** - Look through information in books to learn about the plants you have listed and symptoms described for animals that have been poisoned.

**Step 4** - Have an idea of the relative palatability of the plants listed, their season of growth, stage of growth when they are the most poisonous, and information on the toxic dose. As an example: snakeweed’s palatability is poor, it is most poisonous during early growth (spring) and the lethal dose is 10% of body weight taken over several weeks.

**Step 5** - Identify trends in vegetation and relate them to poisonous plants (use your rangeland monitoring data).

**Step 6** - If you would like to take it one step, some diet analysis can be done using fecal analysis. Taking these steps can be helpful in assessing livestock poisoning risks and rangeland management options.

**Poisonous Plant Books:**


*Poisonous Plants of Southeastern Arizona*, Coronado RC&D, Call 520-384-2229 x 123 or contact your local NRCD.

**Feather Fingergrass**  
*Chloris virgata* Swartz

**Description**

Growth habit: A weedy, annual bunchgrass with weak, spreading stems and a shallow root system.

Color: Light green when growing; light straw color when dead.

Leaves: Flat or folded, thin, and rather weak, with few or no hairs.

Inflorescence: Several slender feathery branches 1 to 3 inches long, radiating fingerlike from the end of a slender, erect stem.
Occurrence
A common roadside and wasteland weed occurring usually below about 5,500 feet elevation. It occurs in all counties of the state, and is one of the first grasses to become established on bare soil.

Forage Value
Because of its local abundance this grass is valuable as forage in some locations. Like other annuals, however, it produces abundantly only after good rainfall seasons or where it receives extra moisture as runoff from adjacent areas. Although feather fingergrass is fineleaved and soft-stemmed, its palatability is low. Livestock will graze it but much prefer the perennial gramas when available.

Grazing Management
Feather fingergrass grows rapidly, and, like most of our annual grasses, appears to set seed abundantly. For these reasons it can be grazed rather closely without harming the next year’s crop. It would be unusual to manage this grass as a key species however.

Calving First Calf Heifers
What is the optimum pre-partum weight and condition score for first calf heifers?
Many calving problems can be eliminated if heifers are of adequate size. Their weight at first calving should be approximately 85 to 90 percent of their expected mature weight. Body condition at calving is the single most important factor controlling when a beef heifer will cycle after calving. Pre-partum body condition score correlates with several factors, such as postpartum interval, services per conception, calving interval, milk production, weaning weight, calving difficulty and calf survival. Heifers should have a body condition of 5-6 at calving through breeding to assure optimal reproductive performance. Animals with excess body condition (>7) have lower reproductive performance and more calving difficulty than animals in moderate body condition (5-6). Body condition score is generally a reflection of nutritional management. However, disease and parasitism can contribute to lower body condition scores even if apparent nutrient requirements are met. A sound herd health program is an essential part of any reproductive management system.

What special management strategies should I use for first calf heifers?
Properly developed and managed beef heifers generally have a 20 to 30 day longer postpartum interval than older cows. If you breed virgin heifers 20 to 30 days earlier than the cow herd, the heifers will have additional time to return to estrus and rebreed with the older cows the next year.

For the complete article, please check out: http://www.beefcowcalf.com

There are a multitude of publications and resources to help out producers.

From "Beef: Questions & Answers" newsletter* By Rick Funston, MSU Extension Beef Specialist, Fort Keogh Range & Livestock Research Station

Livestock & Crop Conservation Grant Program
The Arizona Department of Agriculture announced the 2005 grant cycle of the Livestock & Crop Conservation Grant Program (LCCGP). It is the intent of the LCCGP to reduce the fragmentation of open spaces in rural areas. As the public continues to demand more benefits from open spaces in rural areas, the pressure for ranching and farming families to sell privately held land to a multitude of buyers can eventually become their most feasible option for financial relief. The LCCGP is designed to offer some relief to this pressure by assisting ranching and farming families with the implementation of conservation practices that ultimately provide for the preservation of open space. Approximately $3.8 million is available in grant awards for the 2005 funding cycle. The application deadline is 3:00 p.m., Friday, May 13, 2005. The grant manual can be found at www.azda.gov/Main/lccgpManual.pdf or by calling Kathleen Ryan at (602)542-4494 or (800)294-0308.
April 1, 2005 – Wet conditions persisted through January and February helping to improve long-term drought conditions that have plagued southeast Arizona. The National Drought Monitor has upgraded most of the region from ‘extreme’ drought status to ‘moderate’ (more information on the latest Drought Monitor can be found at http://www.drought.unl.edu/dm/monitor.html). A strong flow of subtropical moisture and favorable jet-stream pattern pushed many productive storm systems across Arizona in January and February. Areas of northwest Arizona received over 400% of their normal January precipitation. Most locations in southeast Arizona were also above normal receiving 150 to 200% of normal precipitation for the same period.

Forecasts for late spring/early summer (May-June-July) from the Climate Prediction Center indicate that the southwest U.S. will see above normal temperatures with an equal chance of above, below, or normal precipitation. Late spring/early summer precipitation forecasts are difficult to make due to the lack of a strong relationship with El Nino or La Nina conditions. ENSO related sea surface temperature anomalies do not appear to influence precipitation patterns over the Southwest during this period. The lack of a strong forecasting signal leads to a lower confidence precipitation forecast for the late spring/early summer period. The higher confidence temperature forecast is based on the upward trend in regional temperatures continuing.

(More information at http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/)

Above normal winter precipitation has helped to improve long-term drought conditions as reflected in the positive PDSI values. The positive PDSI value of 1.65 in February is the first time the PDSI has been greater than zero since late 2001.
Average January temperatures were several degrees above normal at most locations across SE Arizona. Local precipitation amounts were also above normal at most stations with some receiving 150% to 200% of normal for the month. Douglas reported a total of 2.71" which is over 3-times the normal monthly total for January based on its long-term record (1948-2004).

The May-June-July seasonal forecast from the Climate Prediction Center depicts an ‘equal chances’ precipitation forecast for Arizona and New Mexico. This forecast means that the probability of above normal or below normal precipitation is no greater than the probability of receiving normal precipitation amounts for the period. Late spring/early summer precipitation forecasts are difficult to make for the Southwest. Pacific sea surface temperature patterns which are an important forecasting tool have little influence on Southwestern late spring/early summer weather patterns.
Producing Quality, Healthy Livestock
A Cooperative Extension Workshop for All Livestock Producers

May 12, 2005, at the Willcox Elks Lodge, 247 E. Stewart St.

9:00 - 9:05 am  Welcome

9:05 - 10:20 am  Herd Health Basics (Dr. Peder Cuneo, UA Veterinary Diagnostic Laboratory)
                Vaccine Use/Label Guidelines
                Proper Handling of Vaccines, Pharmaceuticals and Syringes
                Extra Label Drug Use
                Biosecurity Protection

10:20-10:30 am  Break

10:30 -11:15 am  Importance of Record Keeping (Dr. Bob Kattnig, UA Animal Science Department)
                 Animal Production, Health & Feed Records

11:15-12:00  National Animal Identification System in Arizona (Dr. John Hunt, Arizona Department of Agriculture, Animal Services Division)

12:00-12:45 pm  Lunch

12:45 - 2:15 pm  Animal Livestock Incidence Response Team (ALIRT)
                 Overview of ALIRT - (Dr. Bob Kattnig)
                 Common causes of extensive livestock loss (Dr. Peder Cuneo)
                 Site response process, flow chart, contact numbers

2:15 - 2:30 pm  Break

2:30 - 3:15 pm  Rancher Beef Quality Assurance (RBQA) Certification Process (Dr. Bob Kattnig)

This workshop will certify producers for the Ranchers Beef Quality Assurance Program. Must be present for the entire workshop to be eligible for certification.

Cost $10 per person (includes lunch)
$25 additional per ranch for RBQA certification and notebook

Questions: Contact Kim McReynolds or Susan Pater at 520-384-3594

Producing Quality, Healthy Livestock Workshop Registration
Registration Deadline: Monday, May 9, 2005

Name(s) _____________________________________________________________

Ranch Name (if applicable) _____________________________________________

Address: ___________________________________________________________

Phone: __________________  Email: _________________________________

Number of persons attending _____ X $10 = ________

RBQA Certification & Notebook $25 per ranch _________

Total Amount Enclosed $_________ (Check made payable to UA Cooperative Extension)

Mail to: Livestock Workshop, Cochise County Cooperative Extension, 450 S. Haskell, Willcox AZ 85643.