From the desk of Keith Duncan, Extension Brush and Weed Specialist

This is the time of year when ranchers and land management agency personnel begin to think about mesquite control. This year they should take a really good look at the mesquite before deciding whether or not to spray. The mesquite budded out in early April in the southern part of the state. This is about a month earlier than last year and means spraying could begin by late May or early June. Another difference between 2011 and 2010 is that the winter last year was wet across much of the state. This winter has been very dry. In fact, much of the mesquite area of the state has not had significant moisture since last September-October. The success of mesquite spraying can be directly correlated to moisture 4-6 months previous to spraying. That being said, management decisions should be carefully weighed before committing funds to spray mesquite in a year such as this. The following is a mesquite condition checklist developed by Brush and Weed Management Specialists from NMSU and TAMU. Following the guideline and carefully looking at the condition of the plants on the area in question can help determine if the mesquite is in a good condition to be sprayed and will result in an acceptable level of mortality. This is only a guide and does not guarantee success or failure with a mesquite spraying project.

Checklist to Determine Mesquite Condition for Effective Herbicide Control

Ranch___________________ Date_________________
Range Site_______________ Pasture #________________

MESQUITE CONDITIONS

1. Current foliage volume as a percentage of “normal” % <75%
   “RED FLAG” Foliage has been damaged, removed, or reduced by % (Circle appropriate agents that have caused damaged, removed, or reduced foliage volume):
   a. INSECT and ANIMAL DAMAGE. Symptoms include: leaflets removed, leaves tied together by webs, insect frass on soil surface, and larvae under loose debris. Lower bark on branches and stems gnawed or removed.
   b. HAIL DAMAGE. Symptoms include: leaves on soil surface, foliage "ragged".
   c. FREEZE DAMAGE. Symptoms include: yellowing or chlorosis of leaflets and leaf drop.
   d. DISEASE. Symptoms include: leaf chlorosis, orange dots on lower leaf surfaces, and leaf drop.
   e. DROUGHT. Symptoms include: necrosis of leaf tips and margins, chlorotic leaves, pale green leaf color, or leaf drop.

2. General foliage color. (Circle appropriate color)
   a. Dark green
   b. Pea green "RED FLAG"
   c. Intermediate green (Between dark green and pea green)
3. Is there light or pea green foliage in upper tree canopies and on twig tips? (Circle appropriate response.) YES NO
   YES = “RED FLAG”

4. Flower color if present. (Circle appropriate answer)
   a. Yellow
   b. White "FLAG"
   c. None

5. Pod (bean) growth stage. (Circle appropriate answer)
   a. Not present
   b. Green and less than fully elongated "RED FLAG"
   c. Green but fully elongated
   d. Ripe
   e. Ripe and fallen

6. Notes: Record observations such as the percentage of the trees that appear "normal" and likely susceptible to broadcast sprays, and where these trees occurred (in draws, along roads, in low-density mesquite areas, etc.)

   Soil temperature at 18 inches __________________ F°
   Estimated rainfall within previous week_______ inches
   Estimated rainfall within previous month________ inches

"RED FLAG"= CONDITION FOR POOR SUSCEPTIBILITY TO BROADCAST SPRAYS

---

Evaluating Your Drought Management Options

By: Paul H Gutierrez

The economic signals to expand the nation’s cowherd may have been sent loud and clear this spring with record high prices, but reality suggests 2011 will likely be another liquidation year.

Record high prices for cash fed cattle last month produced excellent profits for cattle feeders, but ranchers also found exceptionally high prices for cull cows and bulls. Those prices lured many cows to market, further reducing potential calf production in the process. Additional cows are being driven to market by a drought gripping the Southwest.

The drought is becoming one of the year’s most important issues affecting agriculture. The U.S. Drought Monitor map [http://www.drought.unl.edu/dm/monitor.html](http://www.drought.unl.edu/dm/monitor.html) shows more than two thirds of New Mexico is now in the severe to exceptional drought category. Exceptional drought means extraordinary and widespread, crop and pasture losses and shortages of water in reservoirs.

New Mexico and the U.S. beef industry may also suffer from the effects of recent flooding in the Midwest that threatens the nation’s corn crop. Grain prices are already significantly higher than last year, and a weather disruption to this year’s crop may add to the market’s volatility.

If a normal growing season develops this summer, expansion of the nation’s cowherd could begin by early 2012. However, market realities suggest there are several obstacles to the likelihood of beef inventory expansion. Calf prices have been at record highs recently, but costs of production are also at record high levels, including $7 corn, $350 per ton soybean meal, $250 per ton alfalfa, $170 per ton...
distillers grains and $4 per gal fuel all of which impact cost of production and cowherd expansion decision—and add to the complexity of drought management decisions. The good news, beef cattle prices are at record high levels.

Management of the ranch during a drought depends on the balance between stocking density and the availability of feed and water. Producers who survive best during drought are those who adopt sound management and financial plans and review them regularly. Early decisions need to be based on what relief measures are potentially available on the ranch, and how best to employ them. Among the important factors are guessing the expected duration of the drought, the current water and feed inventories, the body condition of the cowherd and financial resources available.

During drought, decisions may often be made on emotion rather than logic. The main goal of this article and document links below is to help producer access their individual situation and make objective decisions.

Year in and year out grazing management is the most important factor for successful and sustained range livestock production in any economic or environmental climate, and ultimately will define a producer production and marketing strategy for any given year, including drought years. And the producers’ production and marketing strategy, combined with business finances and prevailing market conditions will determine the producer’s profit or loss. Range livestock producers are in the business of forage production. A drought management plan/strategy is intended to keep producers in business.

Drought management strategies may be divided into several categories, but the key point to remember it that drought management is about taking the “guess work” out of decision-making. A drought management plan should help producers take control of their production and marketing situation. Decisions must be made in a proactive, rather than a reactive manner to minimize negative effects on rangeland and or livestock production during prolonged periods of drought.

Several factors that affect risk management during drought include:

1. The total population of cattle in relation to feed availability (including supplemental feed stuff),
2. How widespread the drought-area is,
3. The time of year and the likely hood of rain and return to adequate feed supplies in your area and,
4. Current and projected crop and livestock market outlook
5. Evaluation of cash flow needs (borrowing your way through drought to maintain traditional herd size may inhibit long-term profitability).

Questions livestock producers must answer when facing drought:
• Are my cows losing weight or not performing adequately?
• Will I have to start to provide supplements?
• What is the cost/benefit of supplements in today’s market?
• If the drought continues, should I cull—when and how “deep?”
• What feeds are available to the ranch?
• Assuming that I will have to purchase supplemental feeds, are they available and at what cost?
• Is one option to sell hay and buy back grain for limit feeding?
• Do I have the feed resources to allow for full feeding vs. supplementary feeding only vs. limit feeding of grain?
A few things we do know and must keep in mind with regard to cow management:

- Fertility of cows may decline when their body condition drops below 4.
- Early weaning of calves is one option that allows cows to rebuild body reserves and rebreed the next year.
- Money and diminishing feed reserves are too valuable to waste on cows that are unproductive, not pregnant or are unsound.
- Production, financial and marketing variables and decisions are all interrelated and ultimately impact the bottom line, and
- You cannot feed your way out of drought.

Drought can happen during any season, but coupled with summer heat the effects it has on cattle producers can be quite dramatic. Dried up pastures, reduced harvested forage yields, and limited water supplies are all potential problems. These problems will effect both short- and long-term management decisions. Immediate attention is needed to relieve shortfalls in enterprise productivity and in some cases sheer animal and ranch survival.

The main concern during drought is to ensure the cowherd’s nutritional needs are being met, and negative impacts to range resources are minimized. As forage availability and quality are limited by shortages in rainfall the economic value of grazing forages increase. Supplements that will enhance the remaining supplies and digestibility of forages may be the best alternative to minimize the purchasing of forage replacements, but in today's high priced grain market the benefit/cost of supplements need to be evaluated with a sharp pencil. Grain byproducts that are low in starch content and high in digestible fiber can increase the utilization of low-quality forages.

Reducing or minimizing the nutrient demands of the herd is another area that can be managed. Early weaning cow-calf pairs will quickly reduce pressure applied to grazing pastures and hay supplies. The decision to early wean is complicated by the decision to sell early-weaned calves or feed to heavier market weight. Calves fed balanced rations in dry lots will weigh similarly to mother-reared calves throughout their lifetime. The trick is to feed the calves properly, and profitably.

Another way to decrease nutrient requirements of the cowherd is to reduce inventory. Good records will ease the decisions of which cows should be disposed of. A good place to start is with the Three O Management Plan. First, cull those cows that are Old, Open, and Ornery. Further culling can continue for unsound cows, late calver’s and low producing cows. We recommend that you develop a three tier culling strategy that includes the number of head and/or individual ID of cattle to be culled and date that they will be culled. Simply put, your culling strategy should include a first, second and third cut.

Other ongoing considerations that must be closely monitored and managed during a drought includes the condition of the range, water quantity, quality and distribution and of course Herd health. Drought usually places greater grazing pressure on the land. This will cause an increase in the harvesting efficiency of plants. Those plants preferred by livestock will have greater than normal pressure put on them by both cattle and invader plant species that want to replace them. Care and proper range management practices need to be followed to minimize the effects of drought during the time the drought is actually happening, as well as prolonged effects.

Available forage utilization in large pastures is difficult to take full advantage of if there is not adequate water distribution. Producers who have pastures with significant amounts of unutilized forage may want
to consider investment in water distribution improvements. Such improvements will prove beneficial in drought and non-drought years.

Herd health is also a consideration during drought. Drought may force animals to consume plants that are normally avoided and poisonous, restricting access or removing the poisonous plants may be necessary. Prussic acid and nitrate concentrations in plants will rise with drought stress. Their effects can become epidemic if not managed properly. Early weaning decisions will require additional herd health considerations for early-weaned calves, and a conversation with your veterinarian.

Livestock producers who are forced to sell livestock due to drought conditions may receive special consideration for federal income tax reporting purposes. Income tax reporting for forced sales of livestock because of drought or other weather-related conditions may be handled in two different ways, according to Internal Revenue Service (IRS) guidelines.

There are lots of variables that need to be evaluated in formulating your drought management strategy. The cow-calf enterprise budget is a good management tool for evaluating the production and financial implications of various drought management strategies. The DROUGHT MANAGEMENT RESOURCE DOCUMENT FOR NM RANGE LIVESTOCK PRODUCERS and the NMSU COW CALF ENTERPRISE BUDGET (Excel template) have been developed to assist producers with the development of their drought management strategies. Sections 1 through 5 summarize different drought topic/categories related to drought management that will allow the producer to develop more informed production and financial information for the enterprise budget analysis. Section 6 of the Drought Management Resource Document discusses a cow-calf cash flow enterprise budget analysis process and is supplemented with an Excel template (NMSU Cow Calf Enterprise Budget) to help individual producers evaluate production and financial implications of different drought management strategies.

Both these documents can be accessed at a newly established web site: http://aces.nmsu.edu/drought. We will continue to update the site with additional information; your input and suggestions are welcomed.

Droughts are times, which test management skills. Using common sense and a sharp pencil will reduce losses to the situation. Producers are encouraged to remain flexible and look for relief through imagination and knowledge.

**************

CONGRATULATIONS

Boone Carter is the proud daddy of their new baby daughter, Rehgan Rae Carter, born May 7th and weighed 9 lb. 7 oz. Mommy and Rehgan are doing fine.

New Mexico State University is an equal opportunity/affirmative action employer and educator. NMSU and the U.S. Department of Agriculture cooperating.