And that means you can prepare for the worst — if necessary

By Rachel Meelor and Mae Smith

2012 was one of the driest years on record. The looming question now is, “What will conditions be like this year?”

Many landowners have survived numerous droughts, and the survivors most likely had a plan in place to make it through.

Forage Production

In normal years, pastures are managed so there is plenty of pasture to feed animals with grass left over in the fall. However, in drought years, there is a shortage by the end of the growing season. Wouldn’t it be nice to know in advance if feed will be limited?

If astute, you can have a heads-up as soon as April or early May.

Spring precipitation is critical in determining the amount of grass that will grow on native (non-irrigated) range-land during the year. If there hasn’t been adequate precipitation by April or early May, grass shortages are likely.

Knowing in the spring allows alternative arrangements to provide enough supplemental feed for animals. Not reducing grazing on pastures runs the risk of damaging them. Documenting changes to the vegetation, climate, and grazing strategies is one way to evaluate what is happening in the long-term.

Winter and spring are opportune times to evaluate last year’s decisions and strategies while making adjustments for the upcoming growing season.

A few items you’ll want to look at include property goals and objectives, information about each pasture and the forage it provides during a normal year (as determined by vegetation monitoring), current grazing/rotation strategy, potential management alternatives or adjustments that can be made during drought, and planned long-range improvements. Writing this information down as a grazing plan will provide a handy reference to visit briefly each year to ensure you are on-track toward your goals.

Irrigation

Spring precipitation is not as critical to grass growth on irrigated land because the landowner can manipulate when the grass gets water
throughout the summer. Snowpack and water right seniority play critical roles in the amount of irrigation water available. If you have water irrigation rights, you are probably aware how senior the water right is and how much is allocated (see UW Publication B-849R or the Water section of the Barnyards and Backyards Rural Living Resources guide for more information on water rights).

Watch the amount of snowpack in the mountains. For irrigators, drought is usually evident as early as mid-winter. If you depend upon irrigation water, keep an eye on the Natural Resources Conservation Service snow telemetry (SnoTel) sites throughout Wyoming (categorized by Wyoming basins).


They provide a monthly report on snow water equivalent (snowpack) and precipitation compared to the average year for each site.

The April 1 report may be the most helpful because, if snowpack is well below average at this time, runoff may be inadequate to provide irrigation water for the season. Buying expensive inputs like fertilizer may not be worth the money if irrigation water is inadequate. If snowpack is really low and you have the most junior water right, you may receive very little water!

**Hay**

If snowpack and spring moisture is inadequate, make preparations to provide supplemental feed to animals. This is often hay, which is usually available in the summer to early fall. However, being first in line for hay in drought years is a good idea.

When hay supplies are short, those further down the list may have to look elsewhere or pay a much higher price. So, buy early and have the hay delivered (or pick it up) early so it isn’t sold to someone else.

If the current year’s hay is sold out, can you use last year’s hay even if it doesn’t look green? Even when hay looks brown on the outside, if it was properly cured, baled and stored, it is probably still green and

**Drought Preparedness Timeline**

<table>
<thead>
<tr>
<th>Date</th>
<th>What to watch for</th>
<th>What to do</th>
<th>Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 1</td>
<td>Check NRCS SnoTel site for amount of snowpack</td>
<td>Make preparations to provide additional forage to animals or for hay on irrigated ground (especially if junior water right).</td>
<td><a href="http://bit.ly/wyopack">http://bit.ly/wyopack</a> Wyoming State Basin Outlook Report</td>
</tr>
<tr>
<td>Mid-April to early May</td>
<td>Not enough spring precipitation</td>
<td>Make preparations to provide additional forage to animals on rangeland.</td>
<td><a href="http://bit.ly/wyopack">http://bit.ly/wyopack</a> Wyoming State Basin Outlook Report</td>
</tr>
<tr>
<td>Early summer</td>
<td>If hay supply is short</td>
<td>Buy your hay early and have it brought to your land!</td>
<td>Hay testing: Contact local extension office</td>
</tr>
<tr>
<td>Winter</td>
<td>Low hay prices</td>
<td>Consider stockpiling if the quality is good</td>
<td>Hay testing: Contact local extension office</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Develop or update grazing strategy and monitoring/drought plan</td>
<td>Local extension office or conservation district</td>
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nutritious on the inside. You can have hay tested to ensure your livestock are getting good nutrition. Local extension offices have supplies and information to assist in forage testing. If a good deal on high-quality hay is found, consider stockpiling some for later use or sale.

**Recovery**

If good moisture is received over the winter and spring, plant recovery from drought depends on previous management. If the grasses were properly grazed and allowed adequate time for recovery in years preceding drought, plants will likely recover quickly. However, if the grasses were overgrazed in the past, drought can be very damaging to these stressed plants, and recovery may be long.

A few guidelines to help improve pasture health include:

1. not allowing livestock time to remove too much of the plant at one time,
2. allowing plants time to regrow leaves and store nutrients before being grazed again,
3. avoid year-round continuous grazing of pastures, and
4. if using rotational grazing, do not graze the same pasture at the same time each year.

There are techniques to help attain some of the above objectives. One strategy is to alter a year-round grazing system by implementing a rotational grazing strategy. This strategy makes use of numerous paddocks in which animals are rotated from paddock to paddock so each area undergoes a short grazing period.

Number and size of paddocks are important aspects to consider, and paddock layout will vary depending on the specific acreage (see http://bit.ly/grazemgt in the Barnyards & Backyards magazine for a story on paddock use). One example of a rotational pasture design is illustrated in Figure 1.

As grazing time quickly approaches, consider evaluating your current grazing strategy or developing a drought plan. These plans will help you, your land, and livestock through good times and bad. And remember, good land management and a little bit of foresight are insurance policies through drought years.

Rachel Mealor is at home on the range – a good thing since she is a UW Extension range management specialist. She can be reached at (307) 766-4139 or rdmealor@uwyo.edu. Mae Smith, an extension educator based in Carbon County but serving southeast Wyoming, has had firsthand experience of the effects drought has had on small-acreage owners and producers. She can be reached at (307) 321-7558 or maep@uwyo.edu.

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**Why Should I Be Concerned About Noxious Weeds?**

- Noxious weeds threaten our natural resources in Wyoming.
- Noxious weeds reduce forage for domestic animals AND wildlife.
- Many noxious species are harmful/fatal to horses and other livestock.
- Noxious weed infestations reduce our recreational opportunities.
- Noxious weed infestations can reduce the economic value of land.
- Noxious weeds are spread by many human activities.
- Most new noxious weed infestations are preventable.

**What can your local Weed and Pest district do for you?**

- Noxious weed identification
- On site noxious weed consultations
- Technical advice and pesticide recommendations
- Cost share programs if available-weeds/pests
- Management plans (weed/pasture/land)
- Educational opportunities for all ages

Find all the facts about noxious weeds in Wyoming. Visit the Wyoming Weed and Pest Council website for contact information of your local Weed and Pest Control District.

www.wyoweed.org

Help protect Wyoming’s natural resources – stop the spread of noxious weeds!