Managing Drought Risk on the Ranch

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What we’ve heard so far

- Drought as a risk to be managed
- Importance of soil health during drought
- Range management practices that may help during drought
- Financial risk management practices to take before and during drought
We can’t control whether or not it rains
We can control what we do before drought, during drought, and in drought recovery

Why Plan?

- We can’t control whether or not it rains
- We can control what we do before drought, during drought, and in drought recovery

Farms wither

Wells dry, herds cut

By Robert C. Richland

Lack of pasture is a major reason why the livestock need to

1930s

1974-77

1952-56

1999-2007

1988-89

Baylor University, Texas Collection

1930s

1974-77

1952-56

1999-2007
Why Plan?

- When it’s raining, it’s hard to remember what it’s like when it’s dry.
- When it’s dry, a sense of panic might keep us from making the best decisions.
National Drought Mitigation Center

Mission: To lessen societal vulnerability to drought by promoting planning and the adoption of appropriate risk management techniques.
www.drought.unl.edu
The Cycle of Disaster Management

risk management

Planning
Monitoring and Prediction
Mitigation
Disaster
Protection
Impact Assessment
Reconstruction
Recovery
Response
Recovery

crisis management
How do Ranchers Plan for Drought?
WORKSHEET 4: CRITICAL DATES AND TARGET CONDITIONS

Date________________ Form Completed by ______________________

Critical dates are timely monitoring points in annual management cycles. Current and predicted forage resources are the primary focus of critical dates.

Each critical date should have an action plan that clearly states target points for initiating the plan.

On your critical date
Monitor and compare to "target points"
Take appropriate action (action plan)

<table>
<thead>
<tr>
<th>CRITICAL DATE</th>
<th>TARGET CONDITION</th>
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http://drought.unl.edu/ranchplan

WORKSHEET 7: EVALUATE MANAGEMENT STRATEGIES DURING DROUGHT

Date________________ Form Completed by ______________________

<table>
<thead>
<tr>
<th>DROUGHT STRATEGIES</th>
<th>IS IT FEASIBLE?</th>
<th>WILL IT HAVE AN IMPACT?</th>
<th>WILL BENEFITS OUTWEIGH COSTS?</th>
<th>TO CONSIDER?</th>
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<tbody>
<tr>
<td>FORAGE SAVING STRATEGIES</td>
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<tr>
<td>FINDING ALTERNATIVE FEEDS &amp; FORAGES</td>
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<tr>
<td>FINANCIAL STRATEGIES</td>
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<td>FAMILY &amp; PEOPLE STRATEGIES</td>
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<tr>
<td>OTHER</td>
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http://drought.unl.edu/ranchplan
Plan is built on understanding of ranch’s…

- Vision & objectives
- Resources (forage, water, $$)
- Strengths & opportunities
- Drought impacts
- Resource Demands (feed & water)
- Weaknesses and threats
Inventory and Monitor – Know what you’re working with

droughtatlas.unl.edu
U.S. Drought Monitor

www.droughtmonitor.unl.edu

October 20, 2015
(Released Thursday, Oct. 22, 2015)
Valid 8 a.m. EDT

Drought Impact Types:
- D - Distresses dominant impacts
- S - Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L - Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:
- D0 - Abnormally Dry
- D1 - Moderate Drought
- D2 - Severe Drought
- D3 - Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

http://droughtmonitor.unl.edu/
Monitoring Tools
Vegetation Drought Response Index

[Image of the Vegetation Drought Response Index website]

[Image of a map showing vegetation conditions in Oklahoma]

vegdri.unl.edu
Building Resilience

- Maximize health of resources
- Build flexibility into operation
  - “We build enough in the good years that we can stand a two-year drought….In the good years we build lots of reserve. In the drought years we take off…”
- Ongoing monitoring
Developing a Drought Plan

- Trigger Information
- Critical Dates
- Decisions
- Options & Strategies

Drought Plan
Write it down!

“I think it’s real important to have that discipline, and writing it out is probably as good a way as any to get that discipline.”
“…your first loss is your least loss. You’ve got to make the decision.”

“I’ve never known I’m going into a drought…so what you’ve got to do is you’ve got to say, for my present, current conditions, how do I need to adjust my stocking rate. …And I think that’s a mindset that’s important, because like I say, every time you get a little shower during a drought, that gives you false hope if you’re not careful.”
Managing Drought Risk on the Ranch

Drought is a normal part of climate...it will happen again. Fortunately, there are things you can do before, during, and after drought to reduce your risk. Ranchers are increasingly implementing new ways to better prepare for and respond to drought.

The information, strategies and resources on this site are designed to provide livestock producers in the Great Plains region with information on how to incorporate management strategies to reduce the threat drought poses to livestock and forage operations.

Managing Drought Risk on the Ranch: Great Plains Examples

**South Dakota**
- Daybreak Ranch (Central)

**Nebraska**
- Tippetts-Myers Ranch (Western Sandhills)
- Reed Hamilton Ranch (Sandhills)
- Shamrock Ranch (Southwestern)

**Kansas**
- Alexander Ranch (South Central)
- Adams Ranch (North Central)

**Colorado**
- Welch Ranch (Southern)
- Texas
- Johnson Ranch (West Central)

Download “Managing Drought Risk on the Ranch” Handbook

How to use this site

Drought Conditions
- U.S. Drought Monitor
- Water Year Precipitation (Oct. 1st to present)
Sample Drought Plans

These sample drought plans have been contributed by ranchers, consultants, and advisors throughout the Great Plains. They range from very simple to quite detailed. While they do not all follow the planning methods suggested here, they may help you decide what sort of plan is needed for your ranch operation.

A key point to remember with any planning process is the old saying, "garbage in - garbage out." The better job you do collecting information about your operation and evaluating your options before, during, and after drought, the better the results of your plan will be.

Sample Plans

South Dakota
Central South Dakota - Daybreak Ranch

Nebraska
Southwest Nebraska - Shamrock Ranch
Western Nebraska Sandhills - Tippets-Myers Ranch
Nebraska Sandhills - Reed Hamilton Ranch

Kansas
South-Central Kansas - Alexander Ranch
North-Central Kansas - Adams Ranch

Colorado
Southern Colorado Case Study - Welch Ranch

Texas
Sample Drought Plan - South Central Kansas

Goals/Strategic Objectives

The declaration of purpose for the Alexander Ranch is to manage all integrated resources in order to maximize the production of protein, shape a harmonious existence with nature and maintain economic viability.

The strategic plan and goals for the Alexander Ranch include:

1. Regenerating the range while utilizing the optimum percent of forage grown.
2. Improve the quality and quantity of the water cycle, mineral cycle, and energy flow.
3. Maximize the forage utilization and flexibility.
4. "Ancona Imparo" (I am still learning) Continue the management education process.

Operation

Seasonal custom grazing with cows and calves, no haying, no tractor

Inventory

- Annual Rainfall - 18-22 inches per year
- Native mixed-grass prairie

Critical Dates

NDMC YouTube Channel

National Drought Mitigation Center

Home Videos Playlists Channels Discussion About

All activities

National Drought Mitigation Center uploaded and posted 3 months ago

learn more at http://drought.gov and http://drought.unl.edu

NIDIS Engaging Preparedness Webinar on Climate and Health Using the Community Capitals Framework
by National Drought Mitigation Center
3 months ago • 52 views
The National Integrated Drought Information System’s Engaging Preparedness Communities Working Group hosted this drought...

National Drought Mitigation Center uploaded and posted 4 months ago

http://drought.unl.edu/ranchplan

Planning for a Drought - Ted Alexander
by National Drought Mitigation Center
4 months ago • 29 views
Ted Alexander, owner of Alexander Ranch in south-central Kansas, describes his ranch operation and the ways that ...

National Drought Mitigation Center uploaded and posted 4 months ago

http://drought.unl.edu/ranchplan

The first issue is deciding: “What is the challenge or decision to be made?”
• Challenges might include questions about cost, or strategy or timing.
• What are my production costs?
• How do I manage through a drought?
• What is a fair lease price for crops?

Economic Factors to Weigh in Making Decisions during Drought, Matt Stockton, UNL
by National Drought Mitigation Center
4 months ago • 3 views
Matt Stockton, Agricultural Economist at the West Central Research and Extension Center in North Platte, Nebraska...
Thank you!

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http://www.drought.unl.edu/ranchplan