

For More Information

Check with your local USDA Service Center providers:

- *Natural Resources Conservation Service*
- *Conservation District*
- *Farmers Home Administration*

Consult your local irrigation district or irrigation equipment suppliers

Contact your Cooperative Extension Service office

Check these Web sites:

- www.usda.gov/drought
- <http://droughtmonitor.unl.edu>
- <http://www.extension.org/pages/64730/drought-resources-content>

Other Tip Sheets

- *Water Conservation Tips for Stretching Water on Crops & Soils*
- *Water Conservation Ideas for Dryland Farmers*
- *Water Conservation Tips for Stretching Water on Pasture & Range*
- *Water Conservation Tips for Stretching Irrigation Water*

To download these tip sheets go to:
<http://www.ut.nrcs.usda.gov/farmers.html>

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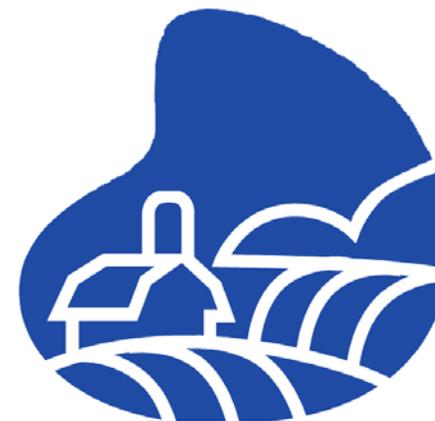
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Crop & Irrigation Management During Drought

in Utah



Crop & Irrigation Ideas for Conserving Water

Drought Brings Challenges

Drought conditions in Utah continue to present serious challenges to farmers and ranchers trying to stay in business with less and less irrigation water. Careful planning and management can help mitigate the effects of drought on agricultural crops. The Natural Resources Conservation Service (NRCS) has information and technical assistance that can help in these challenging times.

Prepare Irrigation System for Use

- ▶ Be ready to use early runoff
- ▶ Make any desired system changes before water is in the canal
- ▶ For surface systems clean ditches early and repair leaky headgates
- ▶ For sprinkler systems make needed repairs to system early and have extra repair parts on hand

Match Needs with Water Availability

- ▶ Grow short season, low water use crops such as small grains, forage or feed peas
- ▶ Be cautious—conventional tillage may result in more water being used
 - ▶ Make sure water will be available during critical growth periods
 - ▶ Irrigate smaller, more productive acreage rather than spreading short water supplies over the entire farm

Possible Alfalfa Considerations

- ▶ Shoot for high yields from early cuttings
- ▶ Save remaining water for best fields only
- ▶ Graze rather than harvest if yields are low. You may want to consider harvest costs, wait for alfalfa to reach full bloom, and use a bloat guard
- ▶ Consider one year renovation of old stands
- ▶ Consider inter-seeding into old alfalfa stands

Use Good Farm Management Practices

- ▶ Avoid excess tillage
- ▶ Fertilize properly—consider band rather than broadcast application and keep "P" levels up
- ▶ Plant small grains/peas as early as possible (1 bu/day loss after optimum planting date)
- ▶ Use good clean certified seed
- ▶ Control weeds both in the field and in ditches
- ▶ Keep good farm records

Monitor insect levels

- ▶ For Alfalfa Weevil, maintain healthy stands and control at economic thresholds:
 - Cut within 1 week of normal cutting
 - Most chemicals require 14+ days wait
 - Plants < 6" 25% stem tip feeding - spray long residual chemicals
 - Plants 12" 75% stem tip feeding - spray short residual chemicals
 - No regrowth within 4-5 days spray
- ▶ For Russian Wheat Aphids, spray from emergence to flowering when one out of 10 plants are infested.

Use Water Wisely

- ▶ Fill the soil profile in the fall if water is available
- ▶ Fill the soil profile in the spring to rooting depth
- ▶ Check soil moisture to root depth before irrigating
- ▶ Irrigate only to the root depth
- ▶ For surface systems:
 - Reduce length of runs
 - Improve water control where possible with gated pipe or siphon tubes
 - Use runoff water if at all possible
 - Flush water through field quickly then reduce stream size for soaking
- ▶ For sprinkler systems:
 - Keep rooting depths in mind and reduce nozzle size or set time
 - If feasible double up sprinklers on half the acreage and irrigate at night
- ▶ Consider the possibility of either buying or selling water

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This publication provided as a service to Utah farmers and ranchers by the Utah state office of the Natural Resources Conservation Service
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For further assistance contact your county NRCS field office listed in the phone book under USDA.