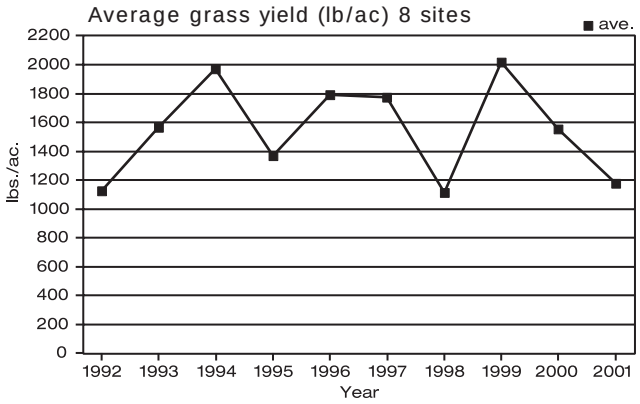
Grazing Lease Management During Drought

Dry Conditions Reduce Parkland Forage Supply

Ongoing drought conditions in Southern Alberta have seriously reduced forage yields in all areas of the region. Drought conditions have extended northward into the parkland region as well. The effects here are not as severe but lower than normal forage yields have resulted. Moisture reserves are non existent and ranges have lower than usual litter cover.



Grazing Lease Forage Supply and Drought

- The rated Animal Unit Months (AUM) of grazing for your grazing lease is an estimate of the forage supply that is normally available with appropriate grazing management. Available AUMs is a guideline that averages the year to year variation in forage production that our climate will produce. Carrying capacities are based on long-term average forage production and stocking records.
- The rated animal unit months (AUMs) must ensure that while forage is harvested to support livestock production, an adequate amount of carryover is left behind to protect plants and soil.
- In prolonged drought conditions grazing lessees must reduce grazing pressure appropriately to safeguard the range plants and protective cover.

Impact of Grazing During Drought

- Continued grazing of drought affected range further magnifies drought impacts.
- Plant vigor and litter reserves are further reduced.
- Continued grazing leads to man caused drought.
- Future forage yields are reduced and eventual range recovery will take longer.
- Value of rangeland for wildlife is reduced as protective cover and food supply is diminished.

Range Management During Drought

- Recognize the effect of drought on forage production.
- Reduce stocking levels to balance livestock needs with the forage supply.
- Allow only light use of forage to enable plants to maintain their present level of vigour (plant health) and retain litter.
- Rest or defer (delay) grazing in those fields that were heavily grazed in the previous grazing season.

"Litter is the ranchers insurance policy".

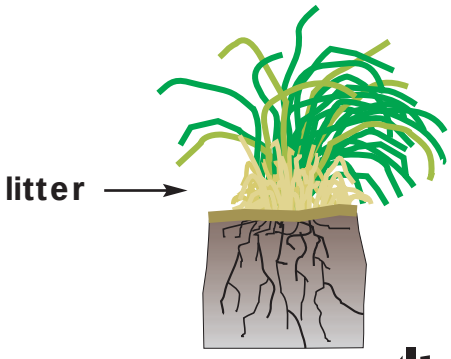
Dr. Walter Willms, Range Scientist, Lethbridge

What is Litter?

- Old grass residue, left over from previous years production; standing, recently fallen or partially decomposed.

Functions of Litter

- Litter conserves moisture by reducing evaporation making scarce moisture more effective.
- Litter shades and cools the soil, traps snow, increases water infiltration, reduces raindrop impact

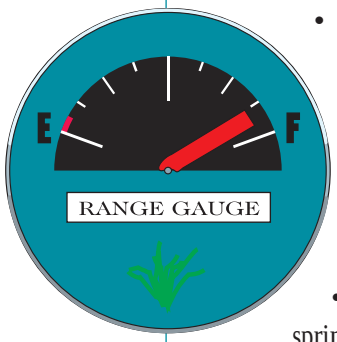


For more information contact your local Public Lands Office.

Alberta
SUSTAINABLE RESOURCE DEVELOPMENT
Public Lands

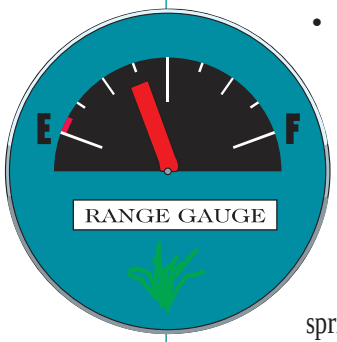
What are your “Range Fuel” reserves

What is the outlook for grazing in 2002



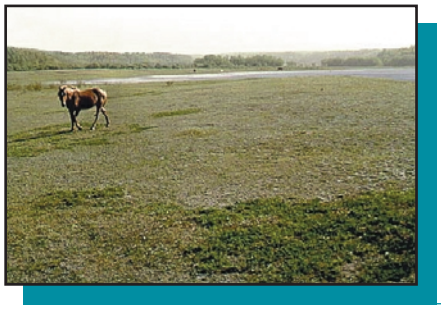
Running on the TOP HALF

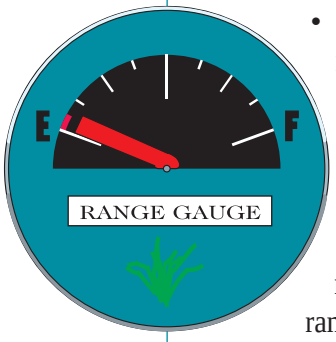
- My range has a good cover of litter.
- I have reduced stocking during these dry years.
- Despite the drought, some grass grew because of protective litter.
- **If drought continues**, I will continue to apply adaptive management in protecting my range from drought impacts.
- **If normal moisture returns** this winter and next spring, I can plan on grazing in 2002, albeit at reduced stocking rates, and expect to see faster recovery in my rangeland productivity.



Running on the BOTTOM HALF

- I have grazed my range heavier than I should have.
- My range is showing signs of stress; plant vigor and litter reserves are reduced. Bare patches with little plant cover are visible.
- **If drought continues**, then very limited grazing opportunities will exist in 2002, and appropriate reductions in stocking will be required.
- **If normal moisture returns** this winter and next spring, reduced stocking will be required for a number of years to rebuild litter reserves, ground cover and plant vigor.





Running on EMPTY

- The range looks “slicked off”.
- Most or all of the old grass or litter reserves are gone and there may be an increase in bare patches.
- **If drought continues**, continued grazing will further damage my rangeland. No grazing will be available on these areas in 2002.
- **When normal moisture returns**, multiple years of rest and careful management will be required to restore rangeland health. Contact your district Public Lands Specialist to discuss recovery plans.