Program Partners

- Agriculture and Agri-Food Canada
- Ducks Unlimited Canada
- Environment Canada
- Fisheries and Oceans Canada
- Manitoba Agriculture, Food and Rural Initiatives
- Manitoba Cattle Producers Association
- Manitoba Conservation
- Manitoba Habitat Heritage Corporation
- Manitoba Water Stewardship

Funding for this fact sheet was provided by: Greencover Canada Technical Assistance Component, Agricultural Policy Framework, Agriculture and Agri-Food Canada, Stewardship-in-Action Program, Fisheries and Oceans Canada and Environment Canada.

For more information please contact:
Riparian Program Coordinator, Manitoba Habitat Heritage Corporation
200-1555 St. James Street,
Winnipeg, MB. R3H 1B5
Phone: (204) 784-4358
Fax: (204) 784-4359
Email: mhhc@mhhc.mb.ca

This and other related material, including a stocking rate calculator, an aerial photo library and other pasture management tools, can be found at www.riparianhealth.ca

MANAGING THE WATER'S EDGE
A Land & Water Partnership

Calculation of Stocking Rate

1. Calculation of livestock forage requirements

Weight of cow (lbs.) X DM intake (1.5 to 3.5% body weight) X Numbers of days of grazing required

= Forage required per cow for grazing period

_____(lbs) X _____% intake X _____# of days

= _____lbs. DM/cow

2. Calculations of total usable forage:

Forage production (lbs/ac) X Utilization rate X Number of acres

= Total forage available for grazing

_____(lbs/ac) X _____Utilization rate X _____(# of ac)

= _____Total forage (lbs.)

3. Calculation of stocking rate:

Total forage available for grazing ÷ Forage required per cow for grazing period

= Number of cows pasture will carry

_____Available forage ÷ _____Forage required

= _____# of cows

Printed 11/2006

Riparian Grazing Strategies

Stocking Rate and Carrying Capacity

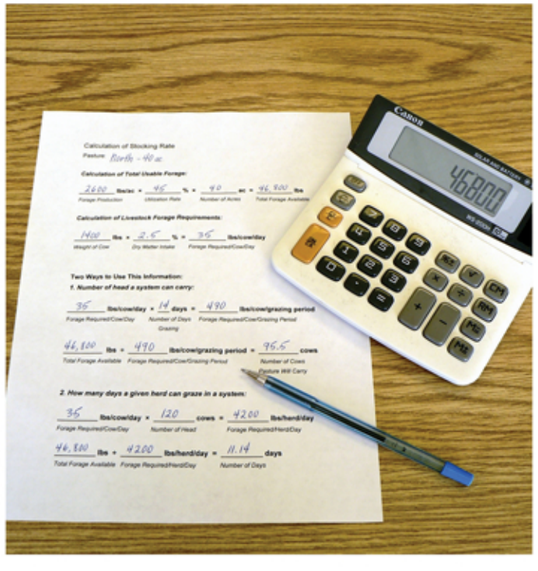
(One of a series)

Selecting the correct stocking rate for a pasture is the most important decision in planning a grazing system because it influences forage production, livestock gains and the long-term sustainability of the system. The stocking rate is the actual number of animals placed on a pasture during a period of time, or grazing season. The stocking rate must be based on the pasture's carrying capacity.

Carrying capacity describes the average number of animals that can be placed on a pasture for a season without harming it. This is determined by estimating the maximum amount of forage that can be removed through grazing and still allow for the maintenance or improvement of the health of the pasture. The amount of forage or grass residue left behind after the grazing period must be enough to protect plants and soil, conserve moisture and trap sediment, and to allow for healthy plant growth the following spring.

If the pasture is understocked – that is, fewer animals than the carrying capacity – individual animal performance may be high but the total pounds of animal weight gained per acre will be low. Much of the forage will not be used.

If the pasture is overstocked – more animals than its carrying capacity – individual animal performance will be low even though the total pounds gained per acre may be high. Pasture quality will decline due to over-grazing. Forage production and soil health will drop. In addition, weed invasion could occur and desirable forage species may be replaced with less palatable and less productive species.



MANAGING THE WATER'S EDGE
A Land & Water Partnership