# **GLOSSARY**

**ANNUALIZED GRAZING IMPACT** – the number of livestock (or Nutrient Units) per unit area averaged over a year (e.g., 10 cow/calf units/ac for 6 months is equivalent to 5 cow/calf units over a full 12 months)

**ANSI** – or Area of Natural and Scientific Interest is one where the land or water represents significant geological and biological features

**BANK** – the side or sides of the cut channels of streams, ditches and rivers

BED-LEVEL CROSSING - established at watercourse-bed level

BRIDGE CROSSING - wood or steel bridge adequately designed as crossing

**CARRYING CAPACITY** – ability of a streamside pasture to sustain the maintenance and production needs of grazing livestock with minimal environmental damage. Those with a high carrying capacity have rich, resilient soils that can provide several growth cycles of forage and withstand livestock access. Poorer and more fragile sites have lower carrying capacity. Integrated or management intensive grazing systems can maximize site carrying capacities.

**CONTROLLED ACCESS** – involves fencing with openings that permit livestock access to the water for drinking or crossing

**DENSITY LEVEL** – the number and type of livestock per unit area of grazing

DRAIN - a channelized stream or constructed ditch designed to convey excess subsurface water from cropland

**INTEGRATED GRAZING MANAGEMENT PLAN** – a grazing management plan that addresses livestock maintenance and production plans while adjusting management practices to the environmental conditions of the local riparian areas

LIMITED ACCESS – allows livestock to reach water for drinking, but doesn't permit crossing

**MANAGEMENT INTENSIVE GRAZING (MIG)** – a planned sequence of grazing and resting pastures to produce a desired agronomic and/or animal result. May require the use of rotational grazing, fencing, alternative water sources, and adjusted stocking rates.

MID-LEVEL CULVERT - along with concrete, is used to construct bridge-like crossings at mid-bank level

**NUTRIENT UNIT** – the amount of nutrients that give the fertilizer replacement value of the lower of 43 kg of nitrogen or 55 kg of phosphate as nutrient as established by reference to the Nutrient Management Protocol

**OUTDOOR CONFINEMENT AREA** – an enclosure for livestock, deer, elk or game animals that has no roof and is composed of fences, pens, corrals or similar structures. Term is used for facilities where livestock are confined, more than 50% of feed requirements are not from pasture, and livestock are confined for more than 200 days and are from a farm operation that generates more than 300 NU/yr.

**SAR** – or Species at Risk, are wild plants or animals that have been deemed at risk of disappearing from the wild in Canada, and are protected by federal legislation

**SLOUGHING** – breaking off of part of the bank

**SLUMPING** – the collapse of an area of the bank

**STREAM** – a perennial or intermittent watercourse having a defined channel (excluding manmade ditches) that contains flow from surface water and groundwater sources during at least 50 per cent of an average rainfall year

**STREAM ORDER** – a numerical system (ranking from headwaters to river terminus) used to designate the relative position of a stream or stream segment in a drainage basin. First-order streams are the smallest headwater streams.

**URBAN WATER INTAKE** – the intake or series of intake pipes at the nearest water treatment plant

WETLAND – land that has a high water table, surface water for part of the year, and water-loving plants

## For More Information

Best Management Practices: Buffer Strips, Agriculture and Agri-Food Canada and Ontario Ministry of Agriculture, Food and Rural Affairs, 2004

Best Management Practices: Farm Forestry and Habitat Management, Agriculture and Agri-Food Canada and Ontario Ministry of Agriculture, Food and Rural Affairs, 1993

Best Management Practices: Fish and Wildlife Management, Agriculture and Agri-Food Canada and Ontario Ministry of Agriculture, Food and Rural Affairs, 1996

Buffer Action: Improving Water Quality, Livestock Manure Pollution Prevention Project, 2002

Caring for the Green Zone: Riparian Areas and Grazing Management, 2nd ed., Cows and Fish Program, Alberta, 1999

Caring for the Green Zone: Riparian Health Assessment Field Workbook, 2nd ed., Cows and Fish Program, Alberta, 2001

Fencing of Watercourses to Control Erosion, Ontario Ministry of Agriculture and Food, 2000, Factsheet Order No. 00-0049

Fish Habitat Conservation and Protection: What the Law Requires, Department of Fisheries and Oceans, Canada, 1995

*Grazing Systems Planning Guide,* University of Minnesota Extension Service, Order No. BU–07606–S, rev. 2003

Low-Flow, Mid-Level Stream and Ditch Crossing with Culverts, Ontario Ministry of Agriculture and Food, 1992, Factsheet Order No. 92-143 Managed Grazing in Riparian Areas: Livestock Systems Guide, ATTRA IP223, 2003

Ontario Environmental Farm Plan, 2nd ed., Ontario Farm Environmental Coalition, 1996

*Pasture Production,* Ontario Ministry of Agriculture and Food, Publication 19, 1992

Pastures for Profit: A Guide to Rotational Grazing, University of Wisconsin Extension, A5329

Principles of Management-Intensive Grazing, West Virginia University Extension Service, 2003

Streambank Stewardship: Your Guide to Caring for Riparian Areas in Saskatchewan, Saskatchewan Wetland Conservation Corporation, 1998

Working Around Water? What You Should Know about Fish Habitat, Factsheet #1 – Working Around Water Series, Department of Fisheries and Oceans and Conservation Ontario. 1999

For a complete copy of the Fisheries Act, please go to:

http://laws.justice.gc.ca/en/F-14/index.html

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