



# PERENNIAL GRAINS

From grain to grazing: the intermediate wheatgrass potential.

## RESEARCH QUESTIONS TO BE ANSWERED

Perennial grain as a dual-purpose crop to provide a cash food grain crop and high quality forage for grazing beef cattle in late fall/early winter in Canada.

Agronomic, soil productivity and cattle performance of the integrated system

Habitat suitability for songbirds and nesting waterfowl

Whole-system environmental footprint of integrated grain production and cattle grazing

Economic potential to provide grain crop and cattle feed in the same growing season



Root Activity in the Soil to Promote Healthy Microbial Ecosystems

Carbon Sequestration

Soil Health Attributes

Long-Term Carbon Storage

Nutrient Recapture Ability

INCREASED

AGRO-ECOSYSTEM BENEFITS COMPARED TO ANNUAL CEREALS

DECREASED

Seeding Costs:  
Seed once every 5-6 yrs

Soil Erosion

Tillage & Soil Disturbance

Nutrient Leaching Risk

Greenhouse Gas Emissions with Reduced Farm Equipment Use

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**DIG DEEPER!** UM News "[From grain to grazing: the intermediate wheatgrass potential](#)"

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