



ENVIRONMENTAL FARM PLANS

Protecting the environment

Environmental Farm Plans help farmers identify their farms' environmental strengths and weaknesses and make action plans for improvements.¹ The goal is to minimize negative effects and risks to the environment while making positive changes to ensure the future of farming.² Examples of areas addressed include water quality/usage, waste management, fuel storage, soil management and pesticide usage.



ENVIRONMENTAL STEWARDSHIP

A **steward** is a person who is in charge of managing something and is given the responsibility to protect it. Farmers are often called "stewards of the land" because of the close connection they have with the land they farm. Their livelihood depends on their ability to use land wisely.³

Agriculture plays an important role in managing and protecting much of Canada's land and green spaces. Farmers continue to identify ways to reduce environmental impacts on their farms in order to conserve natural resources.

A goal of environmental stewardship is to maintain or improve the quality of soil, water, air and/or biodiversity of land. **Biodiversity** refers to the number of species and ecosystems in a region and the health of an ecosystem. Farmers and ranchers have an important role in protecting the biodiversity of their land by maintaining healthy water, soil and grasslands so that native plants, insects, birds and other wildlife can thrive alongside agriculture.



Applying seed and fertilizer to a field using no-till to help reduce soil erosion

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CONSERVATION PRACTICES

Some of the ways farmers help preserve the environment include:^{4,5}

MAINTAINING & IMPROVING SOIL NUTRIENTS

- Rotating crops so that the same amounts and types of soil nutrients aren't used from year to year
- Planting legumes (e.g., peas, clover or alfalfa) to add nitrogen to the soil

REDUCING PESTICIDE USAGE

- Specifically identifying areas of fields that need pesticide treatment rather than treating the whole field
- Using holistic methods of pest control (Integrated Pest Management or IPM) rather than relying just on pesticides (See Organic or Conventional Pesticide sheet for more information about IPM.)



Land around waterway is fenced to prevent cattle from accessing it directly.



CONTROLLING SOIL EROSION

- Seeding crops using conservation tillage or no-till methods that reduce/eliminate tillage and disturb soil less
- Planting trees, called **shelterbelts**, around the perimeter of fields

USING FERTILIZERS MORE EFFICIENTLY

- Following the **4 R** approach to nutrient management – applying the **right** rate of the **right** fertilizer at the **right** time in the **right** place⁶ - whether fertilizer, manure or compost
- Recycling livestock manure as fertilizer

REDUCING GREENHOUSE GAS EMISSIONS

- Feeding cattle diets that reduce the amount of methane they release
- Using GPS systems on machinery to more accurately apply seeds and fertilizer, thereby using less fuel

PROTECTING WATERWAYS

- Planting buffer zones (strips of grass between fields and water) to catch run-off water from fields so that nutrients, etc. doesn't end up in waterways
- Maintaining water quality by putting fences around streams or ponds to keep livestock and livestock waste out of the water (water is pumped to a drinking trough so livestock can still access water without going directly into it)

DID YOU KNOW?

70% of dairy farmers in Canada have an Environmental Farm Plan.⁷

