

# ON-FARM PLANNING PROGRAM



## PROGRAM FACT SHEET

The Ducks Unlimited Canada (DUC) On-Farm Planning Program involves the development of individualized long-term agreements with specific farm landowners to share the cost of various land management activities. These activities are to enhance the habitat for migratory waterfowl and to improve the sustainability of soil-based farm operations. The program represents a viable alternative to costly land acquisitions through stewardship partnerships over the landscape.

The On-Farm Planning Program began on a pilot basis in the Fraser River Delta. Prior to the implementation of this program, a study was commissioned to identify key factors limiting farm productivity in Delta through interviews with agriculture and wildlife experts and farmers. The last phase involved obtaining additional input from farmers through information meetings in order to fine-tune a template for the On-Farm Planning Program. As the program grows in scope to include other farming communities, the limiting factors and concerns for these new areas will be included.

Three main issues were identified as posing significant limitations to productivity: drainage issues; degraded soils (lack of organic content and nutrients); and wildlife damage of grass fields. Pest problems; increasing management costs and field fragmentation were also identified as limitations to productivity. Other less-frequently cited factors included urban pressures, saline soils, depreciation of machinery, limited potential for crop rotations, inadequate irrigation and lack of capital for site improvements.

Several plans are underway, and have involved the detailed development of individualized, long-term strategies for farms owned or leased by the landowner. Cost-estimates for various activities to be shared between DUC and the landowner have been identified and incorporated into management plans and budgets.



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## *Integrating farm and wildlife needs*

The On-Farm Planning Program has identified farm activities which improve the viability of farm operations and provide both indirect and direct benefits for wildlife. Direct improvements are those which improve the habitat by providing feed and refuge for wildlife. Indirect improvements do not directly provide feed or habitat to wildlife, but reduce negative factors such as point source pollution and improve the viability of the specific farm operations. A full spectrum of both direct and indirect tools is needed in order to deliver a comprehensive conservation program and ensure a full partnership approach with participating farms.

Supporting the efforts of farmers to improve productivity and make soil-based farm practices sustainable over the long-term improves the capacity of the Fraser River delta and other coastal areas to continue to support internationally significant wildlife populations well into the future.

All efforts will be made to integrate DUC's On-Farm Planning Program initiatives with those outlined in the *Agricultural Policy Framework Guidelines* agreed upon by the federal and provincial governments.

### **Farm activities which support this integrated approach include:**

#### **Over winter cover crops and grass rotations:** (Direct wildlife benefit, direct agricultural benefit)

Cover crops and grass rotations provide important feed habitat and refuge to many species of migratory wildlife including American Wigeon, Snow Geese and Trumpeter Swans. They are also an important aspect of a sustainable, soil-based operation. Cover crops and grass rotations provide benefits by protecting and improving soil structure, helping to restore depleted organic matter levels, and aiding in breaking up crop diseases and pest cycles. Soil management improvements such as these are key to increasing the capacity of these fields to support wildlife.

#### **Nutrient Management:** (Indirect wildlife benefit, direct agricultural benefit)

Manure provides extra nutrients for growing crops, benefits soil structure and increases organic matter levels. Lime applications raise the soil pH, increasing the production of forage crops and possibly their crop nutrient availability. Improvements in both the quality and quantity of forage production make farm operations more lucrative and more able to accommodate wildlife feeding on farm fields.

#### **Soil Drainage:** (Indirect wildlife benefit, direct agricultural benefit)

A properly designed, installed and maintained drainage system can lead to improvements in both plant growth and in the traffic ability of soils. Good drainage allows deeper rooting of crops, which reduces the need for irrigation in the summer (increased root mass increases the water storage capacity of the soil). Well-drained soils warm up faster in the spring, extending the growing season and increasing cropping options. Land leveling improves surface drainage and may lead to increased crop yields, reduced erosion and benefits to soil structure. An effectively operating ditch will have a relatively large carrying capacity for water and is an essential component of good soil drainage. Benefits of improved drainage for wildlife are in the resulting increases in the capacity of fields to provide feed habitat for longer durations while reducing damage to forage crops.

#### **Integrated pest management (IPM):** (Indirect wildlife benefit, direct agricultural benefit)

IPM is a system whereby crops are monitored for pest and disease problems in order to pinpoint specific treatments.. This enables the operator to reduce the use of chemical controls by applying specific treatments when and where they are necessary. Indirectly, wildlife benefit through the reduced exposure to pesticides from fields and the bio-accumulation of these chemicals through local food chains.



Ducks Unlimited Canada is a private nonprofit charitable organization dedicated to the conservation of wetlands for the benefit of North America's waterfowl, wildlife and people. For other fact sheets or more information about conservation projects, please call 1(800)665-DUCK (3825) or visit <http://www.ducks.ca>