Kings County Riparian Fencing
Nova Scotia Habitat Conservation Fund
Final Report 2007

Wetlands and riparian edges are an intricate and important component to the agricultural landscape providing both essential wildlife habitat/biodiversity and reducing surface water contamination, erosion, flooding and water runoff. Much of the crop and pastureland along the valley floor watersheds has been worked to the edge of the waterways essentially removing the natural riparian zone. Riparian fencing attempts to create a buffer zone between pastureland and waterways to allow regeneration of the lost riparian edge increasing the biodiversity of flora and fauna found in these specialized areas.

Introduction

Kings County is the most intensively farmed county in Nova Scotia. Most of the agricultural activities (58%) in the county are in the Agricultural District located on the valley floor and includes the watersheds of the Cornwallis, Canard, Habitat, and Pereaux Rivers. Both the agriculture effort and the greatest population densities are centred around these four east flowing rivers which ultimately enter in the Bay of Fundy through the Southern Bight of the Minas Basin, a Ramsar site and a Western Hemisphere Shorebird Reserve. Irrigation, pesticide and nutrient applications, livestock access to waterways and agricultural waste runoff are common occurrences in these watersheds that can have a negative impact on both wildlife habitat and water quality.

Much of the crop and pastureland along the valley floor watersheds has been worked to the edge of the waterways essentially removing the natural riparian zone. These edges, which provide essential habitat for specialized fauna and flora, also provide corridors for a variety of wildlife. In addition, these areas help improve water quality especially in the agricultural landscapes by reducing nutrient and pesticide runoff and soil infusion into the waterways. Without this buffer zone, common practices such as pesticide and nutrient applications, livestock access to waterways, agricultural waste runoff and even tile drainage impact directly on the waterways.

The current loss of riparian landscape in this area is one of the factors that negatively impacts on the water quality in these watersheds. These waterways, which are heavily relied upon for irrigation and water supplies for livestock, often exceed Canadian guidelines for E.coli and nitrate/phosphorus contamination.

To reduce the impact of agricultural operations on both the lost wetland/wildlife habitat and water quality in the east flowing rivers of Kings County, the Friends of the Cornwallis River Society (FCRS) and their partners have been working on a multi-facet

approach that both assists and motivates producers. These approaches have included a riparian fencing project for livestock producers, and a riparian leasing project for crop producers.

The riparian fencing project is designed to encourage livestock producers to fence off livestock access to wetlands (including salt marshes) and waterways and to leave a buffer strip (riparian edge) around these areas (Fig 1). The minimum setback is 5 meters. The fencing projects are a cost sharing effort between FCRS and the landowner. FCRS will contribute up to 40% of the initial total cost of the approved project and the landowner will contribute 60%. Guidelines and agreements follow those currently used by the NS-EHJV in their Riparian Management Project.

The leasing project focuses primarily on crop farmers. Producers along the waterways were approached with an offer to lease their riparian lands for 10 years at $25.00 per acre (or approximately one half the lease value). The minimum setback from the stream/river edge is 5m. As 1 acre of a 5m setback is essentially 1 km long, the cost of protecting 1 km of riparian edge for 10 years is $250. The setback distances were established using semi-permanent markers and the landowners signed an agreement to allow the natural vegetation to reclaim the area or FCRS to re-introduce natural vegetation and native tree species. Farmers/landowners were paid in full on signing the agreement. This method provided the farmers/landowners with a more appealing financial offer and eliminates the need for yearly tracking and payments.

The voluntary participation by agricultural producers in these incentive projects provide valuable support for implementing changes to reduce the impact of agriculture on both wildlife habitat and water quality. These changes will place the producers in the forefront of the efforts to address water/wetland conservation in the agriculture landscape in Nova Scotia.

Accomplishments

To date the biggest accomplishment the Friends of the Cornwallis River Society has had is the number of producers we have talked with, handed brochures to and hopefully educated in a way that will help them value their property differently. In contacting landowners we have supplied them with the information they need to make an informed decision based on their operation and land use. In 2005 packages were sent out to 75 landowners along the river with a brochure that we created on our riparian options and their benefits. Included was also a letter to the landowner and contract information. In 2006 a brochure supplied by Island Nature Trust on the best land management practices was distributed to specific landowners as well as the general public. About 150 of these have been distributed.

In the interim report it was stated that we were hoping for contracts from two farms on the Brandywine Brook. These are ideal sites but even though we talked to the landowners a number of times they would not sign the contract. They wanted more money than we could supply them with and didn’t see the benefits of putting a fence

close to a river that was going to flood every year. This was the general consensus we got from a lot of the public. The main roadblocks from landowners who would not participate were their concerns with flooding, up keep and lack of need in their eyes.

We were successful in getting two fencing contracts both on tributaries of the Cornwallis River. One is a hobby farm that is just getting started and will have sheep and donkeys. The area we fenced was protecting a tributary and a marsh area from degradation due to grazing by livestock.

Newly erected fence along a tributary of the Cornwallis River.

Marsh area that the fence will be protecting.

The second site was a contract on the VanOostrum Farm located in Somerset, Nova Scotia on the headwaters of the Cornwallis River. This beef farm houses around 500 head of cattle that are pastured on a couple of winding streams. Several improvements have been planned for this farm from a variety of different contributors. To date, through our project we have erected fencing along 2 km of stream bank at a set back of a minimum of 5m. This will keep the 500 head of cattle out of the stream and off of the

riparian edge allowing it to re-establish itself and creating a healthy area for native flora and fauna as well as decreasing contamination of the water due to field runoff. There is plans for at least 2 more kilometres of fencing to occur at this site by spring 2007.

Five farmers from neighbouring properties have been by to talk to the farmer about the future plans and to see how the fence was put in place. There are more plans in the works for this farm as a demonstration site. This will allow the public to see what a well designed, ecologically/economically friendly farm can look like and the benefits that it holds both aesthetically, economically and environmentally.

VanOostrum Farm in Somerset, Nova Scotia. Two kilometers of fencing took place behind the barns on the left side of the picture. The smaller stream seen in this photograph will be fenced out in the future plans.