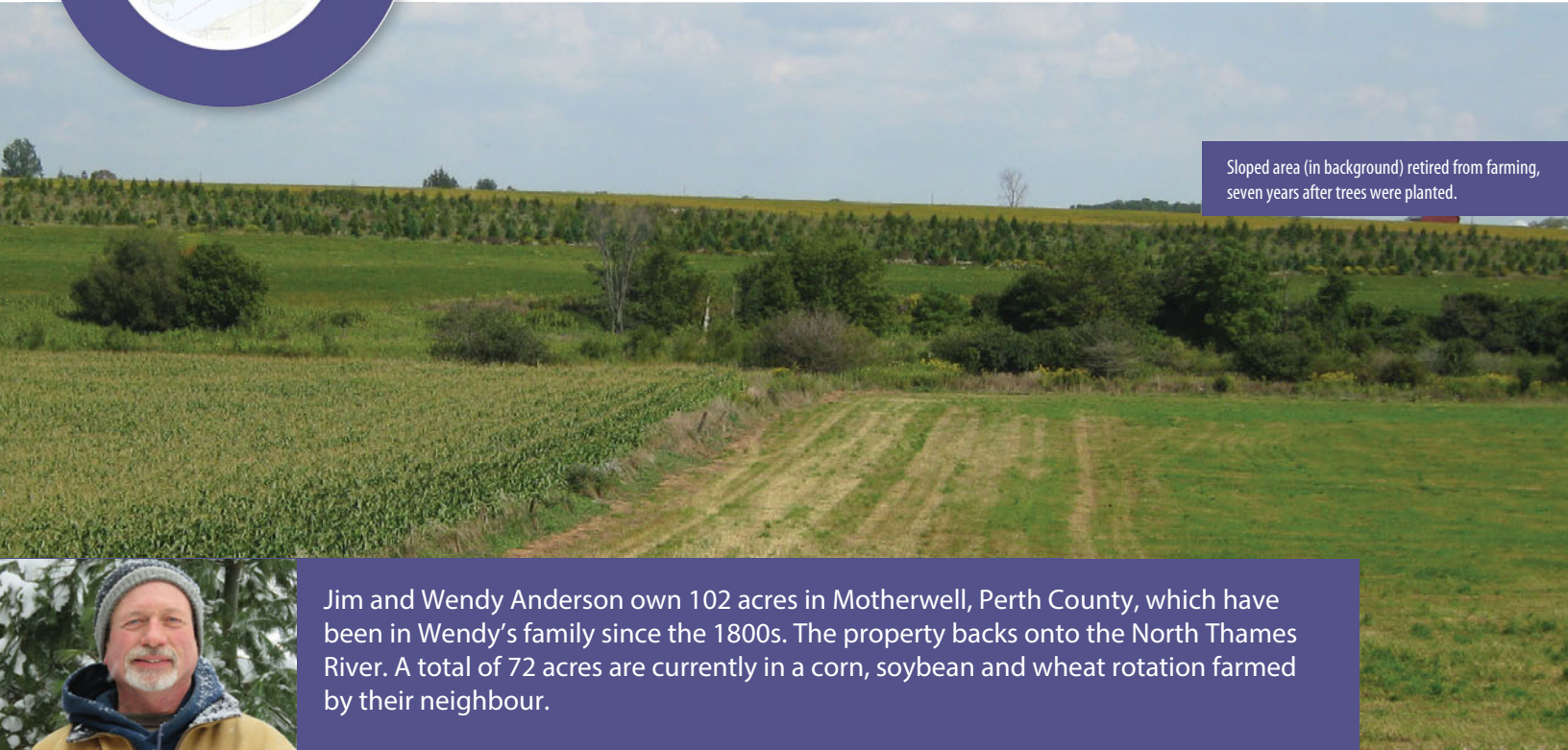




Case Study: Fragile Land Retirement along the North Thames River



Sloped area (in background) retired from farming, seven years after trees were planted.



Jim and Wendy Anderson own 102 acres in Motherwell, Perth County, which have been in Wendy's family since the 1800s. The property backs onto the North Thames River. A total of 72 acres are currently in a corn, soybean and wheat rotation farmed by their neighbour.

Concerns:

A portion of the land has a slope greater than 20%. This slope was not productive and erosion was creating gullies. Jim was concerned about sediment and nutrient losses into the river.

Solution:

In 2000, Jim completed an Environmental Farm Plan that identified two areas of concern on the property, leading to the decision to retire the erodible fragile land. Jim worked with the Upper Thames River Conservation Authority (UTRCA) on a tree planting plan to determine tree spacing and species.

Benefits:

Taking the sloped areas out of production and planting trees has helped to reduce soil erosion while improving soil health and water quality.



Sloped area retired next to road, seven years after trees were planted.

Project Timeline:

Spring 2001 – Sloped areas taken out of farm production and planted with red clover

Fall 2001 – UTRCA sprayed herbicide to create rows in the red clover for the following spring planting of the seedlings

Spring 2002 – UTRCA machine planted 2,750 seedlings

Maintenance:

UTRCA **sprayed herbicide** on five different occasions: after the seedlings were planted in spring 2002, as well as in fall 2002, fall 2003, and spring and fall 2004. Jim further reduced competition from grasses and weeds by **mowing** between the trees for the first two years. Jim received advice from UTRCA on how to **bait traps** for rabbits that were girdling the young trees.

Tree species planted on Jim's land:

White Ash
White Cedar
European Larch
Red Oak

White Pine
Norway Spruce
White Spruce



The sloped land was taken out of farm production in spring 2001 and red clover was planted as a cover crop. That fall, UTRCA sprayed herbicide on the red clover to create rows for the seedlings to be planted the following spring.



Trees in 2009, seven years after planting.

By the numbers:

4.5 acres of fragile land retired
2,750 seedlings planted
\$4,549.00 project cost (in 2002)



An added benefit of retiring the fragile land is the trail system Jim has made among the trees that he and his family enjoy all year round.