

## Wind management can reduce farm odors

Todd Leuty, Agroforestry Advisor, Georgetown/Guelph OMAFRA

It's the wind that carries unpleasant odors of farming to neighboring noses. At windbreak workshops most information presented to farmers focuses on improving crop yields, reducing energy costs by sheltering buildings and livestock and controlling soil erosion. A frequent question asked from audiences at workshops is, "Could a windbreak help to control odors from manure storage facilities?" The answer is yes.

Although unpleasant odors will not be completely stopped, a properly designed windbreak located upwind of the manure storage area should help to reduce the movement of odors. A windbreak will reduce the amount of air that moves past the manure. Strong winds will be slowed and calmed by the tree barrier. Excessively turbulent winds will be diverted up and over the storage area. Windbreaks serve to reduce the amount and the intensity of air that mixes with the smells. Less moving air means less movement of odor.

Wind direction changes. To guarantee that windbreak protection will always be located upwind from the manure storage area, windbreaks can be planted around as much of the perimeter of the storage as possible. An opening in the windbreak to enable access to the storage area should give you lots of maneuvering room for the largest machinery. (A reminder that tree roots may block drainage tiles. See OMAFRA publication 29, Drainage Guide for Ontario for additional information).

Try to locate the windbreak at least 100 feet away from the manure storage area and any access roads. This distance is important during winter because windbreaks also function like a snow fence knocking blowing snow out of the air and dropping it in drifts just downwind of the tree row. A separation distance of 100 feet will prevent snow drifts from piling up in inconvenient places.

Windbreaks can be designed in different ways and the following is one suggested method. One row of hybrid poplar planted six to eight feet apart will provide a fast growing windbreak within a five year period, but since poplars drop their leaves in autumn the windbreak will be best in summer. For good season-round protection, add a second row of conifer (ever-

greens) planted about eight to ten feet away from the poplar row either to the inside or to the outside of the poplar row.

Evergreens such as white spruce, Norway spruce or Austrian pine can be planted about three feet apart within the row but plan to cut out every other tree after several years as they begin to crowd each other. White cedar is not recommended for windbreaks because it grows too thick creating downwind air turbulence. Evergreens take longer to grow than poplar but should begin to give wind control benefits after eight to ten years of good growth.

Keep the weeds around trees controlled for the first five years. Poplar may need white plastic mouse guards around the base of each trunk to keep mice from killing the trees during winter. Mice usually don't kill conifers.

A properly designed windbreak should allow about 35 to 50% of the wind to pass through it but at a much slower and more even speed. The other 50 to 65% of the wind will be pushed up and over the windbreak and, most important, up and over the manure storage tank. Some wind must be allowed to flow through the windbreak. Wind that flows through the trees acts like a cushioning pillow (air pressure) that holds the faster more turbulent wind aloft. The fast turbulent wind remains aloft, gradually returning to the ground, for a downwind distance that is equal to about 15 times the height of the windbreak. For example, a 20 foot high windbreak will provide 300 feet of downwind protection.

If the windbreak is too thick and dense e.g white cedar, the cushioning air pressure will not form downwind of the windbreak. The turbulent air will be drawn down very quickly becoming even more turbulent causing excessive mixing of the offensive odor into the air.

The windbreak has a limit on useful life. Trees will eventually become overgrown, openings will develop under the trees and unwanted holes will form where trees and branches die out. Plan to renovate the windbreak (plant a new one) after 30 or 40 years of good working service.

Less air movement over and around the manure storage area means less mixing of unpleasant smells. Properly located windbreaks should help to deliver much cleaner air to all downwind noses. Hopefully, what once was a waft should be only a whiff.

## Glen Williams walking tour

BY IAN SMITH  
NORTH ESQUESING

On a walking tour of Glen Williams on June 10th with the Esquesing Historical Society, this writer learned that, although it has never been a town of its own, Glen Williams certainly has a distinct history and has always been somewhat "self-sufficient". On a walking tour of the Glen, Mark Rowe took the Esquesing Historical Society members back to a time when what is now the ball park was nothing but a swamp, and when various mills supplied the locals with not only employment, but a sense of community as well.

Glen Williams used to be known as Williamsburg. But the establishment of a post office in 1852 gave the town the designation of Glen Williams, because there was already a post office designated as Williamsburg along the St Lawrence River.

In 1825, a clothier named Benaja Williams bought a 200-acre lot in the area that is now

Glen Williams, and established a sawmill and a flourmill on the highest spot that was close to the river. He was 61 years old and had established a woolen mill in Gainsborough Township in Niagara, where he had been granted 200 acres in the late 1790's. He had also married Charles Kennedy's daughter, Elizabeth, in 1805.

Then in 1833 Benaja bought lot 21 on the ninth concession so that a road would connect Williamsburg with the seventh line and the Toronto to Guelph Road.

In 1839, Benaja's fifth child, Jacob, started a woolen mill. But after his death in 1853, the mill was taken over by his brother Charles Williams.

The village bought a fire engine in 1856, which wasn't required to be of service until 1864. It was lost while fighting a forest fire in 1866.

In 1878 a mill in Norval, owned by Samuel Beaumont, burnt down. So he rented a mill owned by James Bradley, purchasing it in 1882 in the Glen. Soon after part of the mill was destroyed by fire, and then a three-storey building was built in its place.

Not only was the Glen plagued with fires, but also suffered from annual flooding due to an earthen dam that had been built by Benaja's son, Isaac Williams, to divert water into the mills.

The Georgetown Light and Power Company built an electric generating station on the site of the old flour mill in 1904, supplying Georgetown with electricity until it was torn down in 1914, when Georgetown Hydro began to supply electricity to the Glen.

There has been talk of making Glen Williams a designated historic site, and after the walk, it's easy to agree with such an initiative.

### Milton Council Recap by Cindy Lunau

**Brookville Playground Structure:** The Community Services Committee of Council welcomed a delegation from Brookville School, including students Tom Wilson, Brendan Lange, Cohn Mania and Katherine Harder. The Committee approved a proposal for an \$18,000 Creative Play Structure at Brookville Public School which will also serve the Community and the Brookville Ball Diamond. The Nassagaweya Community School Committee pledged to repay \$8,000 over four years to assist the project. If ratified by Council on July 6th, plans will proceed for completion as soon as possible, likely in August, 1998.

**Campbellville Park:** Leisure Services has offered to provide garbage barrels, benches, and picnic tables for Campbellville Park. It also agreed to share the cost of two portable washrooms with the C.A.B.A. (the Campbellville Area Business Association.) The proposal was passed by Community Services Committee, and will come to Council for ratification on July 6th.

**Milton Triathlon:** Nassagaweya welcomes the cycling portion of the Milton Triathlon on Saturday, July 18. Approximately 600-800 athletes are expected to test their skills in the cycling portion of the triathlon. The Triathlon start/finish is within the Kelso Conservation Authority Area, with the swim event occurring in Kelso, running on Appleby Line to Hilton Falls and return, and the bike race extending from Third Sideroad into Nassagaweya.

**Bridge Closure:** First Line Bridge at the border of Eden Mills (not to be confused with the Bowstring Bridge within Eden Mills) will be closed for repairs commencing in late June and completed by late August. Rerehabilitation is necessary to maintain the integrity of the structure. The Town is cost sharing the construction costs with the County of Wellington. The 50% share should not exceed \$250,000.

**HUSP:** The Region's Administration & Finance and Planning & Public Works Committees in a joint meeting unanimously approved a motion to continue this project to the design and build stage. This plan will be presented to full Regional Council for ratification on Wednesday, June 24, 1998. Under this proposal, Milton is scheduled to realize the beginnings of the HUSP development by the fall of 2000.

**Tax Bills:** On Wednesday, June 24, there will be a joint information meeting of regional and local councils in the Regional Chambers for a presentation of current value assessment impact and tax policies. Thursday, June 25, Regional Council will receive delegations relating to CVA and tax policies. The meeting begins at 4 p.m. Call Joan Eaglesham, Regional Clerk at (905) 825-6000 to register your appearance. On Wednesday, July 8 Milton Council will hold a special meeting to receive a report from staff on the assessment and tax policy issues as they affect Milton. The public is welcome. Milton's final tax rates will be set by the end of July and final tax bills will be sent some time in August.

#### Your representatives:

Your questions, comments, concerns are important. Please call us. Lieven Gevaert (519) 856-4529; Barry Lee (519) 824-0679 or (519) 853-5790; Cindy Lunau (519) 853-3772.

### Important information about 911

Your municipality, working with Bell Canada has implemented 9-1-1 service throughout your area. The new 9-1-1 service uses your municipal address to deliver 9-1-1 calls placed from your location to the appropriate Police, Fire and Ambulance dispatch agency. Your municipality has assigned you a new municipal (also known as civic) address that consists of a street name, house number and possibly a direction indicator. Your new address was provided to you by your municipality. If you rent the property, please contact the landowner to obtain the correct information.

If you are not sure what your new address is, please contact your local municipal office before responding to Bell Canada.

Your municipality and Bell Canada have worked together to provide 9-1-1 service. Your life and property may depend upon emergency services being able to locate you in the event of an emergency. Your address is critical to allow emergency service providers to find you quickly.

Call the 9-1-1 addressing office at 1-800-667-1961, fax your information to 1-800-667-2481, or mail it to 9-1-1 Addressing, Bell Canada, 449 Princess St., Floor 5, Kingston, ON, K7L 4Z9.

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