

COLUMN

**Environmental efforts
 continue**

Several projects supported by the CDAQ are designed to improve farming practices and make them more efficient and more respectful of the environment.

Here are two projects where producers want to develop new sustainable agriculture technologies.

Liquid effluent treatment on a dairy cattle farm

A prototype of a biofilter on an organic bed treating liquid effluent and a sheltered manure composting platform have been installed at *Ferme Bicoise* in the Lower St. Lawrence by the *Centre de recherche industrielle du Québec* (CRIQ). In collaboration with the Purdel agri-food cooperative, the CRIQ has proceeded to adapt a technology developed for liquid hog manure, the Biosor[®], to treat dairy effluent and manure efficiently.

The treatment system allows reduction of the volumes to be spread and the odours associated with this activity by enhancing farm fertilizers only in compost form. The results obtained to date show a cleaning efficiency ranging between 88% and 99% depending on the components (BOD₅, particles in suspension, nitrogen, phosphorus, etc.), allowing the treated liquid effluents to be discharged to the receiving environment (approximately 1.5 m³/day).

Even though there is no specific regulation concerning dairy effluent for the time being, the owner of *Ferme Bicoise*, Nil Voyer, hopes to stay ahead of events. "With this system, I'm on the leading edge. The public is increasingly sensitive to environmental problems caused by agricultural activities and I believe that it's only a matter of time before new effluent laws are enacted," says Nil Voyer. He is very satisfied with his new treatment system, which won him a *Phénix de l'environnement* award in 2001 for improving environmental performance.

For more information: Nil Voyer (418) 736-4284

Design and production of a chicken manure and compost spreader

The agroenvironmental club GERA, in partnership with the owners of *Fermes Longprés*, Loïc, Thomas and Côme Dewavrin, have developed a chicken manure and compost spreader. "We wanted to make a spreader that could deposit and incorporate manure between rows in a single pass to minimize tillage, while limiting nitrogen losses and odours," says Loïc Dewavrin. "The machinery necessary for this type of work exists for liquid manure, but there's nothing like this on the market for solid manure."

To provide the soil with fertilizer input proportionate to crop needs, agricultural producers who use manure with a high nitrogen and phosphorus content, such as poultry manure, must apply rates ranging between 5 and 10 t/ha to comply with environmental standards. With the Dewavrin brothers' spreader, it is possible to spread rates as small as 2 or 3 t/ha uniformly, unlike conventional spreaders. The owners of *Fermes Longprés* say that the prototype is ready to be developed for marketing if there is a demand.



Côme, Loïc and Thomas Dewavrin, designers and builders of the new spreader.

For more information: Loïc Dewavrin (450) 452-4559

We invite you to contact us for any question or comment on this column or the activities of the CDAQ

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To refer to the list of financially supported projects, please visit the Council's website at: www.cdaq.qc.ca
 Since its inception in 1996, the CDAQ administers the producers' share of provincial funds allocated by Agriculture and Agri-Food Canada (AAFC) under the Canadian Adaptation and Rural Development Fund (CARD).