

Water Guardian Program by Imperial Tobacco's Fundacion Altadis is a Universal Success

Fencing and No-Till Farming Protect Against Erosion

–By Augustus Farragut

mperial Tobacco, Universal Leaf do Brasil and Fundacion Altadis (a non-governmental organization/ NGO that is part of Imperial Tobacco) report collaborative success with their Water Guardians program. The Water Guardians initiative comprises the funding of research, planning, program development, strategies and im-

plementation, supervision and results tabulation for the conservation of a stream in the heart of tobacco country in southern Brazil. Since it began in 2011, the Water Guardians program has received technological support through the University in Santa Cruz do Sul (UNSC), located in Vera Cruz, RS. Brasil.

A riverbank without Water Guardian protection: The constricted flow results from degradation of the riverbank, often caused by farm animals.

Tobacco farmers are among the first links in the tobacco supply chain and many farmers in the Arroyo Andreas watershed—near Vera Cruz—are practicing improved agricultural practices in order to foster their own economic sustainability while helping their region remain ecologically healthy. The Arroyo Andreas stream is the source of drinking water for Vera Cruz, but it is also a key resource since it flows through a cluster of tobacco farms in the heart of the "old belt" in Rio Grande do Sul. This region is also a center of tobacco processing and commercialization in Brazil—the No. 1 source, by volume and value, of exported tobacco in the world.



Above: A riverbank with Water Guardian protection. Fencing can protect the riverbank from the erosion caused by animals, and this allows healthy native vegetation to rejuvenate. Right: A field of tobacco using erosion-resistant techniques such as "no-till," which allows incidental vegetation to remain in place where it can help limit the erosion caused by heavy rain and drainage.

The Water Guardian initiative has become self-sustaining with the guidance and support of Imperial Tobacco, Universal Leaf, Fundacion Altadis and UNSC. When it was in its first year, TI visited the region and reported on the program's initiation. Following that initial tour in 2012, TI revisited several participating farms in February 2014 and the progress made by the farmers in the interim period was clearly evident. The Arroyo Andreas is healthier than before the program started and, most encouraging, the farmers who participate are reaping economic benefits because of decreased soil erosion.

As envisioned, the programs have successfully established better soil conservation and river protection by eliminating erosion of the river's bank. This is achieved by utilizing fencing for the purpose of excluding farm animals from river banks and providing more con-

trolled, less intrusive access to drinking water. The Water Guardians programs are focused on the maintenance of the stream, but they also help establish an atmosphere more conducive to the acceptance of better business practices for farmers. Most notably, several of the participating farmers are now utilizing no-till farming, which means that the troughs between the rows of tobacco plants look a bit overgrown, even neglected. In fact, the real purpose of notill farming is that the vegetation in the troughs takes hold and helps reduce runoff and the resulting loss of nutrients. This is the very runoff problem that farmers experienced last year in the Tobacco Belt, where heavy rains damaged or stressed many crops. While not part of the Water Guardian initiative, ULT and its field staff actively encourage the use of no-till farming.

The farmers who are Water



Guardians often remain open to new ideas to enhance their economical sustainability. No-till practices are widely utilized, with up to 70 percent of farmers following this method in certain areas. This is a big change from 2005 when a less-successful methodology was borrowed from soya producers; that method did not work well on small-scale tobacco farms. Another cost saving idea is predrying tobacco before it is placed in the barn. This shortens time in the barn and reduces demand for barn capacity.