

# Profiling for Preservation

Caroline Lewis reports on a DNA profiling project aimed at protecting the genetic diversity of the rare Manx Loaghtan sheep which is currently on the 'at risk' category of the RBST Watchlist.

For the past 21 years, the Manx Loaghtan Sheep Breeders' Group (MLSBG) has been dedicated to the conservation and promotion of this breed for use in conservation, meat and wool. In autumn 2008 the group launched an important new initiative which is committed to the preservation of rare Manx Loaghtan bloodlines in order to ensure that the breed retains as wide a gene pool as possible.

Working in partnership with the RBST, the MLSBG's Breed Advisory and Analysis Group (BAAG) goes to the heart of the ethos of the keepers of all rare breeds: to increase numbers while maintaining as much genetic diversity as possible and therefore protecting the vigour and overall health of the breed for years to come.

The work of the BAAG began with a presentation by RBST Head of Conservation Dr Dawn Teverson on the position of the breed's overall genetic bloodline profile. Some lines had already become extinct and others were very much on the verge of doing so. At the following AGM, the MLSBG gained the support of its members to take the project forward.

With the tuppung season bearing down, a huge amount of activity took place in a very short period of time. This involved tracking down owners of the first six bloodlines catalogued. This was no easy feat as animals and owners were spread far and wide and in some cases the trail quite literally went cold, leading to a recently slaughtered ewe or ram. Throughout this time, BAAG members were responding to interested breeders, providing genetic co-efficient data on their flocks and seeking out relevant mates. This was the sheep equivalent of Dateline and the support from Manx Loaghtan breeders was overwhelming.

BAAG is also collecting targeted blood samples so that a breed DNA profile can be established. To this end,



Barry Lewis, George Platt and Jeff Clarke on the Isle of Man.

MLSBG chairman Jeff Clarke and committee member Barry Lewis visited the Isle of Man as breeders' flocks there have specific founder bloodlines, essential to the profiling programme. This included the flock of George and Cilla Platt. The pair also visited George and Diana Steriopulos to discuss BAAG's work and to see what further progress can be made on this project with more Isle of Man Loaghtan breeders. BAAG group members have trained specifically to take blood samples for DNA profiling and further sampling is currently taking place in the east of England and Cornwall.

Rare bloodlines are continuing to be targeted as another breeding season is around the corner, both for semen collection and live animal conservation. The project is one that relies upon support and co-operation between the MLSBG committee through BAAG, group members, Manx Loaghtan breeders in England and the Isle of Man and the RBST.

**For breed society details see [www.rbst.org.uk](http://www.rbst.org.uk), useful links.**

#### About the author:

With a smallholding in Northamptonshire, Caroline Lewis and husband Barry describe themselves as "very much hobby farmers". Owners of the Lewislox Flock, they have been breeding rare sheep for the best part of 20 years. Their flock of Manx Loaghtans was established in 1998 following a family holiday on the Isle of Man where they saw the breed for the very first time. They have shown widely and successfully. Taking a break from showing, they say they have "gained greater satisfaction taking a wider perspective of the important role of Manx Loaghtans in conservation and for their prized wool and delicious meat."