



# Increasing Productivity of Triplet Lambs

Margaret Chan, Master Shepherd Course Participant & University of Guelph Student

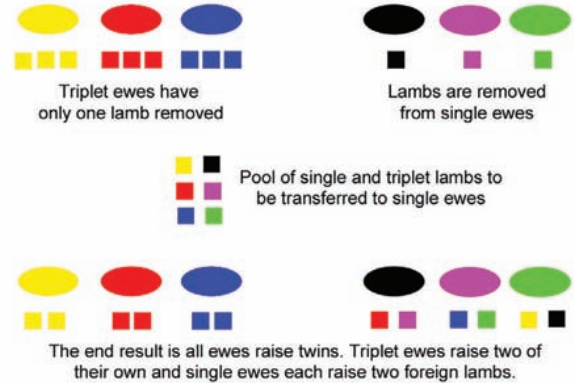
In many commercial flocks in Ontario, producers use a crossbred ewe that is some percentage Rideau as a means to increase prolificacy and therefore the number of lambs they are able to market. Even in flocks that are not a high percentage Rideau, there are often problems with uneven sets of triplets. However, as the number of lambs born per ewe increases, the birthweight decreases, and the survival rate of the lambs also tends to decrease because the ewe cannot feed them (Huffman et al., 1985). Most commonly, triplets are seen as nuisance that tend to cause more work for producers than they are worth. On the opposite extreme, producers are not generally happy with ewes that produce single lambs either because the ewe's potential ability to feed and raise two lambs is not fully used. There are many different management systems available which aim to increase the survival rate of these smaller lambs, all varying in time, labour and cost. This article will focus a novel system being developed in New Zealand – the Triplet Transfer System.

The profitability of a sheep operation is dependent on the number of lambs shipped to market, so producers aim for a higher lambing rate whenever possible. Recent research in New Zealand has shown that if the third lamb had survived in half the triplet-bearing ewes, the bottom line would increase by \$30,000 and if the third lamb had survived in 80% of the ewes, the bottom line would be increased by a further \$18,000 (Beef and Lamb New Zealand, 2013a). To take advantage of the opportunity provided by triplets, producers have developed the Triplet Transfer System.

The Triplet Transfer System is built on the idea that every ewe has, at minimum, the potential to raise two lambs well. Therefore, to maximize the productivity of each ewe in the flock, triplet bearing ewes will have one lamb removed and two foreign lambs will be grafted to each single bearing ewe (Beef and Lamb New Zealand, 2013b). Ewes are scanned and separated into groups of singles, twins and triplets. The target group for the triplet transfer is single bearing and at risk triplet bearing ewes. To eliminate a ewe's bias towards

...if the third lamb had survived in half the triplet-bearing ewes, the bottom line would increase by \$30,000 and if the third lamb had survived in 80% of the ewes, the bottom line would be increased by a further \$18,000

## The Triplet Transfer System



her own lamb, all the singles and the removed triplets are mixed up and each ewe is given back two foreign lambs (Freeman and Freeman, 2013). To ensure bonding between foster ewes and lambs, lambs should be fostered before they are 3 days old as the ewe becomes less receptive after this

The Triplet Transfer System is built on the idea that every ewe has, at minimum, the potential to raise two lambs well.

point, and ewes should be restrained somehow to allow the lamb free access to the udder without interference (Freeman and Freeman, 2013). When pairing lambs, it is less critical to get two lambs of the same size than it is to get two lambs that are equally vigorous; this ensures that both will have an even chance at getting milk from the ewe (Freeman and Freeman, 2013). Single ewes and lambs should be separated overnight before transfer. This allows ewes to 'bag up', ensuring there is milk available to suck when new lambs are introduced. Additionally, it is suggested that this makes ewes more inclined to accept the lambs since they spent the last 12 hours looking for their lambs (Freeman and Freeman, 2013). Ewes and new lambs should be held in bonding pens for a full 24 hours prior to release into a mixing pen to interact with a small group of other ewes and lambs.

Highlighted production statistics recorded from the trial in New Zealand over 3 lambings were a 10% increase in lambing percent, from 146% to 155%, triplet survival increase

Continued on page 17.

from 190% to 230% and the triplet lamb weaning weight increasing by 31%, from 26kg to 34kg.

This system has many benefits for the productivity of a flock, however it is not the right system for everyone. The experimental farm where this trial was run used a total of 500 ewes, 250 triplet ewes and 250 single ewes. For producers running large flocks, this system certainly is a viable option, however it requires intensive management as well as the appropriate infrastructure to be able to sort and house different groups of ewes. Pregnancy checking and fetus counting is also a key part of this system, which also requires extra infrastructure and time management. In such a setup, using any performance recording software like GenOvis or BioFlock would be a significant challenge as none of the transfer lambs are being raised by their true dams and keeping records on pedigrees would also be challenging.

There is a wide variety of approaches used by shepherds to try and maximize the productivity and increase the survivability of their triplets. In any operation, the first choice is usually fostering as this is the most natural for the lamb and the ewe and when done properly results in the least work for the producer. Artificial rearing is a very common practice in many large flocks and particularly in dairy sheep flocks. It can be a very effective way of raising lambs, however it can also become very expensive depending on the milk delivery systems (i.e. pails vs. milk machine). As an alternative to artificial rearing, the Triplet Transfer System takes advantage of triplets and single bearing ewes to even out the workload across the flock. It would be ideal for large flocks focused only on producing market lambs, but because of the infrastructure and management required, it would not be highly compatible with smaller producers or those collecting performance records for each animal. Each system has advantages and disadvantages and there are many more combinations of systems that have not been covered here which work equally well. Ultimately, each producer must do what works in their flock according to their own goals and requirements.

For the full paper please visit: [www.ontariosheep.org/LinkClick.aspx?fileticket=wuPxWfV9Kx4%3d&tabid=112](http://www.ontariosheep.org/LinkClick.aspx?fileticket=wuPxWfV9Kx4%3d&tabid=112) **OSN**

#### Works Cited:

Beef and Lamb New Zealand. (2013a). Triplets for profit – Final Report. Accessed at: <http://maxa.maf.govt.nz/sff/about-projects/search/05-104/triplets-final.htm>

Beef and Lamb New Zealand. (2013b). The triplet lamb transfer system. Accessed at: <http://beeflambnz.com/news-events/News/2013/february/the-triplet-lamb-transfer-system/>

Freeman, A. and Freeman, G. (2013). Wairarapa Demonstration Farm Presentation. Beef and Lamb New Zealand. Accessed at: <http://www.beeflambnz.com/Documents/Farm/Triples%20transfer%20system%20presentation.pdf>

Huffman, E.M., Kirk, J.H., and Pappaioanou, M. (1985). Factors Associated with Neonatal Lamb Mortality. *Theriogenology*. 24 (2): 163-171.



#### ABOUT THE AUTHOR:

Margaret Chan is from Lakefield, Ontario and has recently completed a degree in Animal Science at the Ontario Agricultural College. She has been involved in the sheep industry since grade 11 when she started working on a local sheep farm and since then has been involved in agriculture through other jobs, 4-H and at university. She is currently enrolled in the Master Shepherd's Course offered by OSMA and hopes to use the knowledge and experience gained to run her own flock in the future. Through the University of Guelph, she has been able to get academic credit for the Master Shepherd's Course and this article is the result of work done for the course.



**FLORALADE FEED MILL LIMITED**  
*Finest in feeds and service for over 50 years!*

Creep Rations • Lamb Grower Rations / Supplements  
Ewe Rations / Supplements • Sheep Minerals and Premixes  
Feeds customized to your needs • Grain Pickup, Mixing and Processing  
Feed Additives and Animal Health Products  
Feed Sampling, Analysis and Programming Services  
Sound Nutritional and Management Advice



Bus 519.669.5478 • Toll Free 1.800.265.6126  
Website [www.ffmld.com](http://www.ffmld.com)