



Why use Artificial Insemination and Embryo Transfer?

Why do we run AI or ET programs at *Glen Holme*? What are the benefits for the commercial producer? It is all about genetic gain.

We have been using artificial insemination (AI) as a breeding tool periodically since the 1960s in the Poll Merino flock to make use of unpurchaseable rams from the best available sources, and our first trial of Dohnes was through AI.

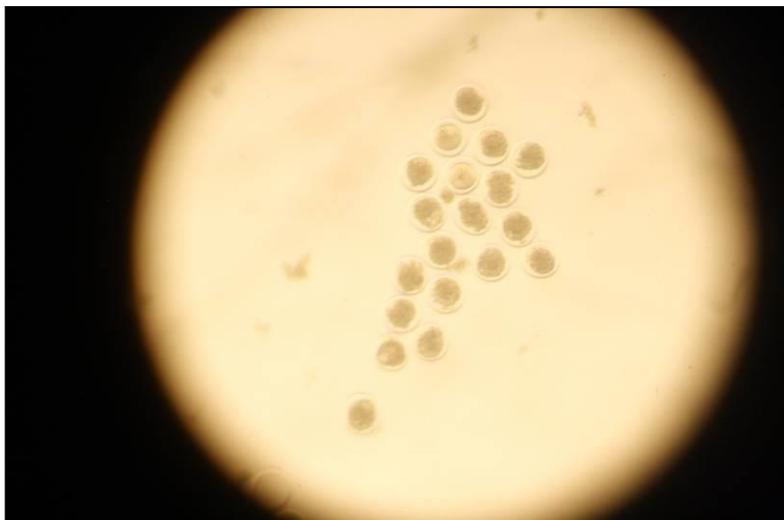
- The best rams in other studs are almost never available for sale; at least early in their productive lives. By the time they are “proven”, they are often superseded. Purchasing semen from top potential sires gives us a chance to utilise “the best of the best” early in their lives. This helps to shorten genetic interval, a major driver of quick genetic gain.
- The use of outside semen through AI helps with genetic diversity and increases the range of choice for our clientele. There is a reduction of the risks of inbreeding.
- Embryo Transfer (ET) can turbocharge an AI program by utilising the very best ewes more widely in any season. As an example; In November 2011, our first use of ET technology, we harvested 60 embryos from 7 ewes using 3 rams. This resulted in 34 lambs in April 2012. Those donor ewes were re-mated naturally to different rams giving us an additional 12 lambs later in the year; all up, well over 40 lambs in 1 year from the best ewes that we own. In November 2012 we implanted 88 embryos harvested from 8 donors, using different sires and dams to the year before. In November 2013 we implanted 70 embryos, harvested from 7 donors.
- AI and ET provide an improved selection of rams for our clients and an equally important injection of ewes into our own stud flock at the top end of the genetic pool.
- Before ewes are considered worthy as donors, they need to be proven breeders of top lambs, and have successfully raised them to weaning.

We will continue to strategically employ these tools for improvement because our clients are the ultimate beneficiaries. Semen is available from our best rams.



Harvesting the embryos from the donor ewes. Our shearing shed was turned into a temporary operating theatre.

Counting the embryos



Embryos – 5 days old
(photo taken through the microscope)