



ADDITIONAL FUNDING FOR SCRAPIE ERADICATION

Minnesota receives additional funding for Scrapie Eradication

The Minnesota Board of Animal Health has recently announced a program to help accelerate scrapie eradication in Minnesota. Under this new program producers can have up to ten rams genotype tested. Trained, board personnel will take the samples and the producer will be reimbursed \$15 per head, the average cost of the test. The goal of the program is to encourage sheep producers to identify the genotype of their herd rams, and hopefully increase the prevalence of scrapie resistant genotypes in their flocks. Funds for the program are available on a first come, first serve basis until May 2005 or when funding is exhausted. For more information contact Lindsey Aipperspach at the Minnesota Board of Animal Health at 1-800-873-2824. This funding is only available to Minnesota producers although other states may have similar cost-share programs.

Although rams appear to be a dead end host for scrapie, e.g. they cannot transmit it to other sheep, the herd rams have the great influence in the genotype of the replacement ewes. For example, if a RR ram is used all of his offspring will contain at least one R regardless of the genotype of the ewe flock. Therefore an RR ram will always produce scrapie resistant replacement ewe lambs. If a QR ram is used he will pass an R gene to only one-half of the offspring. In the case of a QR ram, the percent of resistant replacements then becomes more dependant on the genetic composition of the ewe flock but on average one-half of the lambs will have at least one R gene. If a QQ ram is used he will pass no R genes onto his offspring and the percent of resistant offspring is solely based on the ewe flock.

So what good is a QQ ram? This question has been answered by market conditions where QQ rams bring significantly less than a QR or RR ram. Because a QQ ram will result in more of the flock becoming susceptible to scrapie producers need to think seriously about using a QQ ram in any flock. Even if the ewe flock is $\frac{1}{4}$ QQ, $\frac{1}{2}$ QR and $\frac{1}{4}$ RR you will need to use at least QR rams to maintain the flock $\frac{3}{4}$ resistant. To progress to becoming more resistant you will need to use RR rams and conversely QQ rams will move the flock in the less resistant direction.

It is in the producer's best interest to increase the percent of scrapie resistant genotypes in their flock. If you ever become quarantined, either by a trace-back, trace-forward or positive cull ewe, you will be forced to sell all of your scrapie susceptible sheep (QQ) to the federal government. Of course they will pay you market price for those sheep but most likely you will not be able to find replacements at the same

price. The more resistant genotypes in your flock, the more ewes you will be allowed to keep and the less burden a scrapie quarantine will become. Unfortunately, the value of a QQ sheep is how much the government will pay you for it if you become quarantined. In commercial flock this is basically market price.

Remember again is not a direct test for scrapie, it is only a test for genetic susceptibility or resistance to scrapie.