# Follow these 10 Steps to Become an Effective NSIP Breeder

# 1. Enroll into NSIP

-- The biggest hurdle to performance based genetic improvement is commitment to a nationally recognized program. NSIP is America's Genetic Foundation for a Profitable Sheep Industry.

# 2. Submit Performance Data

-- Sheep enrolled into NSIP are no different from the average sheep if performance data is not collected and submitted. Whereas sheep that have been selected based on EBVs, derived from performance data, are often genetically superior to animals without EBVs.

# 3. Cooperate with Other NSIP Breeders

-- One of the strengths of NSIP is the ability to do across flock genetic comparisons. However, this does not occur until NSIP breeders within a breed share genetics. The best method to prove elite status of an animal is to test its genetics in multiple flocks.

# 4. Plan Breeding Groups to Test Genetics

-- Genetic predictions are based on differences in performance data of animals compared to the average of a group. Therefore, genetic predictions are greatly improved when multiple sires and dams have offspring in the same contemporary group (lambs born within a similar time and managed similarly). Performance data on a small numbers of lambs born to a single sire provides little information to make genetic predictions.

# 5. Collect the Right Data at the Right Time

-- Breeders should develop a strategic performance data collection protocol that fits the breed type and flock management system. It is essential to know the date of birth and parentage. A weaning weight is greatly beneficial; thereafter, data collection is optional based on the goals of the breeder and commercial clientele.

# 6. Maintain Good Contemporary Groups

-- The program relies on data from on-farm performance testing designed to minimize non-genetic sources of variation. Genetic predictions are less reliable when data is submitted on a subset of the lamb crop. Similarly, the program can make improper genetic predictions because animals are not placed in proper contemporary groups based on management.

## 7. Communicate with Commercial Producers

-- EBVs are a tool to improve the productivity of the national flock. The best way to make genetic improvements is through the seedstock industry, which then distribute the genetics to the commercial industry. Successful NSIP breeders should develop an open line of communication with their clientele, the commercial producer. Explain why EBVs are important and how to use them to improve profitability. Plus, take feedback from the commercial breeders on what areas of genetic improvement are most important to the industry.

# 8. Make Sound Breeding Decisions

-- EBVs should not be the only source of information to make breeding decisions. They should be used in combination with visual appraisal to ensure the breeding animals are structurally sound and void of genetically heritable defects.

## 9. Be Honest

-- Very rarely does an animal exist that does not have flaws. An honest breeder discloses information on an animal's weakness, in addition to its strengths. The breeder is more likely to have a satisfied repeat customer than one that withholds information. Both the breeders and NSIP are negatively affected when breeders are not forthcoming with all the information.

### 10. Be Patient and Trust the Data

-- Breeding animals based on EBVs can be discouraging at first if breeders have too lofty of expectations. It takes multiple generations of collecting and submitting performance data to accurately predict genetic merit within a flock. In addition, accuracy of individual animals can be low until it has been progeny tested. Over time, the data will reveal the truth, so be patient.



Learn more about how NSIP's genetic evaluation tool can help your flock at



