

## NSIP Meeting

Thursday – July 12, 2018

7 p.m. CST

Minutes submitted by Lisa Paris Weeks

Attendees: Matt Benz, Rusty Burgett, John Carlson, Alison Crane, Lynn Fahrmeier, Carl Ginapp, Cody Hiemke, Ben Lehfelddt, Jim Morgan, Brenda Reau, Reid Redden, Mark Roembke, Bill Shultz, Lisa Surber, Todd Taylor, Lisa Weeks

### Agenda:

- Secretary Report
  - Correction to May minutes requested by Cody Hiemke to add Brenda Reau to the list of attendees. Matt Benz moved to accept minutes, Lisa Surber seconded, motion passed.
- Treasurer Report
  - Cody Hiemke is assisting in transitioning the treasury role from Walt Williams to Kathy Soder. A full report will be submitted for September meeting.
- Executive Committee report
  - Presented by Reid Redden
  - Breed Association Partnerships – We have been approached by the American Boer Goat Association (ABGA) on partnering to enable their association to have access to NSIP tools. NSIP would sign an annual contract with each association desiring to become a partner. Each partnership would be allowed one visit annually by an NSIP staff member to the breed association annual meeting per se. There are two options for breed associations that want to access NSIP's tools but provide this service to its membership.
    - Option A - The breed association would pay NSIP \$10,000 on an annual contract. This would allow the breed association to sign up 100 flocks/herds. NSIP will train a breed association staff person to coordinate with their members to collect and submit data to SheepGenetics. NSIP will not provide technical support to their membership similar to what current members receive; this is the breed association's responsibility. Flocks or herds above 100 will incur a flock fee of \$50 per flock/herd. The breed association will be responsible for database fees.
    - Option B - The breed association would pay NSIP \$5,000 on an annual contract for up to 50 flocks/herd and \$100 per flock above 50. Everything else would be the same.
  - Discussion included requests for caution from Matt Benz before making too many decisions to go forward with the partnership proposal. Jim Morgan suggested exploring a partnership with the ABGA for a three year trial period as a beta test. Matt Benz made a motion to provide latitude to the Executive Committee to draw a contract with the ABGA, Cody Heimke seconded, motion carried.
- Program Director Report
  - Presented by Rusty Burgett – full report included at that end of the minutes.

- Large time commitment towards two NSIP sheep sales: Center of the Nation July 29 in Spencer, IA and the Eastern NSIP Sale August 11 in Wooster, OH. Three concerns going forward: 1) should there be a limit to the number of consignments, 2) how to maintain the quality of those consignments, and 3) how to determine sale order. Rusty recommended creating a Center of the Nation Sale Committee. This committee should be made of unbiased, non-consignor individuals.
- NSIP Expansion Proposal to ALB – The basis of the plan takes advantage of the reach and brand recognition of NSIP to help educate producers on other aspects of production beyond genetic selection with the hopes that additional services offered will draw new membership. Reid Redden mentioned the lack of funding for graduate students and research projects as discussed by Ron Lewis. This should be included in the expansion proposal in some format.
- Technical Committee
  - Presented by Reid Redden (complete report included at the end of the minutes)
  - Genomics Subcommittee Update – three genomics companies (Zoetis, Neogen, and Eurofins-Biodiagnostics Inc) have been contacted seeking their input on constructing a genotyping panel for the US sheep industry that would include:
    - Parentage ID
    - Genetic conditions
    - General markers building towards the use of genomics to improve accuracy of breeding value estimation.
  - NSIP Website Resources – The technical committee is in the final stages of updating several of the indexes used in the 2011 Report prepared by Dr. Notter describing the EBV and Indexes. This update is scheduled for review prior to next meeting in September. The NSIP Board will approve revisions prior to posting on the NSIP website.
  - Contemporary Groupings – Maternal traits are greatly impacted by contemporary groupings. The technical committee will be re-evaluating CG strategies currently in place, particularly for number of lambs born and weaned.
- The next meeting will be September 13, 2018 at 7 p.m. CST.
- Meeting adjourned.

NSIP Program Director's Report  
July, 2018

My largest time commitment the past 2 months has been organizing the two NSIP sheep sales. We have 189 head consigned to the Center of the Nation sale and 102 headed to Wooster for the Eastern sale. The American Polypay Sheep Association is having their annual membership meeting on Friday before the sale, which is a great way to help form a better relationship with the breed associations. It's also encouraging that we have several new consignors participating in both sales.

This week I also visited with the American Lamb Board presenting a proposal to expand NSIP to better serve the U.S. sheep industry. The proposal is attached here and the idea was well received by the group. The basis of the plan takes advantage of the reach and brand recognition of NSIP to help educate producers on other aspects of production beyond genetic selection with the hopes that additional services offered will draw new membership. I emphasized that I would like the industry to play a major role in shaping how this expansion takes place and I would like both the American Lamb Board and American Sheep Industry association to be involved. My goal is to provide the best service possible to the industry and the best return on the industry's investment into the program.

I also traveled to the Midwest Stud Ram Sale in Sedalia, MO in June to talk with the Texel Sheep Association as well as the Katahdin Hair Sheep international group as well visiting with several producers of various breeds. Upcoming, I will be attending the Superior Farms Sheep Industry Innovators Conference in Davis, CA and the Sheep Industry Round Table meeting in Denver, CO. If you are able to attend, I'd love to see everyone at the Center of the Nation NSIP Sale on July 28 in Spencer, IA and at the Eastern NSIP Sale on August 11 in Wooster, OH.

## **Expansion of the National Sheep Improvement Program to Better Serve the U.S. Sheep Industry**

Productivity improvement has been identified as one of four priorities to the long-term success of the sheep industry by the U.S. Sheep Industry Roadmap project. The National Sheep Improvement Program has been expanding ever since; increasing the use of quantitative genetic selection throughout the country with now over 400 members. However, genetic selection should be utilized as part of a system-wide approach to improving production efficiency. Therefore, NSIP can expand its mission to further the industry and fill other voids outlined by the Roadmap project.

The Roadmap project also reported:

- "Producers keenly feel the loss of industry infrastructure—from processing capacity to academic, extension and research assets"
- "Numerous participants desired greater alignment between commercial producers, seedstock producers, producers who show animals and club participants—greater coordination can help address the needs for quality and production improvements industry-wide".
- "Research results not being fully communicated to producers due to lack of funding".

Through the efforts of the industry-sponsored re-launch of NSIP in 2014, the program has gained additional exposure and awareness industry wide. In 2017, the NSIP program director presented at 32 different events in 30 different states, engaging producers in various segments of the industry and in all the major geographic regions. Recognition of the program through industry press and social media is also at an all-time high. Additionally, the NSIP board is comprised of 9 members with Doctorate degrees and 4 with Master's degrees in various animal science disciplines.

**Moving Forward**--Combining these resources and the current reach of NSIP could be used to provide industry education on a whole-systems approach to productivity improvement—beyond genetic selection alone but combining that NSIP technology with other disciplines and additional management practices designed to improve industry production efficiency.

With the addition of a second staff position, NSIP can offer educational events, materials and outreach on improving various management practices beyond genetic selection to improve production efficiency, product consistency and quality to the U.S. consumer. With guidance from the American Lamb Board, American Sheep Industry association and other industry leaders, the program could apply the most recent research into the various segments of the industry to encourage an industry-wide improvement to production. This will help to implement the suggested changes to the industry outlined by the Roadmap project to keep industry improvement in the forefront. By adding an ALB and ASI representative to the NSIP board of directors, we can improve collaboration and communication throughout the industry segments. Ultimately, this will contribute to the overall increase in profitability and long-term sustainability of the U.S. sheep industry.

## NSIP Technical Advisory Committee Report July 2018

### Genomics Subcommittee update

Following discussions at the ASI convention, the three genomics companies that participated in the NSIP Open Forum panel discussion (Dr. Jason Osterstock, Zoetis; Ben Pejsar, Neogen; Micah Wells, Eurofins-Biodiagnostics, Inc.) have been contacted seeking their input on the pragmatics of constructing a genotyping panel for U.S. sheep that would include:

- Parentage identification.
- Genetic conditions.
- General markers building towards the use of genomics to improve accuracy of breeding value estimation.

As part of that request, a list of 37 major genes identified by the International Sheep Genomics Consortium's associated with genetic conditions in sheep globally was provided. Among these conditions, those likely of most interest to U.S. producers are:

- Scrapie (spongiform encephalopathy)
- Ovine Progressive Pneumonia haplotype (TMEM154)
- Spider (chondrodysplasia)
- Horn/poll (utility will vary by breed-type)
- Dermatosparaxis
- Fecundity (e.g., Booroola)
- Black Gene
- Callipyge (muscular hypertrophy)
- Myostatin (double muscling)

Without committing to the exact content of the panel (comment below), the correspondence included asking for their estimates of costs for constructing such a panel. Hopefully further specifics will be available by the time of the next NSIP Board meeting.

As part of activities of the Genomics Subcommittee, with particular help from Rusty Burgett and Cody Hiemke, a survey is being prepared for U.S. producers to confirm their interests in the content of a genotyping tool and, among other things, the numbers of sheep they might genotype test.

### NSIP Website Resources

Among the educational materials on the NSIP website is a document describing the Estimated Breeding Values (EBV) and indexes provided by NSIP (<http://nsip.org/wp-content/uploads/2015/03/NSIP-EBV-Descriptions-FINAL-1.16.15.pdf>). This useful document was prepared by Dr. Dave Notter in 2011. Since then several of the indexes provided to NSIP members have been revised, and those changes are not reflected in the current document. To ensure that the most up-to-date information is available, the Technical Committee is in the final

stages of updating the content of this document. Once completed, the revised document will be forward to the NSIP Board for review and comment before posting on the NSIP website.

### **Contemporary groupings**

Contemporary grouping strategies impact genetic evaluation. When the number of animals within a contemporary group (CG) is small, the performance of individual animals contributing to that group can substantially affect the average performance of the CG. The consequence of small CG on the group average is particularly seen for traits measured on only a single sex (typically females) and that are counts (e.g., number of lambs born and weaned). Since an individual animal's performance is expressed as a deviation from the average of its CG in genetic evaluation, reliable estimates of the average performance of CG – which means effectively having CG with sufficient numbers of animals – is clearly important.

This item is raised for two reasons: i) the topic is likely important for outreach to NSIP members, and ii) re-evaluating the contemporary grouping strategies currently in place for, particularly, number of lambs born and weaned may be needed.

Ron Lewis  
July 12, 2018