Sheep Health Update

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American Sheep Industry Association January 20, 2022

What is scrapie freedom and why is it important?



Latest U.S. Classical Scrapie Case

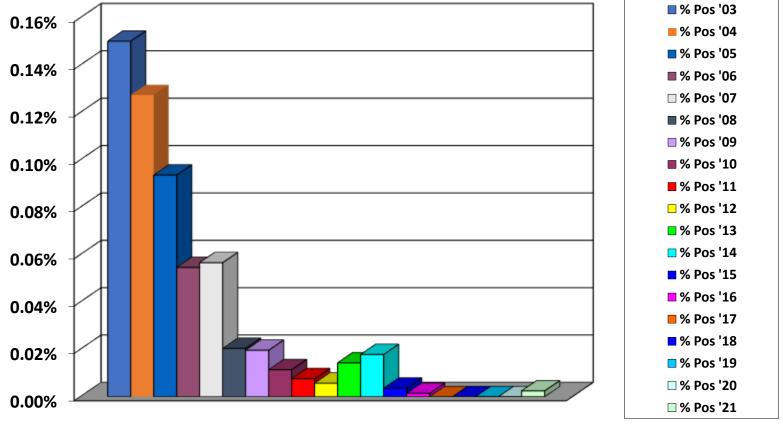
January 2021

- RSSS Sheep
- Sheep/Goat Herd in WI
- Probable origin AR



Percent of RSSS Sheep Samples that Tested Positive for Classical Scrapie - Weighted by Face Color

FY 2003 - FY 2021*



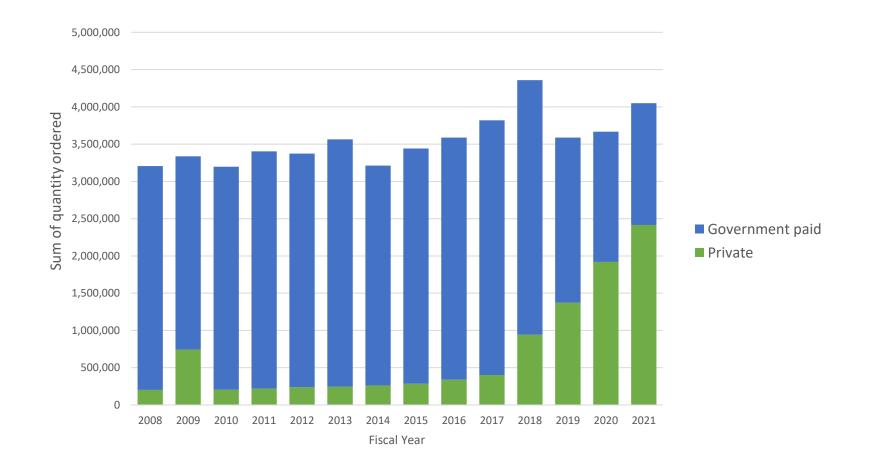
^{* 106} FY 2021 samples pending results. Adjusted to exclude multiple positive animals from the same flock. Does not include Nor98-like scrapie cases found through RSSS.

Use of official ID traceable to herd-of-origin in goats and sheep is the key to scrapie eradication

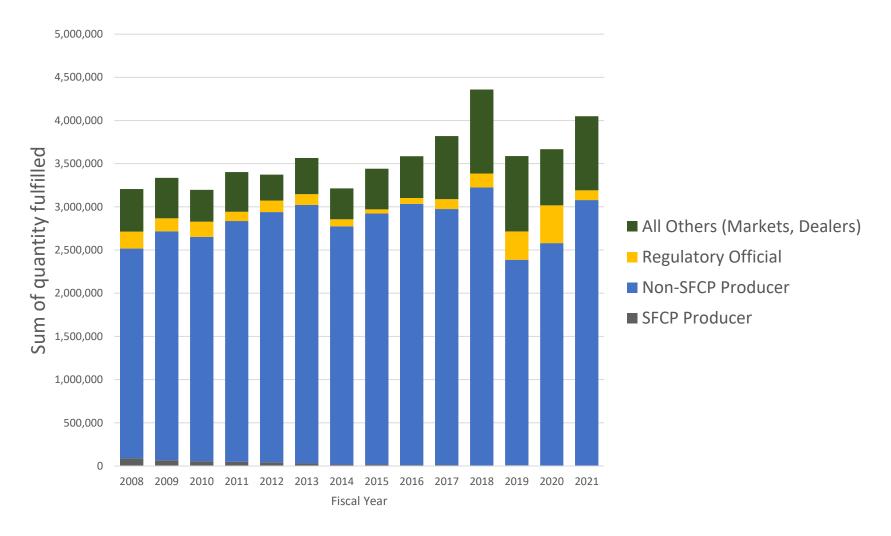




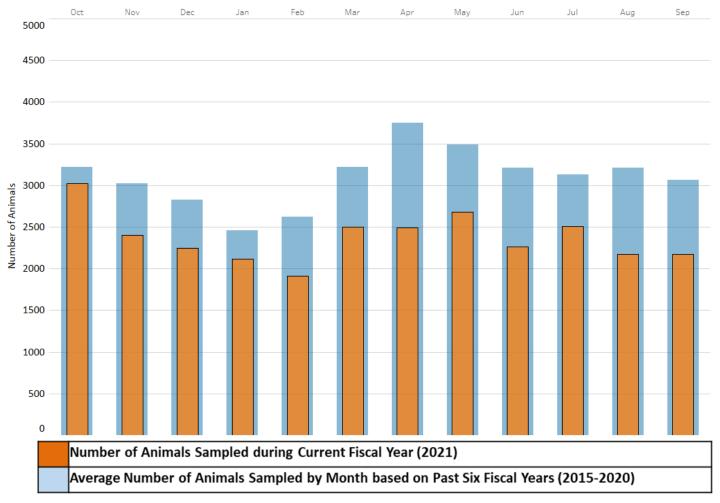
Official sheep and goat tags provided by APHIS or purchased by producers, markets and dealers



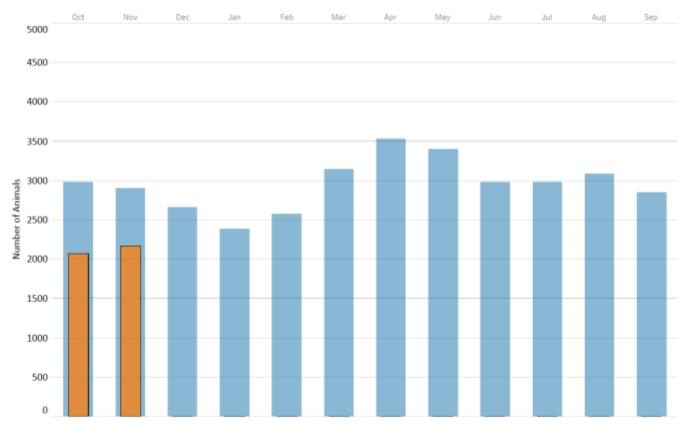
Number of official sheep and goat tags ordered by user type



Comparison by Month of RSSS Samples Collected in FY 2021 to Average of FY 2015 – FY 2020



Comparison by Month of RSSS Samples Collected in FY 2022 to Average of FY 2016 – FY 2021

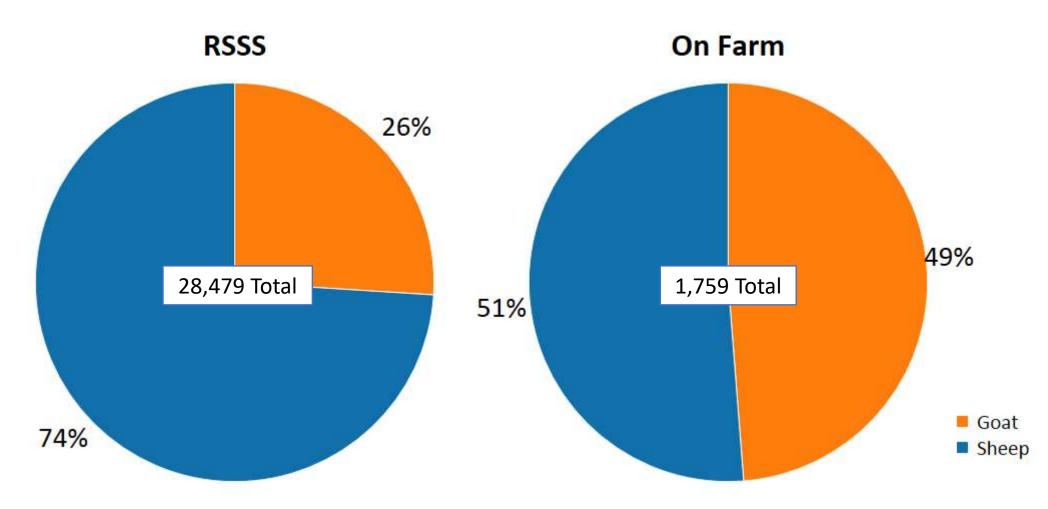


Average Number of Animals Sampled by Month based on Past Six Fiscal Years (2015-2020)

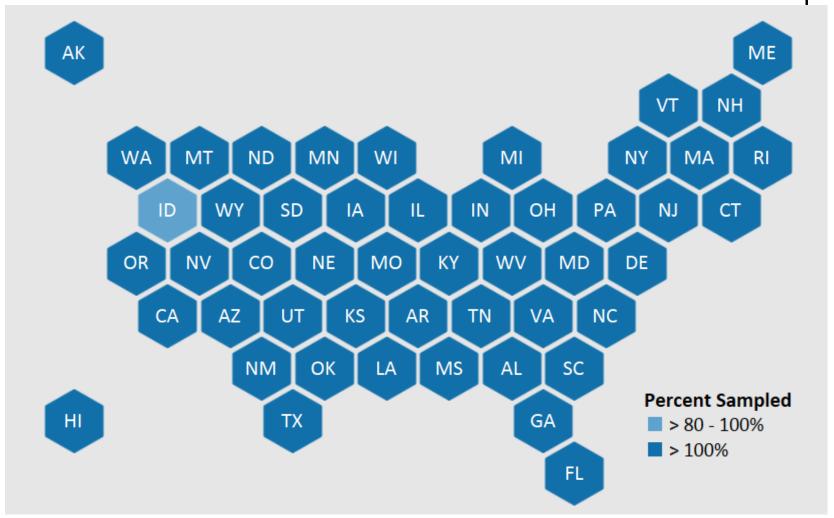
Number of Animals Sampled during Current Fiscal Year (2021)

* As of November 30, 2021.

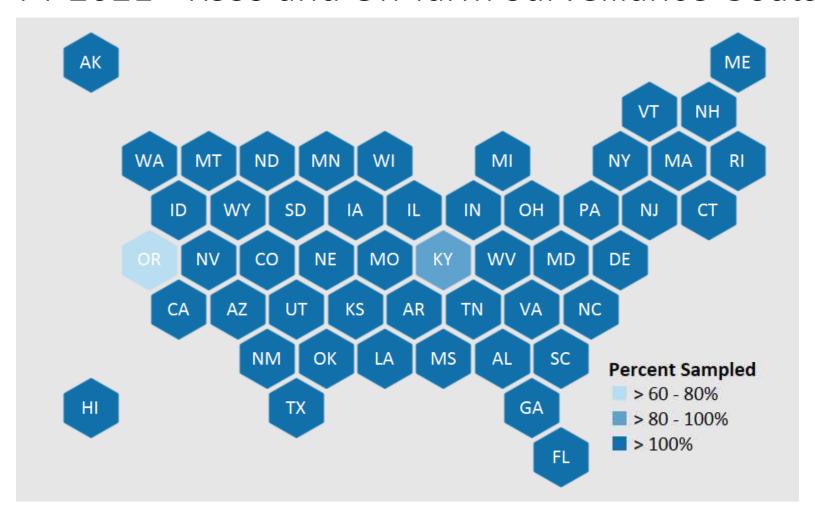
RSSS & On-Farm Surveillance Sampling by Species *FY 2021*



Percent of Sampling Minimum Achieved in FY 2021 - RSSS and On-farm Surveillance Sheep



Percent of Sampling Minimum Achieved in FY 2021 - RSSS and On-farm Surveillance Goats



RSSS Genotyping – Cost Savings



- Obex and retropharyngeal lymph node tissue collected
- Only specimens from genetically susceptible sheep are IHC tested
- In FY 2021, 74.8% samples considered genetically resistant or genetically less susceptible
- Cost savings ~\$6 per sample or ~\$17,000 for FY 2021

Cooperative Projects



- ASI is conducting an RFID evaluation for sheep in markets and education and outreach among producers about scrapie program and electronic ID
- AGF is conducting the third year of an RFID retention trial in Goats and conducting a handling equipment evaluation for tagging unruly goats and sheep at markets

Cooperative Continuity of Operations Planning



 USDA will continue to support ASI in providing education and outreach on the Secure Sheep and Wool Supply Plan

Brucella ovis Serum Bank

- Goal: Create a serum bank of well characterized positive serum from 50 animals.
 - Compare and correlate culture, semen PCR, and serological testing in individual animals (secondary goal)
- **Status**: 36 animals from 3 different locations (MO, UT, CO)

• 31 of 36 animals had *B. ovis* cultured from at least 1 of the 20 anatomical

locations sampled

Case Definition

Conclusions and Next Steps

- Good correlation of tests
 - PCR shows promise but needs further evaluation
- Still looking to acquire more positive animals to complete serum bank.

Samples available for use



B. ovis Contact Information – Potential animals, Questions

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NAHMS Sheep 2024 study



The Sheep 2024 study will be:



Next Steps



NAHMS Contact Information



Questions?

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