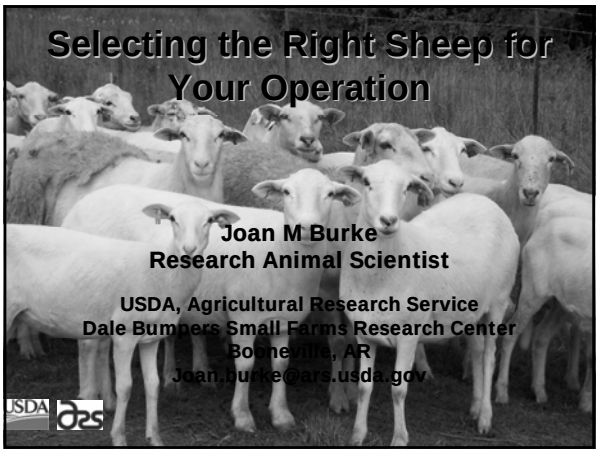

Selecting the Right Sheep for Your Operation

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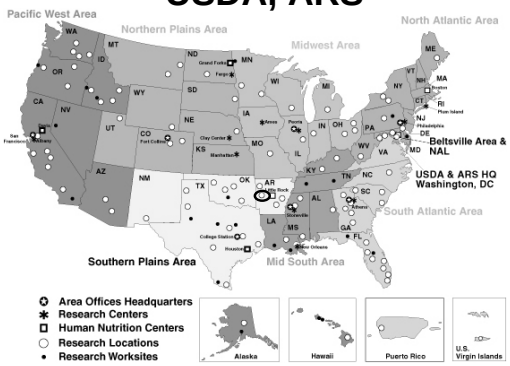
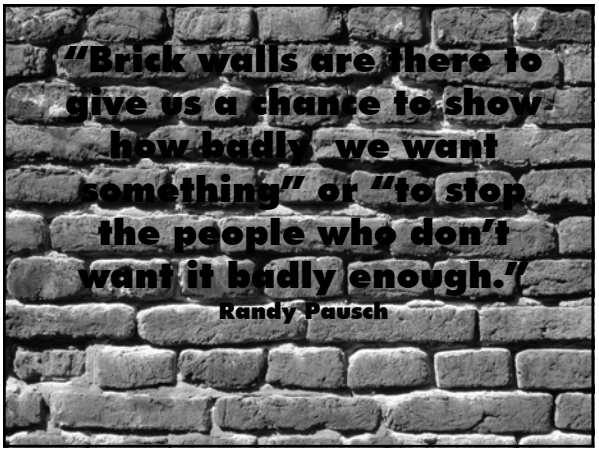
USDA, ARS





Overview

- Define goals
- Determine markets
- Consider breed types
- Consider resources
- Other considerations

Why do you want sheep?

- Hobby
- Way of life
- Pets
- 4-H Project
- To make money

Markets

- Seedstock
- Direct
- Sale Barn
- Farmer's Market
- Co-op
- CSA (Community Supported Agriculture)
- Land managers
- Research, therapy, etc.

Select the right breed for the market

- Meat breeds
- Wool breeds
- Dual purpose
- Dairy

Breed considerations

- Purebred
- Maternal breeds
- Terminal sires

Match personality to sheep

- High input
- Low input

Management Considerations

- Pasture or feeds
- Reproduction/lambing
- Parasites
- Health

Feeding program – highest cost/input

Pasture or Feeds

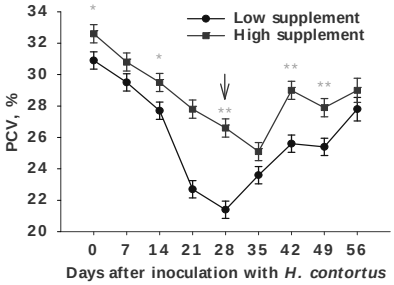
- Pasture availability
- Pasture quality
- Supplemental feeds
- Goal: meet nutritional needs for each stage of production

How to assess feeding program

- Body condition scores and body weight can determine if animals are obtaining their nutritional demands.
- Sheep: http://www.case-agworld.com/cAw.IU.framescore.html or http://www.sheep101.info/201/feedingewes.html.

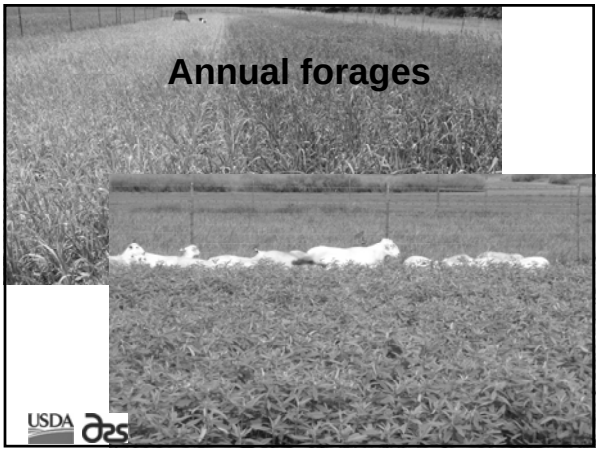
Nutrition

Effect of supplement on PCV



Harvested or purchased feeds

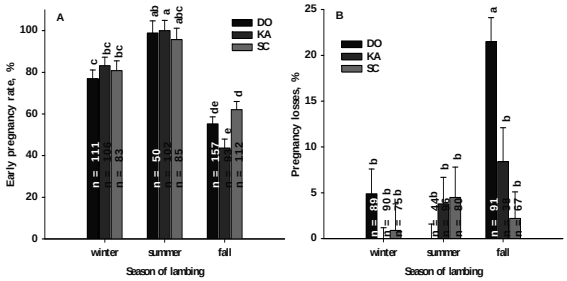
Rotational Grazing



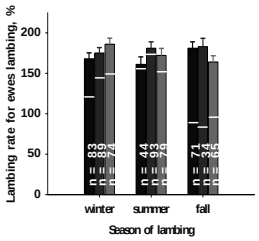
Reproduction/Lambing

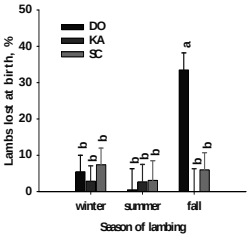
- Yearly – spring
- Out of season / fall
- Accelerated lambing

Effect of season on pregnancy rate and losses

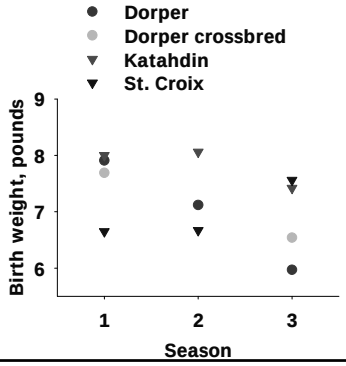


Effect of season on lambing rate and losses

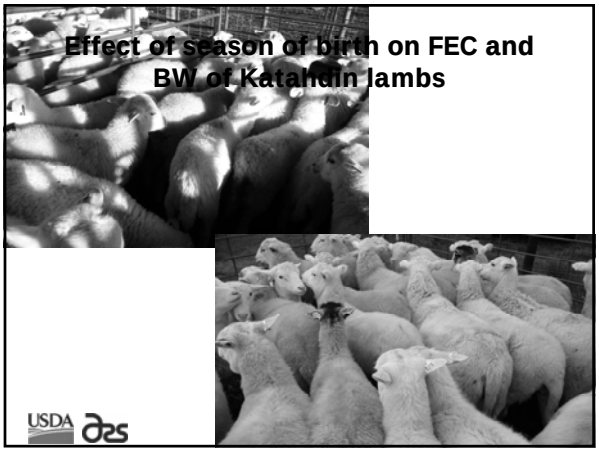




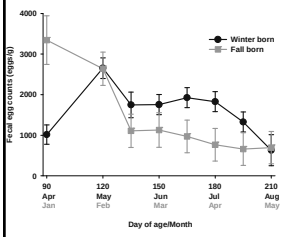
Effect of season on birth weight

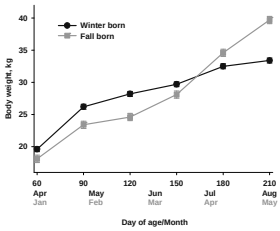


Effect of season of birth on FEC and BW of Katahdin lambs



Effect of season of birth on FEC and BW





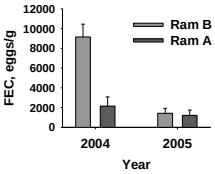
Breeding program – to help make progress on specific flock goals (important to use records and breeding values)

Genetic Selection

- Selection for certain traits are useful to meet farm goals. Select for moderate to high heritability traits.
- National Sheep Improvement Program: genetic selection of sheep based on performance using Estimated Breeding Values. For more information, nsip.org. Several breeds included.

Genetics

- An animal's ability to resist parasites is heritable (~0.2 – 0.5)
- USDA, ARS sires are selected based on parasite resistance (low FEC) and tolerance (lack of anemia; low FAMACHA scores)



Health and Parasite Control

"Brick walls are there to give us a chance to show how badly we want something" or "to stop the people who don't want it badly enough."

Randy Pausch

Parasites

- *Haemonchus contortus* or barber pole worm is one of the greatest challenges for small ruminants in warm, humid climates.
- Control is difficult because of dewormer resistance and an integrated approach is necessary.
- Other parasites: *Trichostrongylus* spp., liver fluke, coccidia, lice, meningeal worm

Sustainable Methods of GIN Control

- Copper oxide wire particles
- Condensed tannin-rich forages
- Nutrition
- Use of resistant breeds (Kiko>Spanish>Boer?) or selection within a herd

Use of Resistant Breeds

Other Considerations

- Fencing
- Guardian animals
- Available resources

Summary

- Define market before choosing a breed
- Define farm goals
- Consider resources and challenges
- Always ask for help if needed

USDA, ARS, DBSFRC Flock

Why sheep?

↓

Research

What is product/market?

↓

Information/Scientists, Extension/Producers

USDA, ARS, DBSFRC Flock

What breed?

↓

Easy care and hardy to match our limited resources and harsh environment.

↓

Katahdins (no shearing, perform well on grass, out-of-season breeders, moderate parasite tolerance)

Bits of advice

- Set goals
- You can always change your plan, but only if you have one (Randy Pausch)
- Keep records!
- Are you spending your time on the right things? (Randy Pausch)
- Keep it fun!

Resources

- ATTRA publications: https://attra.ncat.org/
- SARE: http://www.sare.org/Learning-Center/Fact-Sheets/National-SARE-Fact-Sheets/Sustainable-Control-of-Internal-Parasites-in-Small-Ruminant-Production
- http://www.sheepandgoat.com/
- American Consortium for Small Ruminant Parasite Control: www.scsrpc.org or www.acsrpc.org