Disease Awareness
Don’t Buy trouble!

Cindy Wolf, DVM
When buying sheep -

- Buy good sheep which are not always the cheapest sheep available
- Why? So they will be productive and enjoyable!
- You can screen them by first assessing the seller’s integrity and knowledge
- Second evaluate their body condition score, behavior, attitude and gait
Body Condition Scores – Sheep/Goats

Condition 1 - Emaciated
- Spine prominent and sharp
- No fat cover
- Transverse process sharp
- Fingers easily pass under

Condition 2 - Thin
- Spine prominent and smooth
- Thin fat cover
- Muscles medium depth
- Transverse process rounded
- Fingers go under with pressure

Condition 3 - Average
- Spine rounded and smooth
- Moderate fat cover
- Muscles full
- Transverse process smooth and rounded
- Fingers need hard pressure to find ends

Condition 4 - Fat
- Spine detected only as a line
- Fat cover thick
- Muscles full
- Transverse process cannot be felt

Condition 5 - Obese
- Spine not detectable; fat dimple over spine
- Fat cover very thick
- Muscles very full
- Transverse process not detectable

Adapted from “Body Condition Scoring of Sheep” by J.M. Thompson and H. Meyer (Oregon State University)
Possible breaches (sheep)

- Caseous Lymphadenitis
- Anthelmintic resistant parasites
- Johnes disease
- Infectious abortion diseases
- OPPv
- Footrot
- Soremouth
- Skin related: ringworm
- Lice
- Coccidiosis
- Cryptosporidiosis
- Scrapie
- Others
What do these diseases have in common?

- Can be production-limiting disease
- Ewe and Ram Replacement rates cost real money
- Lost milk production/lamb survival and growth rates
- Lost breeding seasons, cover less ewes
- Less live lambs born
- Consumed feed should produces product (milk, meat, lambs, fiber) and not just redirected into animal itself as is the case with chronic disease
It’s not hard to count sheep...

when they’re dead.

Enjoy your visit to the livestock market. Make sure you are still happy tomorrow. Please make Biosecurity a top priority.

BIOSECURITY PROGRAMS

- Design
- Implement
- Evaluate and improve
Biosecurity – definition

• Refers to management measures taken to prevent disease agents from being introduced and spreading to & from flocks or groups of animals or their proximity.

• Three main components
  – Isolation
  – Traffic control
  – Sanitation/Husbandry
Before you adds animals to your flock

• Health status of the source flock should be evaluated
  – Ask specific questions about disease.
  – Request copies of test results.
  – Find out specific management practices.
  – If possible, visit the flock prior to purchase.

• Minimize number of source flocks.

• Best to use a “closed” flock of verifiable good health status.
Isolation

• Definition - the confinement of animals away from other animals.

• The most common way that new diseases are introduced into a herd is through new animal additions.

• Includes introduction of
  – new purchases or
  – through show animals returning to the herd.
Isolation

• Isolation areas (buildings and pens) should not share the same airspace as resident animals. A distance of 100 feet*, if feasible, should separate building and pens. The farther new animals are kept away from resident animals, the more effective the isolation will be. These facilities should be easy to clean & disinfect.

• Who has this available? Probably not many of us, BUT if we think outside of our ‘box’ we could construct this.
On-farm biosecurity practices

• New purchases:
  – “permanent identification”, should have an official Scrapie tag already in when purchased
  – Vx for Clostridium perfringens C,D & T
  – Dewormed with broad spectrum dewormers
  – Treated with ectoparasiticide, REPEATED in 2 weeks time
  – Prior to pasturing check for resistance to internal parasites (FEC, FECRT)
  – ±Serology (OPPv, CL, JD, Scrapie genotype)
  – Examine feet, consider preventive treatments
Your new purchases should come with an Official Scrapie Tag can double as Individual Animal ID
While animals are in isolation…

- Observe closely
- Test for specific diseases of concern if not tested before purchase
- Vaccinate and also treat for internal and external parasites, assess efficacy pre-release
- Other preventative health measures should be performed during this period, i.e. foot trims, etc.
OPPv

• Infection with this virus results in less milk and higher replacement rates and probably more concurrent disease

• Net effect $$$$ $

• Results from MN real on-farm field trials have shown how to control and work toward eradicating this viral infection
Caseous Lymphadenitis (CL)

• Avoid buying it in the first place!
• But now that its in the herd and in the animals’ environment, what measures can reduce its prevalence?
• Sort & house obviously infected sheep from uninfected sheep
Control plan

• Decide the disposition of infected sheep
  – Options: cull, lance and flush, surgical excision

• Regularly vaccinate uninfected sheep

• Regular monitoring and prompt decisions on infected sheep
Vaccination options

- Commercially available sheep-licensed vaccine
- Commercially available goat-licensed vaccine
- Production of autogenous vaccine
• If lameness is in flock, question the reason
Can’t tell without looking at the foot by cleaning and trimming
Foot Scald
Footrot
Johnes Disease in Sheep not easy to address

A sheep showing signs of OJD.
Most common infectious abortion agents

- Chlamydial infections
- Toxoplasmosis
- Campylobacteriosis
- Q fever
- Salmonella species
Anti-infectious Abortion Plan

• Adherence to purposeful biosecurity plan
  – Don’t buy from herds of lower health status
  – Testing will be required
  – Timing of introducing new stock relative to pregnancy
  – Well timed and evidence-based vaccination programs
  – Consider chemoprophylaxis esp. if historical evidence exists for susceptible agents
Management

• Feed hay and grain in feeders
• Keep maiden ewelambs separate from the mature ewes
• Keep farm cats spayed/neutered and healthy and control their pooping sites, i.e. not in animal feed and bedding, so give them a litter box in a private area of the barn!
• Vaccinate against Chlamydia and Campylobacter
• Immediate removal of aborting sheep from rest of pregnant ewes
• Submit PLACENTAS and fetuses to Veterinary Diagnostic lab ***
Value of diagnostic testing

• Ongoing message that the placenta-fetus set is an important diagnostic tissue in abortion management
• Can’t tell cause of abortion with visual exam
• Can freeze sets of aborted placenta and fetus until convinced there is a problem, then submit all saved tissues within reason
VFDs can legally be written for small ruminants

- To address chemoprophylaxis
  ource/resmgr/Resources/CPG_615.115-ELDU-
  medicated_f.pdf
Some Resources

Books
• The Shepherd Magazine
• 8th edition of SID manual
• Practical Lambing
• Educational meetings
• Successful producers
• Veterinarians
• Nutritionists who have sheep

Certain Websites
• oppsociety.org
• The MD small ruminant page
• www.acsrpc.org
• www.farad.org
• Numerous others
Questions?