

This presentation is part of an educational modular program designed to provide new and beginning farmers and ranchers with relevant information to initiate, improve and run their agricultural operations



United States Department of Agriculture
National Institute of Food and Agriculture

**This program is funded by the
Beginning Farmer and Rancher
Development Program (BFRDP)**

USDA-NIFA-BFRDP 2010-03143



Common health problems in small ruminants



UNIVERSITY OF
ARKANSAS

Disease

- ▶ Even with proper management and nutrition, sheep and goat can develop health problems
- ▶ Keeping health records will help you to identify animals that have repeated health problems, seasons when health problems are more common and identify the most common diseases in your farm and area
- ▶ Culling those animals will result in a stronger herd



Record keeping

- ▶ Record keeping is one of the most important ways to ensure the health of your herd
- ▶ Keeping records of sick animals, treatments and keep track of withdrawal periods for any drug used in your herd are essential strategies to ensure that your animals and your products are safe





Internal parasites

- ▶ For many producers, especially in the south part of the country, internal parasites are the primary health problem
- ▶ Animals with severe internal parasite loads do not gain weight, are often anemic and may die
- ▶ Due to overuse of dewormers and parasites' increasing anthelmintic resistance, management of internal parasites is a complex problem
- ▶ Sheep producers must know about the parasites in their area, and must have an active plan to prevent and manage parasite infections through out the year





Elements of a program for parasite control

Pasture management	<p>Use pasture rotation</p> <p>Employ multi-species grazing (sheep/goat with cattle, pigs and/or birds)</p> <p>Never allow animals to graze on short forages (that is where most parasite larvae can be)</p> <p>Provide forages containing condensed tannins (like the plant sericea lespedeza) as this help reduce parasite infections</p>
Animal selection	<p>Use breeds and animals that show resistance to parasites</p> <p>Cull animals that are frequently sick</p> <p>Use FAMACHA method to identify sick animals</p>
Strategic deworming	<p>Deworm ewes at lambing times</p> <p>Treat lambs because they have little resistance</p> <p>Deworm all new animals</p>

FAMACHA

- ▶ It is a simple test that was developed in South Africa to determine which animals in a herd are anemic due to one type of parasite: the wireworm or *Haemonchus contortus*
- ▶ Anemia can be observed by looking at the color of the lower eyelid of the animals, sick animals will have pale eyelids and animals with more serious infestations will have eyelids that are almost white
- ▶ With this test, farmers can treat the animals that have a heavy parasitic load, and identify those that need treatment from those animals that are healthy and don't require treatment

White eyelids in
an anemic goat



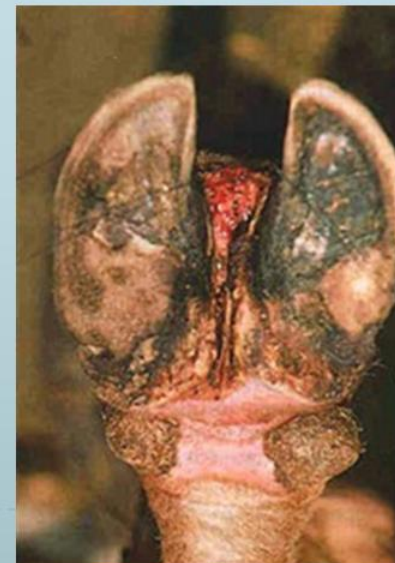
FAMACHA

- ▶ Ask your veterinarian to come and see your animals if you suspect that they are anemic
- ▶ FAMACHA charts are only available to veterinarians and producers that attend training sessions on the use of this method



Foot rot

- ▶ Foot rot is a contagious disease caused by bacteria that infect the hoof tissue
 - ▶ It is characterized by limping animals and pockets of foul-smelling infection in the hoof
- ▶ Once this disease gets in a herd it might be hard to eradicate
- ▶ The bacteria gets onto the ground and bedding, where it is picked up by uninfected sheep or goats



Foot rot

- ▶ Never bring a limping animal to your flock
- ▶ Don't purchase animals from sale barns
- ▶ Isolate all new animals and examine their feet frequently
- ▶ Restrict entrance to your farm
- ▶ Cull animals with repeated foot rot problems
- ▶ Hoof trimmings and foot baths are common treatments, however it is important to disinfect all trimming tools between animals
- ▶ Foot baths with zinc or copper sulfate solutions can be used
- ▶ Vaccination programs have shown some help in prevention and treatment, but it is not 100% effective



SCRAPIE

- ▶ Scrapie is a fatal, degenerative disease affecting the central nervous system of sheep and goats
- ▶ It is one of the diseases classified as transmissible spongiform encephalopathies (along with Mad cow disease)
- ▶ Signs include weight loss, itching and rubbing, loss of coordination and death
- ▶ In the US, this disease has been commonly found in Suffolk sheep and their crosses
- ▶ There are national and international programs in place to control this disease
- ▶ As part of this program all animals must be registered and identified if they are to change ownership
- ▶ Check with your veterinarian and extension agent to learn about the specific requirements in your state



OPP

- ▶ Ovine progressive pneumonia is a virus that generally affects only sheep over 2 years old
- ▶ Signs of the disease include weight loss, labored breathing, hard udder and lameness
- ▶ It is generally diagnosed through a blood test
- ▶ There is no treatment and sick animals must be culled from the herd



Contagious ecthyma

- ▶ Also known as sore-mouth or orf
- ▶ Infected animals will develop sores and scabs on their lips and mouths and occasionally on the udders and teats
- ▶ Once an animal has been infected, it is generally immune to further infections
- ▶ This virus can be passed to humans, always wear gloves if you handle animals with sore-mouth



Caseous lymphadenitis

- ▶ It is caused by a bacteria that causes abscesses on the lymph nodes and internal organs
 - ▶ Animals are usually infected through a wound (shearing is one of the most common times for animals to get this disease)
 - ▶ Animals usually have one or more abscesses that are often located just beneath the skin, usually around the jaw and neck
-
- If the bacteria reaches the bloodstream, the abscesses can develop in internal organs such as the lungs or liver. In this case, external abscesses may not be present only generalized disease symptoms will be observed (loss of weight, weakness, reluctance to move)
 - If punctured, the abscesses contain a thick, yellow to white pus that has a thick pasty consistency



Abscess

Mastitis

- ▶ It is the infection and inflammation of the mammary gland and may affect milk production
- ▶ Symptoms include pain, heat, redness and swelling of the udder
- ▶ Newborns that are not growing and thriving may not be getting enough milk from their mothers due to mastitis
- ▶ Most infections can be treated with antibiotics





Vaccinations

- ▶ The most common vaccination are those that protect against clostridial diseases
 - ▶ A CD-T vaccine protects against enterotoxemia caused by *Clostridium perfringens* types C and D and tetanus caused by *Clostridium tetani*
 - ▶ Talk to your veterinarian about diseases in your area and preventive strategies
 - ▶ Keeping records of animal behavior, food consumption and body weight and production will help you discover problems before they become serious
 - ▶ Good records will also help you to choose animals to breed and which ones to cull
-



This module was prepared by:

USDA-ARS-DBSFRC

- Joan Burke
- Annie Donoghue

University of Arkansas, Fayetteville

- Dan Donoghue
- Ixchel Reyes-Herrera

This presentation is part of an educational modular program designed to provide new and beginning farmers and ranchers with relevant information to initiate, improve and run their agricultural operations

This program is funded by the
Beginning Farmer and Rancher
Development Program
(USDA-NIFA-BFRDP)

USDA-NIFA-BFRDP 2010-03143



UNIVERSITY OF
ARKANSAS



United States Department of Agriculture
National Institute of Food and Agriculture



UNIVERSITY OF
ARKANSAS

This project is the result of the collaboration of these institutions:



USDA-NIFA-BFRDP 2010-03143

