



# Sheep Project



Monthly Lesson Plan  
January 2023



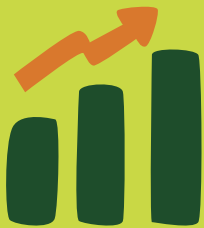
## Upcoming Deadlines

- ✓ February 1st – Re-enrollment deadline
- ✓ April 1st – New member enrollment deadline
- ✓ April 28th – Market sheep Ownership deadline



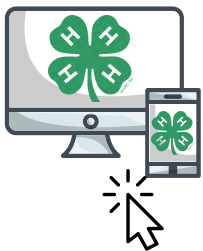
## Project Progress

Suggest the following as things your members should work on or accomplish with their project this month. Follow up to see which they achieved:



1. **E Record Books:** Download the 2023 Livestock Recordbook
2. **Hands On:** Members should evaluate their sheep housing and lambing setups for bred ewes for any weak or hazardous materials or drafts. (Sheep Resource Handbook pg. 21 & 38)
3. **Knowledge:** Breeding goat members should review lambing procedures so they are prepared for lambing season (Sheep Resource Handbook pg. 35)
4. **Other:** Update your calendar with 2023 Animal Project Dates

2023 Animal Project Dates



## Opportunities

See 4-H Calendars for full details & more recently added events

- **January** – date tbd –Hoof Trimming clinic
- **January 13-15, 21-22** – NWSS Sheep Shows
- **February 8th** – Project 101 Virtual





# Sheep Project



January 2023

## Attached Activities

Use these suggested activities at club project meetings to increase member knowledge and keep members engaged in their project.

### Group: "Checking the Calendar"

- Leaders will work with their members to create a sheep production schedule for breeding flocks or market lambs.

### Individual: "Lambs on the Way"

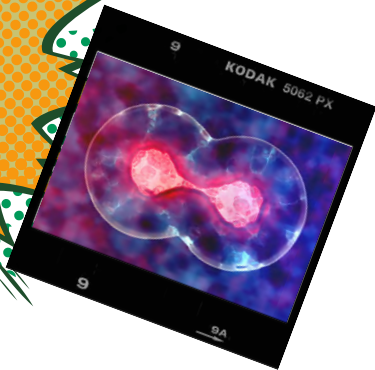
- Members can practice to prepare for different lambing situations.

\*for more Sheep project activities, order the National 4-H Curriculum "Sheep Helpers Guide" through the 4-H Office\*



## Fun Fact

The first mammal ever cloned from an adult cell what a sheep named Dolly.



## Timely Tips to Share

Make sure sheep have access to a wind break of some kind to reduce exposure and illness. Wind breaks can be provided by sheds, dog houses, hay bales etc.



## Resources



- The following & more can be found on the ADCO 4-H Sheep Project Webpage: <http://adams4h.org/4-h-sheep-project/>
    - 2023 Animal Project Save the Dates
    - Sheep Resource Handbook (Ohio State)
    - E Record Books
    - Fourcast Newsletter Signup
    - Project Tipsheet
- Fairgrounds Livestock Scale – can always be used by 4-H members with appointment. Contact Kenzie to schedule a time.



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**ADAMS COUNTY**  
COLORADO STATE UNIVERSITY  
EXTENSION

## Checking the Calendar



A sheep production management schedule or calendar with specific dates is a useful tool for both novice and experienced sheep raisers. Whether they have one market lamb or a growing flock, your group members will find that a calendar for their individual sheep operations will be useful. They will also be learning how to plan for the future.

**Sheep Project Skill:** Managing a sheep operation  
**Life Skill:** Planning and organizing  
**Show of Success:** Plans a one-year sheep management calendar.  
**Time Involved:** One hour  
**Suggested Group Size:** 3 to 20  
**Materials Needed:** Note cards, markers, pens or pencils

### Getting Started

Make a note card for each of the management practices listed on the next page plus any others you feel are important. Write the month on one side and one practice appropriate for that month on the other side. You will end up with about 50 cards. Make twelve additional cards too — one for each month. This can be done beforehand or by the youths at the meeting. Additional background information is available on pages 14–15 “Breeding Flock Management Calendar.”



#### 1. Experience (Doing)

Before jumping into the main activity, do a roll call. Ask each youth to name one management practice for a sheep and the month in which it normally occurs.

Using the cards, lay out the month cards and give each team a portion of the remaining cards. Give them the following situation and task:

**Situation:** You want to organize all the key management practices necessary for the fifteen ewes and one ram you own. These ewes will be exposed to the ram beginning August 15th.

**Your Task:** Plan a 12-month management program by matching the months with the management practices beginning in July.

After five to ten minutes of discussion, ask each team in order to place one management

practice under the month selected and justify the choice. Another team may challenge. After discussion, turn the card over to check the month. Continue in order from team to team until all cards are in place. Then ask follow-up questions.

If you have a large group make several sets of cards and have teams of four or five youth determine what should happen each month. Then ask teams to compare and debate their answers before turning any cards over.







# Sheep Management Practices

This schedule is only an example and may not be correct for all sheep operations or areas of the country.

## July

- Shear ram and trim hooves
- Check testes of ram for abnormalities
- Grain-feed ram if moderate flesh
- Check udders and mouths of ewes
- Cull ewes that don't meet the criteria for type, condition and size
- Conduct ram breeding soundness exams

## August

- Deworm ewes
- Flush ewes and ram
- Vaccinate for vibrio and repeat two months later for any ewes not previously vaccinated
- Paint ram's brisket or use marking harness
- Stop feeding grain after 2-3 weeks
- Begin feeding approximately 3 1/2 pounds of good hay per ewe daily until a month before lambing

## October

- Vaccinate ewes for vibrio a second time
- Vaccinate ewes for overeating with C & D if never vaccinated (and again 2-3 weeks prior to lambing)

## December

- Start grain-feeding bred ewes 1/2 to 1 pound per day depending on condition plus 4 pounds of legume hay
- Vaccinate ewes a second time for overeating; use C & D toxin

## January

- Shear ewes
- Paint brand ewes or use large type ear tags
- Provide a 4' x 4' pen or jug for each 10 ewes
- Leave ewe and lamb in jug 24-48 hours
- First day give ewe no grain or only 1/2 pound plus good hay

- Feed approximately 5 pounds of hay and up to 2 pounds of grain per ewe daily
- Clip and dip navel cords
- Dock lambs at 2-4 days
- Keep barn well ventilated
- Castrate ram lambs no later than 10-14 days
- Start creep feeding lambs at 10 days of age
- Discontinue grain to ewes after 6-8 weeks

## February

- Vaccinate lambs for sore mouth if a problem
- Vaccinate lambs for overeating with C & D toxin as they reach 3-4 weeks of age and again 10 days later
- Deworm ewes

## April

- Trim ewes' feet
- Deworm ewes 3-4 days prior to going to pasture
- Cull all ewes that were barren, poor milkers, ruptured, had bad udders
- Wean lambs at 10-11 weeks of age from mature ewes; 9 weeks for ewe lambs
- Remove feed and water at least 1 1/2 days to dry up ewes before putting on pasture
- Keep mineral mixture before ewes at all times while on pasture

## May

- Sell lambs that weigh 110-130 pounds
- Deworm ewes third time
- Spray for ticks and other external parasites

## June

- Shear replacement ewe lambs
- Tag or crotch ewes and lambs to remove wool tags and avoid maggots
- Begin looking for stud ram



## Talk It Over

### 2. Share (What happened?)

- Q. What did you learn about managing sheep?
- Q. What new practices did you discover?
- Q. How did it feel to work as a team to complete the calendar?

### 3. Process (What's important?)

- Q. What other management practices should be added to the calendar?
- Q. Why is planning ahead important?

### 4. Generalize (So what?)

- Q. What does it mean to plan your work and work your plan?
- Q. What would cause you to change your plan or start a new one?

### 5. Apply (Now what?)

- Q. How will you use what you learned in this activity about planning?
- Q. What other areas of your life would benefit from planning?

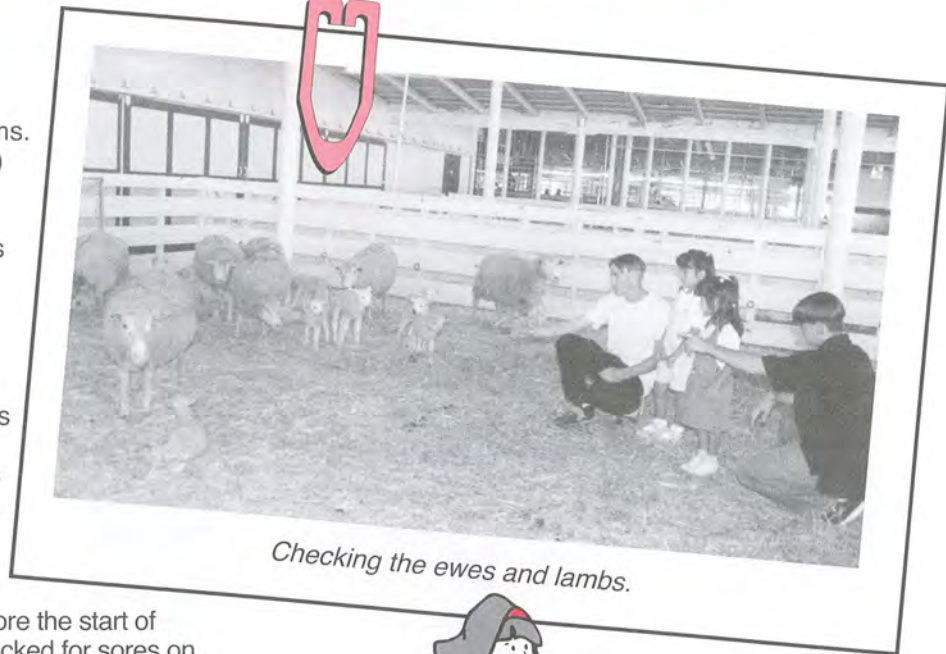




# Breeding Flock Management Calendar

## Six to Eight Weeks Prior to Breeding - Rams

1. Select and purchase new rams. Test for *Brucella ovis* (ELISA) Give breeding soundness examination (BSE). Isolate new rams for at least 30 days and observe daily Retest with *B. ovis* ELISA before releasing from isolation.
2. Conduct a breeding-soundness evaluation on all previously owned rams. Treat conditions and cull unsatisfactory rams. Feet should be checked for foot rot and excess hoof growth. Long hooves should be trimmed several weeks before the start of breeding. Rams should be checked for sores on the penis sheath. The scrotum should be checked for abnormal growth or misshapen testicles. Also, when possible, all rams should be semen tested.
3. Treat all rams for internal and external parasites and shear them (if breeding during hot weather).
4. Give vaccinations as recommended by your veterinarian.
5. Feed rams for top physical condition. Rams should be in body condition score (BCS) 3.5–4.0 at the start of breeding.



*Checking the ewes and lambs.*



## Six to Eight Weeks Prior to Breeding - Ewes

1. Conduct a general health and soundness examination with special attention to teeth, feet, and udder. Cull all ewes with unsound udders.
2. Sort ewes into groups by BCS, and adjust nutrition to achieve a BCS of 3-3.5 on a scale of 1-5 for highest conception rates by breeding time. With proper nutrition it takes three weeks to gain 0.5 of BCS.
3. Plan a nutritional flushing program for ewes with <2.5 BCS. A typical flushing program lasts for five weeks, beginning two weeks prior to the breeding season. Flushing is the term used to describe the practice of feeding additional energy to ewes at the beginning of the breeding season in order to maximize the number of multiple births. Energy feeds such as corn or barley are commonly used. The amount of corn per day depends on the size and the condition of the ewes and may vary between 0.5 and 1.0 pounds. Flushing can also be accomplished by grazing ewes on good quality pasture. Use caution if flushing ewes on legume pasture. Some clover varieties produce enough estrogen to interfere with reproductive hormones in sheep.

4. Treat all ewes for internal and external parasites.
5. Vaccinate any previously unvaccinated ewes for campylobacteriosis (vibrio). Vaccinating ewes for chlamydia (EAE) should be considered in flocks where chlamydial abortions have occurred or in high-risk areas. Other vaccinations may be necessary in local areas.

## Breeding Season

1. Observe rams closely for any problems. Cull rams that fight excessively. Cull rams that are not covering ewes. Cull or adjust feeding for rams with BCS < 2.
2. Remove the rams at the end of the designated breeding season and examine them for any problems.
3. Most breeds and their crosses begin to cycle in late summer and show their highest fertility in the fall. Ewes exhibit heat about every 17 days during the breeding season. The gestation period (length of pregnancy) for sheep ranges from 143 to 150 days.



### Gestation Period (148 Days)

Early Gestation (First 45 days).

1. Vaccinate replacement ewes with *Clostridium perfringens* C & D bacterin-toxoid. Vaccination with other clostridia species, e.g. tetanus, may be advisable.

### Mid-gestation (46 to 90 days)

Ultrasound ewes for pregnancy (46-80 days ideal) and divide into single and multiple bearing groups. Adjust nutrition programs accordingly.

### Late Gestation (91 to 148 days).

1. Adjust feeding programs for nutritional requirements.
2. Vaccinate all ewes for campylobacteriosis (*vibrio*) > 100 days post-breeding.
3. Shear or crutch four to six weeks prior to lambing if feasible.
4. Vaccinate all ewes with *Clostridium perfringens* C & D bacterin-toxoid two to four weeks prior to lambing. Flocks that have experienced a problem

with K99 *E. coli* scours in baby lambs should consider vaccinating pregnant ewes two to four weeks prior to lambing with a K99 *E. coli* vaccine.

5. Deworm two weeks prior to lambing, if needed.

6. Start a coccidia control program, if needed, by adding a coccidiostat to the ewes' ration 30 days prior to lambing.

### Lambing Period

1. Clip and apply iodine to the navel of the lamb, strip the wax plug out of ewe's teats, and make sure the lambs nurse. If the ewe is deficient in colostrum, her lambs should be given supplemental colostrum. In confinement lambing, the shepherd plays an active role in ewe-lamb bond formation by providing a "private" place (the jug) for the ewe and her lamb(s).

2. Identify lambs by ear tag or paint brand.

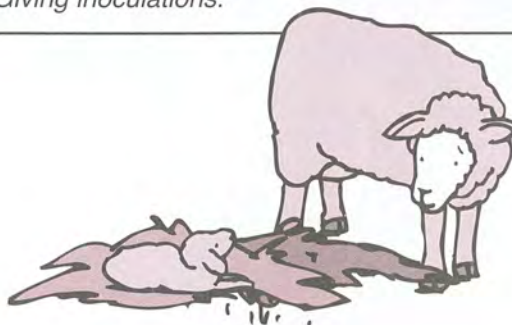
3. Observe ewes for mastitis and lambs for poor mothering, scours, pneumonia, and other problems. Scours should be treated at the first sign of a problem.



Giving inoculations.



Treating the navel.





## Birth to One Month

1. Dock and castrate lambs before two-weeks of age. It is important to leave two vertebrae when tail docking since short tails are associated with rectal/vaginal prolapses. An accepted rule of thumb is to cut the tail at the distal (furthest from the body) end of the caudal fold (the two flaps of skin on the underside of the tail attaching it to the rectum) or two vertebrae (tailbones) long. Castration and docking is easiest with the assistance of a helper who can hold the lamb and lock the front legs under the hocks of the hind legs (see picture below). Fly repellent should be applied around the wound and the lambs should be watched for fly strike.

2. Vaccinate lambs with Clostridium perfringens C & D bacterin-toxoid at about one-month of age followed by a booster in 14 days.

3. Adjust feeding programs for nutritional requirements. Providing a creep feed while lambs are still nursing will help to increase their growth. A creep is a special feeding area that only lambs can use. Slots are built into the side panels that can be adjusted to different widths, so only lambs of a certain size or smaller can get in. It is especially important that creep-fed lambs be given enterotoxemia shots.

4. Excessively tearing or watering eyes is often a sign of an inverted eyelid. What usually is happening is that the lower eyelid has turned inward, causing the hair on the lid to irritate the eyeball. Inverted eyelids can cause blindness in severe cases. Although correctable, lambs with entropion should not be kept or sold as breeding stock because the condition is heritable. Fixing the eyelid requires that you cut out a crescent of loose skin below the lower eyelash. Alternatively, the eyelid may be stitched or taped in a normal position.

## Weaning

1. Lambs may be weaned between 60 and 90 days of age.

2. Dry ewes off by deprivation of feed for 48 hours and water for 24 hours. Provide low energy and protein feed for next 10-14 days. Monitor udders closely for evidence of acute mastitis.

3. Cull ewes with mastitis, lameness, excessive thinness, poor lactation, bad teeth (molars and incisors), etc.

4. Treat all ewes for internal and external parasites.

Why does the mother and lamb have the same number?



Paint branding each lamb.

Included with permission from "A Handbook for Raising Small Numbers of Sheep", 1985, University of California Cooperative Extension.

Acknowledgement: Adapted with permission from ASI Sheep Production Handbook.



# Lambs on the Way



**Sheep Project Skill:** Caring for newborn lambs  
**Life Skill:** Planning and organizing  
**Show of Success:** Plans and demonstrates what to do when lambs are born.

Lambing time is the most important time of the year for anyone who raises sheep. A whole year of taking good care of the ewe—breeding, feeding, tagging, shearing, housing, vaccinating—is to prepare her for newborn lambs. Whether you are just

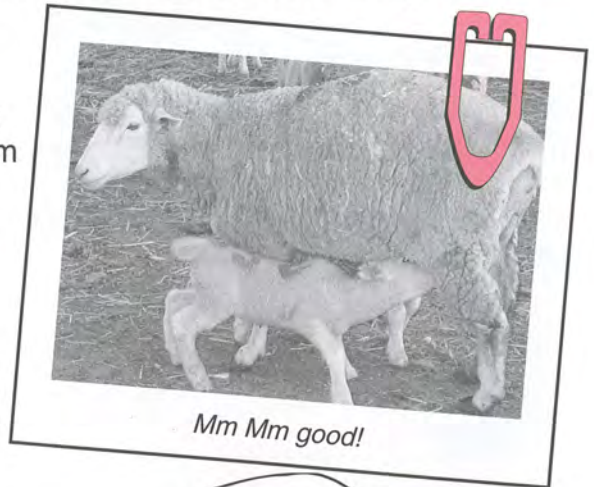
thinking about raising sheep or already have them, this activity will help you know more about lambing and planning.

## Your Challenge

First collect as many of the pieces of equipment listed under lambing supplies as you can. Then read the situation that follows and act out what you would do.

**Situation:** Pretend you own five ewes. One of the ewes has just started giving birth to a lamb. Role play what you would do to make sure that when the lamb is born it: 1) breathes 2) is dried off 3) the umbilical cord is clipped and dipped 4) gets colostrum and 5) is

accepted by its mother or dam. You can use a model lamb or a real lamb to role play for your helper and family. Complete the activity by writing in the circles the five most important things you would do. Put one item per circle.



I'll make sure you have everything you need.





Share with your helper

- What special things do you need to know at lambing time?
- How do you make sure the ewe's teats are open so the lamb can get colostrum?

Tell what's important

Why is it important to check the ewes often when they are lambing?

Explore what you learned

How does practicing and planning ahead help you when an actual event happens?

Imagine what's next

What steps can you take now to be ready for lambing?

Getting Ready to Lamb

Ewes should either be sheared or crotched prior to lambing. If you shear, it should be done about three or four weeks before lambing. This will allow for cleaner lambing and no dirty tags for lambs to suck. Handle the ewes gently. In tagging (crotching or crutching), the ewe's wool is trimmed from the crotch and udder and a few inches forward of the udder on the stomach. (see photo)

Lambing Pens

Lambing pens or "jugs" 6' x 6' should be ready for the newborn lamb and its mother. A jug allows a better opportunity to observe their bonding behavior and fix any problems that may arise during the first week following birth.

The jugs should have clean bedding, a small feeder and a container of water that cannot be spilled or stepped in by the newborn lamb.

Barns should be clean, dry, and free of draft—but not too warm. A warm, damp barn is conducive to bacterial growth, which may lead to pneumonia and other disease problems.

After Lambing

Ewes are often thirsty after giving birth. It is a good idea to offer the ewe a bucket of warm water containing about half a cup of stock molasses. Offer good hay but no grain the first day as it could promote more milk than a tiny lamb could use. If the ewe has twins or more, grain feeding should start that first day.

Caring for the Newborn Lamb

- Clean the nostrils of mucus and uterine membranes
- If the lamb is having breathing difficulties, use a veterinary aspirator to stimulate normal breathing
- Apply iodine to the navel as soon after birth as possible to avoid navel infection. A wide-mouth (size of a silver dollar) container of iodine and scissors are helpful in applying iodine properly
- Milk both of the ewe's teats to break the wax and check for udder problems.
- Help weak lambs to nurse. The first milk (colostrum) is important to the lamb because it has a laxative effect and contains antibodies providing immediate protection against many diseases
- Revive any lamb you find that is chilled, weak and refuses to nurse. One method is to rub the lamb until it is dry and warm it, under a heat lamp, but do not overheat it. Then feed colostrum milk. Another method to warm a chilled lamb is immersing its entire body, except the head, in warm water (100 to 120 F) or put milk directly into its stomach with a catheter tube connected to a syringe.

Adapted From "Sheep Management - Lambing Time", 1988 J. J. Dahmen, Ed Duren and Pete South, University of Idaho, College of Agriculture.

Lambing Supplies

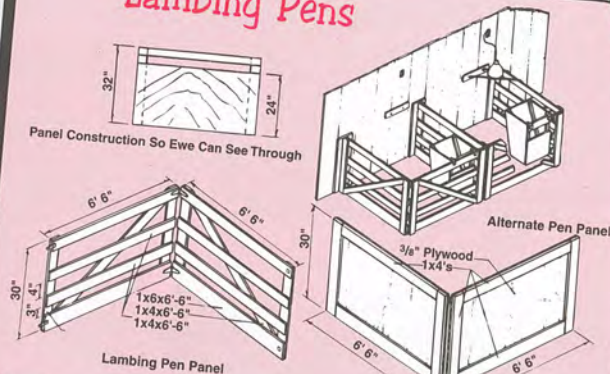
- Heat lamp
- Towels
- Water pail
- 6 x 6 foot pens
- Iodine
- Scissors
- Colostrum
- Esophageal feeder
- Lamb nipples
- 60cc syringe
- Antibiotic uterine boluses
- Detergent

Lambing Losses

Be prepared to avoid losing lambs to these 10 causes:

- Starvation
- Pneumonia
- Scours (Diarrhea)
- Navel Ill
- Entropion (Inverted eyelids)
- Urinary Calculi (Water Belly)
- White Muscle Disease (Stiff Lamb)
- Enterotoxemia (Overeating Disease)
- Parasites
- Coccidiosis

Lambing Pens



A crutched ewe.

More Challenges

1. Visit a sheep operation during lambing time and help take care of newborn lambs.
2. Demonstrate what to do if a lamb is not breathing when born or is very cold and weak when found.