

When Will My Livestock Project Animal Be Born?

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Goal (learning objective)

Youth will gain a basic understanding of breeding management decisions such as selection of breeding stock, breeding methods to implement, breeding calendars, and care before, during, and after pregnancy for beef, sheep, goats and swine.

Supplies

- Photocopies of the following handouts (enough for group):
 - Handout 1 “Beef Calendar”
 - Handout 2 “Sheep Calendar”
 - Handout 3 “Goat Calendar”
 - Handout 4 “Swine Calendar”
 - Handout 5 “Calendar”
- Pens or pencils (enough for group)

Pre-lesson preparation

- Make photocopies of Handouts 1,2,3, 4 and 5 – enough for group
- Read/review lesson
- Read/review terminology and concepts for each species

Lesson directions and outline

Share the following information with the youth:

Livestock management decisions are made based on each individual producers’ goals, requiring a producer to ask themselves questions such as:

- Will the offspring be used for breeding or go into meat production market?
- What method of breeding will be used, AI or natural?
- When should females be bred by for birth to occur during a certain time of year?
- How long are the animals in gestation?

These decisions influence everything from what sire is utilized to when breeding needs to occur. For example, to accomplish late winter/early spring calving, a producer will need to breed in May

Gestation of Livestock

- Cows are pregnant for 283 days or just over 9 months
- Sheep are pregnant for 147 days or just shy of 5 months
- Goats are pregnant for 150 days or 5 months
- Pigs are pregnant for 114 days or just shy of 4 months.

Another important management step a producer needs to address is the care to be given to a breeding animal prior to pregnancy, during and after birth.

- Prior to pregnancy animals should be fed properly to support the amount of energy their body is using to grow a calf, lamb, kid or a litter of piglets.
- Pregnant animals should receive proper vaccinations to keep them healthy as well as help provide initial immunity to their offspring.
- During birthing, livestock should be kept in clean areas, such as not yet used pastures or barns. It may be necessary for a producer to be continually checking their livestock in case birthing assistance is needed.
- After birth, animals will require additional nutrition and need to remain in a clean area while the newborn's immunity develops. It may also be necessary for the producer to ensure that newborns are successfully nursing from their mothers.

Conducting the activity (DO)

1. Ask for a volunteer to distribute Handout 5 to the group.
2. Have youth organize themselves into four species groups (if needed): beef, sheep, goats and swine.
3. Have youth fill out Handout 5 (the yearly calendar) for their species group. As a group they need to discuss/explore/record what should be done month by month. They should record what decisions are being made and why, and what action(s) are needed.
4. Provide time for the groups to work through the activity. Check for completion, distribute Handouts 1, 2, 3, and 4 to the groups.
5. Have groups review their calendar versus the appropriate Handout (1=Beef, 2=Sheep, 3=Goat, 4=Swine).
6. Have groups share their calendars:
 - a. Ask: Are there similarities between your calendar versus the species calendar?
 - b. Ask: What differences are there between the calendars?
7. Have a discussion as a larger group:
 - a. Ask: Are there similarities in the calendars amongst all species?
 - b. Ask: Any surprises?

What did we learn? (REFLECT)

- Ask: Is there much planning that goes into breeding management?
- Ask: What are some pre-breeding decisions to consider?
- Ask: What type of care should be provided to animals after birth?

Why is that important? (APPLY)

- Ask: What happens to a production system if no planning occurs?
- Ask: How do these decisions impact a production system?
- Ask: How can missed steps through the year impact your 4-H project?

Resources

Calendarlabs.com. (n.d.). 2018 Monthly Calendar Template. Retrieved from <https://www.calendarlabs.com/2018-calendar-templates>

Ohio State University Extension. (2011). Management Practices. *Beef resource handbook* (pages 3-3 through 3-6 and 2-13).

Ohio State University Extension. (2008). Reproduction. *Goat resource handbook* (pages 39-41, 67-69).

Ohio State University Extension. (2011). Management Practices. *Sheep resource handbook for market and breeding projects* (pages 32-35).

Ohio State University Extension. (2000). Breeding Management. *Swine resource handbook for market and breeding projects* (pages 18-1 through 20-4 and pages 15-4 through 15-6).

REPRODUCTION: WHEN WILL MY LIVESTOCK PROJECT ANIMAL BE BORN? – HANDOUT 1

BEEF CALENDAR

January:

Be paying attention and evaluating nutritional status and body condition of herd, being prepared to separate out animals not meeting a healthy standard. Begin feeding in the evening about 2 weeks prior to first expected calf birth to induce day time calving – who wants to check for labor at 2am?

February:

Calving will begin so be ready to assist. Increase available feed as cows will have higher nutrient requirements for lactation. Administer vaccination protocol for your herd to calves as they come.

March:

Provide nutritional supplements. Vaccinate cow herd. Cull any cows that did not calve – why would this have effect on breeding management and the herd? (Answer: cows that didn't produce a calf are now just consuming feed without a result and may not rebreed so are now of less productivity and value).

****Branding season begins typically at the end of March and will go into the first part of May****

****Branding includes castration and dehorning plus additional vaccinations****

April:

Cows go out to pasture, unless implementing AI. Check bulls for breeding soundness and/or purchase semen.

May:

Bulls go out. Be observing cows for heat if using AI.

June:

Yearling heifers should be in heat and bred about 45 days prior to mature cows.

July:

Breeding season ends, separate bulls from herd. Implant calves being sold for meat market.

August:

Control pests and bacterial afflictions.

September:

Vaccinate breeding herd. Sell market calves. Pre-check cows and sell open cows and poor performance cows.

October:

Finish selling market calves. Begin bringing herd in from pasture.

November:

Finishing bringing in herd and/or move to winter ground. Provide additional feed to sustain cows through pregnancy.

December:

Continue winter feeding.

REPRODUCTION: WHEN WILL MY LIVESTOCK PROJECT ANIMAL BE BORN? – HANDOUT 2

SHEEP CALENDAR

January:

Check ewes regularly for lambing or health problems. Disinfect lambing pens between ewes. Identify lambs before moving them to a mixing pen. Dock, castrate and give lambs appropriate shots. Start lambs on creep feed. Feed ewes according to the number of lambs they have. Ewes nursing twins and triplets have high nutritional needs.

February:

Provide plenty of clean, fresh water to sheep, especially nursing ewes. Provide salt and minerals. Make sure lambs have had all shots. Cull ewes that did not breed.

March:

Start weaning lambs and reduce ewe's feed. Select lambs to keep and those to market. Plan your deworming program for pastured sheep.

April:

Shear all sheep and trim their feet. Get pastures ready for sheep. Separate ewe and ram lambs. Market lambs not being kept as replacements as well as unsound and unproductive ewes. Turn in rams for fall lambing.

May:

Pasture ewes. Attend sales to market or purchase breeding stock and then isolate any new breeding stock purchased.

June:

Register the purebred replacement lambs. Check sheep for foot rot and treat immediately if observed. Exercise market lambs and show sheep, working with and training them for show.

July:

Cull out lambs for show. Check pasture quality and provide pasture shade for animals. Provide plenty of clean water for all sheep.

August:

Vaccinate ewes for abortion diseases two weeks before breeding with consultation from a veterinarian. Shear rams for breeding and purchase breeding harness crayons. Get supplies ready for fall lambing and start flushing ewes (providing high amount of quality nutrition). Turn rams in around August 10 for January lambs.

September:

Record breeding dates and change crayons in the chin ball marker on rams every 16 days.

October:

Continue to change crayons. Check ewes for foot rot problems. Sell rams that are not to be kept for breeding.

November:

Check pasture quality, may need to supplement. Shear and trim feet of replacements and brood ewes. Pregnancy check ewes.

December:

Give booster vaccines to ewes and starting increasing the energy in the feed. Shear ewe prior to lambing to help with cleanliness of environment for lambs. Check lambing supplies and clean lambing area.

REPRODUCTION: WHEN WILL MY LIVESTOCK PROJECT ANIMAL BE BORN? – HANDOUT 3

GOAT CALENDAR

January:

Check does regularly for kidding or health problems. Disinfect kidding pens between does. Identify kids before moving them to a mixing pen. Feed does according to the number of kids they have. Does nursing twins and triplets have high nutritional needs.

February:

Dock, castrate and give kids appropriate shots. Start kids on creep feed. Provide plenty of clean, fresh water to goats, especially nursing does. Provide salt and minerals.

March:

Cull does that did not breed. Start your deworming program for all goats.

April:

Start weaning goats and reduce doe's feed. Select kids to keep and those to market. Get pastures ready for sheep. Separate doelings and buck kids. Market kids not being kept as replacements as well as unsound and unproductive does and bucks.

May:

Pasture goats. Buy replacement breeding stock and then isolate any new breeding stock purchased. Continue feeding kids.

June:

Treat again for parasites. Continue feeding kids. Register the purebred replacement doelings. Start working with show goats and training them for show. Start to flush feed does.

July:

Continue to flush feed does. Check pasture quality. Provide plenty of clean water for all goats. Treat for parasites.

August:

Vaccinate does for abortion diseases before breeding with consultation from a veterinarian. Start breeding does. Turn bucks in around August 15 for January kids. Market all wethers and doelings that were fed for market.

September:

Record breeding dates. Cull non-productive bucks and does.

October:

Continue to record breeding dates. Treat for parasites again. Sell bucks that are not to be kept for breeding.

November:

Check pasture quality, may need to supplement. Trim feet on all goats that need trimming. Pregnancy check does if needed.

December:

Give booster vaccines to does and start increasing the energy in the feed. Check kidding supplies and clean kidding area.

REPRODUCTION: WHEN WILL MY LIVESTOCK PROJECT ANIMAL BE BORN? – HANDOUT 4

SWINE CALENDAR

January:

Evaluate nutritional status and body condition of herd, be prepared to separate out animals not meeting a healthy standard. Administer pre breeding vaccine.

February:

Check heat of sows and gilts. Gilts and sows reproductive cycle is 21 days. Be ready to breed females exhibiting heat. If you order semen for AI make sure you have semen available at the appropriate time. Breed 24 hours after standing heat and again 12-24 hours later. Don't mix females after breeding for at least 21 days.

March:

Provide a balanced gestation ration. This ration should contain 14% protein and appropriate levels of vitamins, minerals and energy. Continue to check heat to make sure all sows and gilts are bred.

April:

Administer the first dose of pre-farrow vaccine. Continue to observe females for correct body condition. Make sure all sows/gilts are at a body condition of 3 or 4.

May:

Administer the second dose of pre farrow vaccine. Make sure sows are not over fed the last 30 days before farrowing. Move sows into farrowing area on day 110 of gestation. Make sure farrowing area is washed and disinfected.

June:

Check sows for signs of farrowing. Be present for farrowing and assist if necessary. Inject baby pigs with iron and penicillin within 12 hours. Ear notch baby pigs for identification.

July:

Vaccinate baby pigs at 7-10 days of age. Revaccinate baby pigs at 3-5 weeks of age. Vaccinate sows with pre breeding vaccines.

August:

Wean baby pigs, make sure they have a balanced ration and appropriate environment. Make sure sows are not overcrowded and begin to observe for signs of heat on day three after weaning. Breed 24 hours after standing heat and again 12-24 hours later.

September:

Sell any sows that do not breed back on the second heat cycle. Begin to monitor sows body condition. After 21 days feed to increase body condition of sows that are below a body condition of three. Move baby pigs out of the nursery and transition them to a grower diet.

October:

Administer the first dose of pre-farrow vaccine. Continue to observe females for correct body condition. Make sure all sows/gilts are at a body condition of 3 or 4. Continue to check heat to make sure all sows and gilts are bred.

November:

Administer the second dose of pre farrow vaccine. Make sure sows are not over fed the last 30 days before farrowing. Transition grower pigs to a finish diet.

December:

Make sure farrowing area is washed and disinfected. Move sows into farrowing area on day 110 of gestation. Market finished pigs that are the appropriate weight and finish.

