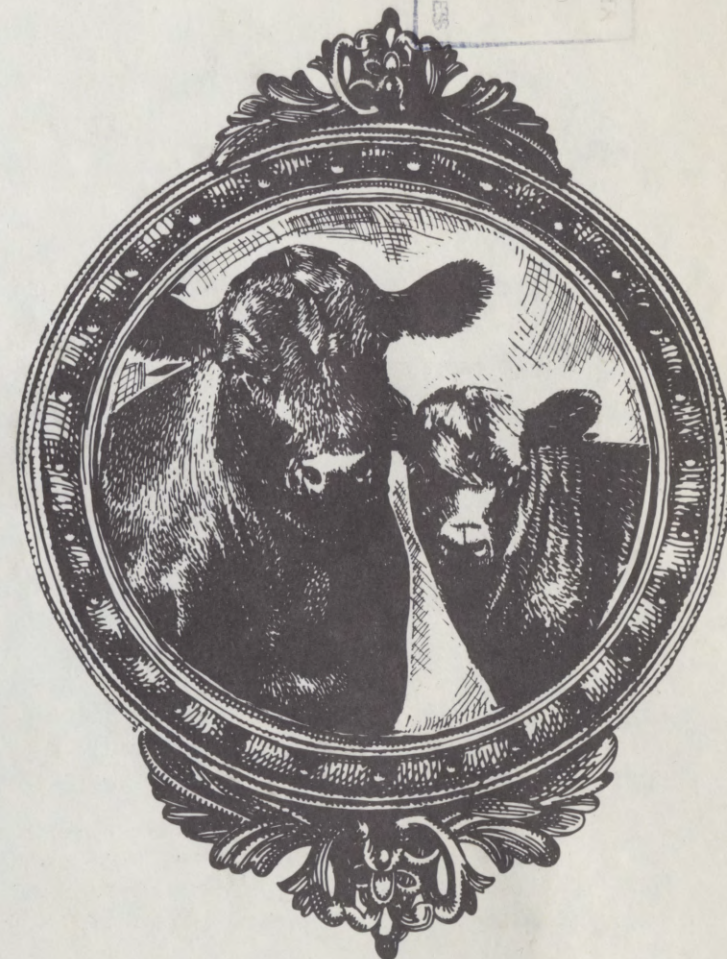


MINNESOTA BEEF COW-CALF MANAGEMENT CALENDAR

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FOREWORD

Owners of beef cow herds should have as goals the production of the greatest possible number of calves per given number of cows, with the heaviest possible weaning weights, at the lowest possible costs. To accomplish these goals, feeds produced on the farm should be used to their greatest advantage. Facilities and equipment must be provided that are not only economical but will also permit safe and effective handling of cattle and feed.

The beef cow herd should use materials such as cornstalks and stubble aftermath that have no other ready market whenever it is consistent with good crop production practices. While beef cows can use these low quality roughages, the feeding program should be based on the production of good quality forages for pasture and stored feed. To ensure that costs are kept to a minimum and that performance of cows and calves is kept at an optimum level, overfeeding or underfeeding the cow herd must be avoided. Minimum requirements for the various nutrients must be met, but supplying more than is necessary is uneconomical and wasteful.

Examples of goals that may be established are:

1. 90-95% calf crop (calculated as percent of weaned calves per number of cows exposed to the bull(s) or inseminated).
2. Calves weighing more than 500 lbs. at 205 days of age.
3. Calves that will gain rapidly and efficiently in the feedlot and that will produce desirable carcasses.

This calendar is meant as a guide as to what practices might be carried out and when. It is not a complete guide on how to do all the things that are suggested.

The calendar starts with March which is a logical time to start calving. Those with earlier or later calving schedules should adjust their calendar accordingly.

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MARCH

HEALTH

Prior to Calving:

Clean calving pens, disinfect if possible. Keep the pens clean and well ventilated.

During Calving:

Check the cows often — especially first calf heifers.

- Watch for abnormal deliveries, take corrective measures quickly
- Dry the calf if needed. Prevent chilling.
- Tie-off or pinch-off the navel cord, if needed. Treat the stub with tincture of iodine.
- Place chilled calves in a warm place (house, warming box, etc.) quickly
- Be certain that the cow "owns" her calf
- Check to see if the teats are open and milk is available
- See that the calf nurses soon after birth

The cow and calf should be kept in an individual pen for a few days, then turned with other cows and calves.

If the cow has not passed the afterbirth ("cleaned") within 48 hours of calving seek the advice of your veterinarian.

Observe calves closely during the first few weeks for signs of disease such as scours and pneumonia. Be prepared to treat calves promptly.

If trees, hills or other shelter are available in pastures close to the farmstead, move the cows and calves to these pastures. Dispersal of the herd in this way may help prevent scours and other diseases.

NUTRITION

Start planning your pasture program. Check with your county agent and/or an extension agronomy or soil specialist on a pasture fertilization program. Order fertilizer.

MANAGEMENT

Start calving the first part of March or earlier, if possible. Early calves, compared to later calves, will be:

- Heavier at weaning
- Able to use the increased milk production when grazing starts
- Big enough to graze forages at the peak of early growth

Develop and use an identification-record system:

- Use tattoos or ear tags
- Have an identification-numbering system. Example — 6001 (6 for 1976, 001 for the first calf. The second calf gets 6002, etc.)
- Use a pocket record book to record:
 - calf number
 - dam number
 - birth date
 - birth weight (optional)

HEALTH

Castrate calves at about 3-6 weeks of age.

Dehorn the calves as soon as the horns show, or at time of castration.

Continue to watch closely for scours or other diseases; treat promptly.

Consider having your bulls' semen checked by a veterinarian or other qualified person. Each bull should be given a careful physical examination. Correct foot problems.

NUTRITION

Feed cows adequately to provide for milk production and to enable them to cycle and rebreed. Adequate energy levels are especially important for cows that are part dairy breeding or of other breeding high in milk production. The nutritional needs of 2-year-old cows being rebred for their second calf are especially critical.

Examples of daily rations for cows nursing calves include:

- Full-fed corn silage and 1 lb. of supplement containing 85% ground corn and 15% urea (281), or
- feed 5-7 lbs. of good quality alfalfa-brome hay (or equivalent amount as haylage) and a full-feed of corn silage, or
- full-feed alfalfa-brome hay with 4 lbs. of grain, or
- full-feed grass hay, with 5-6 lbs. of grain and 1 lb. of supplement containing 85% ground corn and 15% urea (281).
- Continue to offer trace mineralized salt and a mixture of 50% dicalcium phosphate (or bone meal) and 50% trace mineralized salt free-choice.

MANAGEMENT

Harrow pastures to scatter the manure piles where there have been large concentrations of cattle.

Check pasture fences; repair if needed.

If you have not acquired your herd bull(s) do so soon.

Isolate newly acquired bulls for 30 days. Gradually adjust them to your feeding-management system.

Apply fertilizer to pastures as recommended by your county agent, extension agronomy or soils specialist, or other qualified adviser. An example of their advice might be to apply 100 lbs. of nitrogen per acre to permanent grass pastures; this nitrogen may be split into two applications, 50 lbs. in April and again in June.

Obtain yearling weights on prospective replacement heifers, together with any other yearlings still on hand. Cull some of the lightest heifers, but retain enough to allow a final culling of those that are not pregnant at the end of the breeding season.

If you are going to artificially inseminate, order semen. For breeding heifers, select a bull that sires calves that tend to be calved easily.

MAY

HEALTH

Trim hooves, if needed, before the cattle go to pasture.

Check with your veterinarian on a vaccination program. Such vaccinations might include IBR, leptospirosis, PI₃, BVD, vibriosis, blackleg and malignant edema. Most of these vaccines, if used, should be given at least 30 days prior to breeding.

Consider the use of artificial insemination (AI). If using AI, check for abnormalities such as infections, cystic ovaries, etc., during breeding. Consult your veterinarian as needed. If problems were evident the preceding year, it may be desirable to check the cows prior to the breeding season so that proper treatments can be administered.

Check the herd daily.

- Watch for bloat, foot rot, and similar abnormal conditions; provide proper treatment promptly.
- Record breeding dates and other pertinent information.

NUTRITION

Feed free-choice, trace mineralized salt. Also provide a separate protected feeder containing a mineral mixture. This mixture might contain 50% trace mineralized salt and 50% dicalcium phosphate (or bone meal).

Watch for grass tetany. Provide a magnesium supplement if this is a problem. Continue to watch as long as lush pastures are available.

MANAGEMENT

Start breeding yearling heifers about 3 weeks ahead of the mature cows. Next year, while nursing their first calf, they may have a longer interval before cycling and conceiving than mature cows. A head start this year will help get them to calve during the desired period in the future.

Turn the bull(s) with the cows, or start artificial insemination or hand mating, about May 20.

- With pasture breeding provide one mature bull to about 25 to 35 cows. Yearling bulls should be limited to about 20 cows.
- If cows are grouped into several pastures, rotate the bulls among the groups above every 2 to 3 weeks. This will help to avoid the possibility of exposing cows to infertile bulls during the entire season.
- If pasture is not available and the bulls are getting too thin, supplement them with some grain or additional feed during the breeding season.
- Use only bulls with at least a 550 lb., 205 day weight and a 1,000 lb. yearling weight (these weights should be heavier if you are using bulls of larger breeds).
- Plan to breed for no more than a 75-day period. A 45-60 day breeding season would be more desirable.

Before calves go to pasture, or between 1 day and 2 months of age, implant steer calves with an FDA approved growth promotant. Follow the instructions.

JUNE

HEALTH

Use back rubbers or dust bags for fly control.

NUTRITION

Consider providing creep feed for the calves. This is especially helpful for calves from first-calf heifers or old cows and during the dry seasons.

MANAGEMENT

Continue to check cattle daily. Record breeding dates.

Rotate pastures about every 2-3 weeks if such a program can be carried out.

JULY

HEALTH

Vaccinate heifer calves with Strain 19 Brucella vaccine as soon as possible after they reach 3 months of age and before they reach 6 months of age (or such maximum age as may be set by the Minnesota Livestock Sanitary Board).

Where advised by your veterinarian, or as otherwise programed, vaccinate all calves over 3 months of age for blackleg, malignant edema and false blackleg with trivalent bacterin (or include *Clostridium sordelli* and use a quadrivalent bacterin).

NUTRITION

Continue to check cows daily and to record breeding dates.

MANAGEMENT

Remove the bull(s) and terminate the breeding season July 20 if a 60-day breeding season is programed (by August 15 if a 75-day breeding season is programed).

Continue to provide creep feed if needed or desired.

AUGUST

HEALTH

Watch for pinkeye, and treat if present.

Continue to use back rubbers or dust bags for fly control.

Follow the vaccination programs recommended for July for those calves not already vaccinated.

NUTRITION

If pastures dry up or are otherwise poor, provide supplemental feed as needed. Sometimes it may be desirable to wean the calves early and provide the calves with grain and good forage.

MANAGEMENT

If the bull(s) were not removed earlier, remove them early in August, or about 75 days after they were turned with the cows.

Enroll in the Minnesota Beef Improvement Program with your county agent or extension livestock specialist.

SEPTEMBER

HEALTH

If castration and dehorning were not done earlier, complete these at least 2 weeks before the calves are weaned.

NUTRITION

Consider creep feeding the calves for about 3 weeks before weaning, they should adjust to the stress of weaning better.

MANAGEMENT

Reimplant steer calves with an approved growth promotant. Such implants are effective for about 90-120 days.

Continue to follow a planned pasture program. For example, cattle should usually be removed from alfalfa or alfalfa-grass pasture by the first week in September. Continue to graze grass pastures.

Wean the calves at least 3 weeks before marketing (delivery).

OCTOBER

OCTOBER

HEALTH

Any "preconditioning" vaccines should be given 7-10 days before the calves leave the ranch. Check with your veterinarian and with the purchaser about using such vaccines.

Several days before pregnancy checking is done, collect manure samples from several cows. Check these samples for worm eggs. If worming is indicated it can be done while the cows are confined for the pregnancy examination.

Consider worming calves if fecal counts show a heavy infestation.

Test cows for TB and brucellosis.

Consider vaccinating calves for leptospirosis, BVD, IBR and PI₃. Consult your veterinarian.

Use pour-on systemic grubicide for grub control and to help control lice. In most of Minnesota, native cattle should not be treated with pour-on systemic grubicides after about November 15.

If pour-on systemics are not used for lice, spray the cows for lice; follow with a second spraying 2 or 3 weeks later.

NUTRITION

Cows can pasture cornstalks as long as available, until heavy snow, or until the fields must be plowed.

MANAGEMENT

Wean and weigh calves the last of October. Consider weighing the cows so a calf weight-cow weight ratio can be used as a measure of efficiency.

Select prospective replacement heifers. Plan to save about 30% of the top heifers, selected primarily on 205 day weights. Consider keeping 30% or more, so additional culling can be done in the spring based on yearling weight and to allow for culling open heifers at the end of the breeding season.

Pregnancy check all cows about 40-60 days after the bulls have been removed. Sell all open cows and heifers. If cow prices justify it, thin cows might be fed some grain for 1-2 months before being sold.

Cull and sell cows that have produced the lightest calves, if herd size and economics allow.

Check cows for problems with the udder, teeth, and eyes. Cull those with noncurable problems.

Cows can lightly graze alfalfa-grass pastures after October 15, providing such pastures are not too wet and if the forage is not grazed shorter than 6 inches.

NOVEMBER

HEALTH

If lice are present, as shown by such signs as rubbing, patchy hair loss, spray with an appropriate material on a warm day and repeat in about two weeks.

NUTRITION

Do not overfeed the mature cows. The equivalent of 15-20 lbs. of alfalfa-brome hay per head daily or of 8 to 10 lbs. of alfalfa hay plus 20 to 25 lbs. of corn silage will provide adequate energy and protein for such cows.

Continue to provide salt and mineral mixture.

Replacement heifers to be bred at 12-15 months of age should be fed to gain 1.25-1.50 lbs. per day. Heifers of the British breeds or crosses should be wintered so that they weigh about 600-650 lbs. by breeding time. Heifers of larger breeds and their crosses should be wintered so that they weigh 650-700 lbs. by breeding time.

MANAGEMENT

Move cattle to winter quarters when pastures and/or cornstalks are no longer available or if heavy snow prevents grazing.

If sheds or barns are needed for shelter, provide about 40 sq. ft. per cow.

To provide economy and to insure adequate future performance, separate cow herds into groups for winter feeding. Fat cows may be separated from thin cows and fed less. Yearling heifers, first-calf heifers, and older, thin cows should be fed separately from mature cows.

DECEMBER

HEALTH

Follow procedure under November for louse control.

NUTRITION

Continue to follow the winter feeding program. If hay does not have considerable green color, or is left over from a previous year, feed 20,000 IU of vitamin A per head daily.

MANAGEMENT

Check cows daily. Watch for abortions and any other abnormal conditions.

JANUARY

HEALTH

Trim hooves as needed.

MANAGEMENT

Continue to follow procedures and practices for December and those for November that continue to apply.

Check on condition of cows. Some changes in the feeding program may be desirable if some cows are getting too thin or too fat.

FEBRUARY

NUTRITION

If pregnant cows are not in satisfactory condition, improve the ration by feeding better quality hay, corn silage, grain, or some other source of energy.

MANAGEMENT

Get calving facilities ready.

Obtain identification materials and other supplies that will be needed during calving.

CHECKLIST FOR THE EQUIPMENT AND VETERINARY SUPPLY CABINET

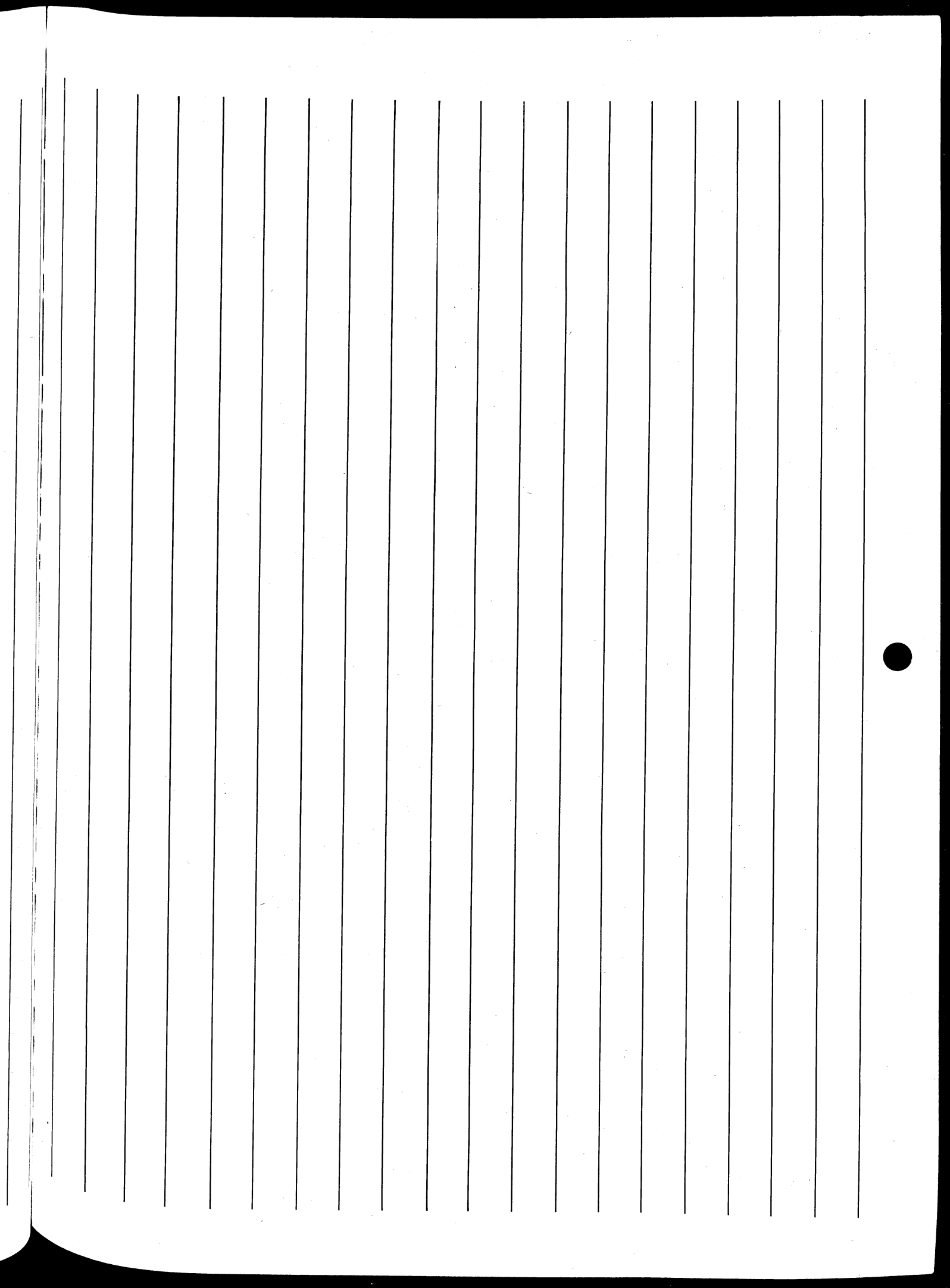
1. Hoof trimmer — long handle
2. Hoof knives
3. Hoof rasp and Kopertox* for treatment of foot rot.
4. Rope halters, ½-inch rope.
5. Mild tincture of iodine for treating navels of newborn calves.
6. Disinfectant for calving, dehorning and castrating equipment such as Quseptic*, Nolvasan* or quaternary ammonium preparations.
7. Equipment to aid in calving
 - a. Plastic sleeves and gloves
 - b. OB chains
 - c. Calf puller
8. Equipment for dehorning: caustic, gouge or electric iron.
9. Equipment for castrating
 - a. Knife or scalpel and an emasculator
 - b. Emasculator or Burdizzo
10. Pinkeye medication. Consult your veterinarian if involvement is extensive.
11. Ear tags, ear tag pliers, tattoo pliers, tattoo ink and tooth brush to rub tattoo ink into needle holes. For new tattoo numerals dull the sharp points by filing, so larger needle holes result when tattooing. This insures a good tattoo. In addition, tattoo calves in upper part of the ear leaving center rib unmarked for veterinarian to place bangs vaccination tattoo in heifer calves. Keep the tattoo pliers clean and disinfect after use.
12. Medication for calf scours. In stocking this, as with many of the previously mentioned items, consult your local veterinarian for a recommendation of products and to outline a prevention and treatment program.
13. Trocar and cannula for treating bloat.
14. Balling gun.
15. Syringes and needles for treatments recommended by your veterinarian.

*Registered trade name.

NOTES



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