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DRY COW MANAGEMENT

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Dry cow care plays an important role in maintaining a profitable dairy enterprise. The way you manage the cow during this period affects her health, the health of the calf and the level of milk production in the following lactation. All of these factors influence total herd profits.

Corrals and housing, feeding, udder care and freshening are key areas in dry cow management. Hopefully, the information and suggestions in this publication will help you plan a program leading to greater profits.

Corrals and Housing

Separating dry cows from the milking herd is a good starting point in developing a sound program. Separate facilities for dry cows have these advantages:

- A different ration can be fed with intake controlled.
- Moving cows to other pens aids in "drying off".
- Milking time is reduced since dry cows no longer enter the milk barn.

Most dairymen prefer loose housing over free stalls for dry cows. If free stalls are used, move cows to maternity stalls before calving. Cows with milk fever or calving difficulties may go down in free stalls and create serious problems.

Install lock-type stanchions in feed mangers. Then you can lock up cows for routine treatment and observation for abnormalities with ease to you and the cow. Allow 30 inches of feed space per cow with lock-type stanchions.

Corrals should be large enough to encourage the cows to exercise. Provide a clean source of drinking water and a free choice calcium-phosphorus mineral. Plans for loose housing, feed areas and corrals are available in the handbook, "Plans for Dairy Facilities," No. D-1, University of Idaho Cooperative Extension Service.

Locate the dry cow facility near the activity center of your operation. You can then check cows approaching calving throughout the day with little effort. Arrange lots and pens for ease of cow handling. Two or more dry cow

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Dry cow management is closely related to herd health, herd production and total herd profits.

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Lock-type stanchions in feed mangers make routine udder observations and treatment easy on you and the cow.

corrals work more efficiently in large operations. You may want to divide the dry herd for several reasons:

- Past production level.
- Ration needs—high grain vs. low grain.
- Stage of dry period—just dry vs. near calving.
- Mastitis history.
- To have smaller groups that are easier to handle.

Maternity pens are a good investment but must be kept clean and sanitary. Allow one for each 25 cows in the herd and include a lock stanchion, feed box and fresh water in your plans. Construct the stall so it is easy to clean and disinfect. Pens of 100 to 150 square feet are adequate for all breeds.

A small pasture is ideal for calving during favorable weather. Provide shade in corrals and pastures to keep the cows comfortable during hot summer days.

Install adequate lighting in maternity stalls and dry cow lots. A small storage area for calving chains, calf pullers, etc., also adds to a good dry cow facility.

Feeding

A sound dry cow feeding program can increase your profits. The incidence of nutritional diseases such as milk fever can be reduced in your herd with a planned feeding program. Cows well-conditioned before calving produce more milk with greater persistency. The general health of the calf at birth is also influenced by the nutrition of the cow.

The dry cow requires **protein** for her own body maintenance and for fetal development. Total protein requirement is less than during lactation. Generally, you can supply daily needs with 10 pounds of average quality alfalfa hay per cow. You may need to add supplemental protein to rations heavy on corn silage, grass hay, oat hay and other non-legume type feeds.

Alfalfa-grass hay is excellent for dry cows. A ration of 10 pounds alfalfa hay plus a low cost feed such as corn silage is a favorite of many dairymen. It provides the basic needs at a low cost.

Energy in the ration helps the dry cow replace flesh lost during lactation. Grain added to daily feed increases her energy intake and results in weight gain.

How much grain should you feed? The amount depends on the length of the dry period and the cow's body condition. Cows completing their lactation in good flesh need little or no grain. However, you may want to add a few pounds of grain to the ration of these cows the last 2 to 3 weeks before freshening.

Thin, underconditioned cows need grain during the dry period to replace body flesh. A few pounds per cow divided over a 6 to 8 week dry period are usually adequate.

Do not overfeed your dry herd. Fat, heavily fleshed cows have more health and calving problems. Overfeeding is also costly and can reduce total herd profits.

Calcium and phosphorus are the two most important minerals in dry cow nutrition. A 2:1 ratio of these minerals—2 parts calcium to 1 part phosphorus—in the total diet helps to prevent milk fever near calving. Blending calcium-rich feeds (usually legumes) and feeds low in calcium (grass, corn silage) will provide the desired 2:1 ratio. All alfalfa hay programs must be supplemented with phosphorus. Sodium tripoly phosphate or monosodium phosphate is the usual source of phosphorus.

Trace minerals should be available at all times. Adding minerals to the feed is the best method, but free-choice feeding is often the only practical method.

An adequate level of **vitamins**, primarily A and D, should be included in your dry cow feeding program. **Be**



High-quality roughages provide most of the nutrients in dry cow rations.

sure to include these vitamins plus vitamin E when forages are damaged by weather or are low in quality.

If you decide to add supplemental vitamins, use the following guidelines:

	Per Head Daily
Vitamin A	30,000 Units
Vitamin D	60,000 Units
Vitamin E	0-45 Units

Other Feeding Considerations

Dry cows should receive quality roughage. Low quality and weather-damaged feeds should be supplemented with protein, vitamins and minerals.

Bred heifers can be grouped with dry cows the last 6 to 8 weeks before calving. Avoid all corn silage or rations containing mostly concentrates. There is some indication these diets lead to displaced abomasums near calving. A small amount of alfalfa hay — 8 to 10 pounds — will prevent this dry cow problem.

A dry cow ration consisting of alfalfa hay and a feed such as corn silage, grass hay or grain hay is hard to beat for performance and cost. It provides adequate protein and a favorable calcium-to-phosphorus ratio. Additional energy for thin cows and heavy producers can be added by blending grain into the daily ration.

Length of Dry Period

How long does a cow need to be dry? You should plan for 6 to 8 weeks. Most dairymen plan for 8 weeks and average about 7 weeks. Dry periods less than 6 weeks may lower production. Try to avoid long dry periods. Cows dry over 8 weeks are likely to develop health and nutritional problems near calving and early lactation. Prevent these cows from becoming overfat and you will lessen the effects of a long dry period.

Drying Cows Off

Special management is required to end the cow's lactation. Your cows should be "dried off" quickly, with a minimum of stress and irritation to the udder.

Cows free of mastitis can be "dried off" simply by not milking. Extremely high producers and cows with past mastitis histories require greater care. These cows may need several milk-outs to prevent excess udder pressure and possible mastitis. Udder treatment may be required to prevent mastitis flare-ups in problem cows during the "drying off" period.

The following management practices may help "dry off" extremely high producers:

- Isolate the cow and limit water and feed intake.
- Place the cow in a different pen of cows.
- Change the type of feed.

Dry Cow Mastitis Treatment

Dry cow treatment is effective in reducing mastitis during lactation and will lead to greater production. The dry period is an excellent time to prevent and control mastitis.



The udder requires special care during the drying off period and just before calving.

The success of udder treatment is greatly increased during the dry period. Consult your veterinarian for assistance in planning a treatment program. Always use **extreme** sanitation practices when treating dry cows, dipping the teat after treatment in a milking cow dip preparation.

Special Management Near Calving

Check your dry herd each day. Watch for evidence of mastitis, such as enlargement or distention of one or more quarters. Routinely check the udder of cows within 2 to 3 days of calving for mastitis. A honey-like fluid is normal and present in dry udders the last part of the dry period. Quarters that contain lumpy material, watery fluid or blood may have mastitis and require treatment.

Cows with past mastitis histories or with extremely large udders should be pre-milked to prevent excessive pressure and irritation. Only a small amount of milk will be in the udder until just before calving. Continue complete milking through the calving period. You can freeze a gallon or more of the colostrum milk for the calf.

Calving

The majority of your cows should calve normally with little difficulty. Call your veterinarian if you suspect an abnormal or difficult calving. Do not wait until the cow is stressed and exhausted before seeking help.

Remove the calf immediately at birth. Wash and dry the udder of the cow, then milk enough colostrum for the calf. Remove the placenta from the pen immediately. Watch the cow for diseases that may occur near calving, such as milk fever and ketosis.

Summary

A good dry cow program requires planning, time and effort every day of the year. Concentrate on housing, feeding, udder health and calving time. Your efforts will be rewarded with improved production, healthier calves and fewer health problems. These improvements will greatly influence total herd production and yearly profits.

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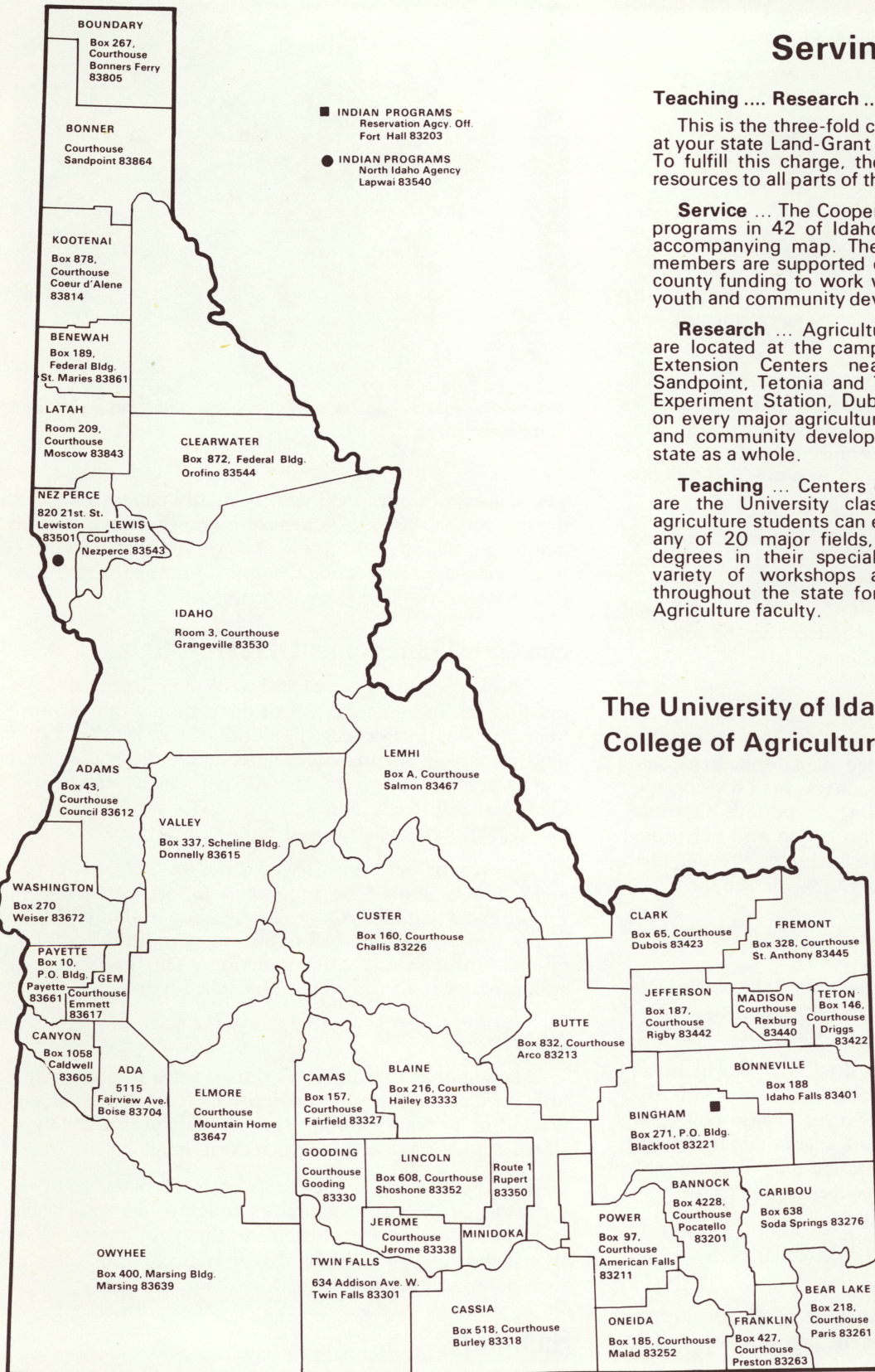
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