Red Bluff Research Animal Monthly Schedule

Jan:
Sheep: In Brush Camp Winter Range Pasture
Feeding 2/3 lbs./hd/day of a 25% protein base cake fed every other day

Ewe Lambs: By sheep facility
Feeding 2/3 lbs. Barley and 4 lbs. Hay per head per day

Cows: Siensograph pasture on winter range
Feeding 2 lbs./hd/day of a 16% protein cake 3 times a week

Feb:
Sheep: Same as Jan. Schedule

Ewe Lambs: Same as Jan.

Cows: Same as Jan.
Vaccinate with a type of scour guard early in Feb.
Cut cows close to calving Feb. 20 and and take to calving facility
Feed heavies 30 lbs./hd/day hay along with supplement schedule in late afternoon

Mar:
Sheep: On winter range schedule until shearing usually after 3/12 or so.
After shearing: wormed, vaccinated with an 8-way with tetanus, and poured with a
Ked control. Then kept on close range and still on supplement schedule.
Feed hay as needed and start all ewes oh 5 lbs. Of hay 3/25 or so.

Ewe Lambs: Keep on regular schedule after shearing until lambing starts.

Cows: Calving starts 3/1 or so.
Around 100 hd in heavy lot on hay.
60 hd or so still on winter range until they show heavy. These maintained on the
supplement schedule.
Try to cut in to drop lot around 10 days prior to calving.
All cows maintained on 2 lbs. of supplement/hd/day fed 3 times a week until time for
MGA is fed 5/1.
Cow/calf pairs weighed at birth and hauled to Stockade pasture and fed daily.

April:
Sheep: Start lambing 4/10 or so.
All ewes on 5 lbs. hay/hd/day and 2/3 lbs. barley/hd/day.
Ewes with lambs kept in pens until they're about 10 days old then shifted out in
Smaller pastures. The ewes with twins are kept separate of the single bearing ewes.

Ewe lambs: Turned out on bottom pasture and supplemented 2/3 lbs. barley/hd/day.
No more hay unless a lot of snow falls.

Cows: Cows still calving until 4/15 or so,
Feeding all cows by now.

May:
Sheep: Sheep lambing until 5/20.
Feeding all ewes with lambs until turn out.
Weigh day for ewes with lambs 5/25 or so.
After 5/25, sheep out with herder and started in 1st feeder pasture.
Ewe Lambs: Out on creek bottoms with drys from lambing w/o supplement after 5/25
Are now yearlings.

May:
Cows: On MGA fed at rate of 2 lbs./hd/day fed every day till 5/14.
Branding around first part of May or end of April.
Calves vaccinated with an 8-way, IBR – BVD-PI3, HEOMPHILUS?,
And fly tags.
Cows given 8-way, leptos, and vibrio.
All cows with calves fed hay until 5/20 or so.
Usually they are in the lower 2nd feeder pasture at this time.
5/27 or so cow/calf pairs moved to Owens Pasture

June:
Ewes: With lambs in 1st feeder and 16 mile pastures in June.

Yearling ewes: Out on bottom until weaning.

Cows: Inject with prostaglandin on 6/1
Ride heat and AI on herd until 6/7.
6/8, cows moved to Dump pasture and clean-up bulls added.

July:
Sheep: Go in Cottonwood pasture 7/1 with their lambs and the herder.

Yearling ewes: In bottom pastures.

Cows: In Dump pasture until 7/20, then the clean-up bulls are removed and the
Cows and calves go to the Cottonwood pasture.

Aug.:
Sheep: Cottonwood pasture until 8/15.
Moved to Upper 2nd feeder pasture to get ready for weaning.
8/20 or so weigh ewes and lambs.
Ram lambs and project lambs go to Ft. Ellis.
Sale lambs and some cull ewes go to Pays Livestock Auction.

Yearling ewe: On bottom pasture until weigh day, then put in with
Ewes and ewe lambs kept for replacement back in to herd.

Sept.:
Sheep: Move to Warm Springs pasture 9/1.
Sell ewes 9/15 and sell or go to Ft. Ellis for projects.
9/16 move to Stockade pasture.

Cows: Prewean vaccinations at the Owens pasture 9/4
Pregnancy check cows 9/4.
Back to Cottonwood pasture until weaning.
9/27 – 10/1 weaning time.
All cows and calves weighed at this time.
Calves and cull cows go to Towne Farm.
Cows are treated with a lice and tick treatment and wormed at this time.
Cows stay in Owens pasture for 5 days.

Oct.:
Sheep: Ewe lambs weaned off.
Ewes go to Norris pastures 10/10 or so.
Ewes go on hay fields 10/25.

Ewe Lambs: Wormed and vaccinated with 8-way 10/11 or so.
Kept in large pen at sheep facility and started on barley and hay.
Oct:
Cows: Moved to Upper 2nd feeder pasture 10/5. Also use 1st feeder pasture during October.

Nov:
Sheep: 11/15 come to sheep facility for breeding. Put in pens in their respective groups. Fed 5 lbs./hd/day of hay.

Ewe Lambs: On feeding schedule of 4 lbs./hd/day of hay and 2/3 lbs. barley/hd/day.

Cows: Stockade pasture sometime after 11/15 or so.

Dec:
Sheep: 12/1 white face rams back to Ft. Ellis. Ewes out of breeding pens and in 1 big group with c-up rams. Still feeding 5 lbs./hd/day of hay. 12/20 all rams back to Ft. Ellis. Ewes put out in Brush Camp winter range with the herder.

Ewe Lambs: Still on feeding schedule daily.

Cows: 12/15 start supplement schedule 2 lbs./hd/day fed 3 times a week. 12/15 move to Seismograph winter range.
Montana State University/Montana Agricultural Experiment Station

Sheep Management Plan

Operations and Policies
<table>
<thead>
<tr>
<th>Month</th>
<th>Item</th>
<th>Due Date</th>
<th>Completion Date</th>
<th>Signature</th>
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<tbody>
<tr>
<td>January</td>
<td>Ad lib access to Bovatech salt - all sheep</td>
<td>Continuous</td>
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<td>Maintain pens and bedding</td>
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<td>Watch pellet supply</td>
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<td>Plow snow</td>
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<td>Hatfield will provide ARNR 232 class schedule</td>
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<td>February</td>
<td>Ad lib access to Bovatech salt - all sheep</td>
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<td>Plow snow</td>
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<td>Treat for external parasites - all sheep</td>
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<td>Shearing - all sheep</td>
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<td>Trim hooves - all sheep = ARNR 232 can help</td>
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<td>Ram Test Field Day - schedule w/ Rodney</td>
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<td>March</td>
<td>Ad lib access to Bovatech salt - all sheep</td>
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<td>Fecal sample &amp; treat for internal parasites if needed</td>
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<td>Recruit students to live at Fort for next year</td>
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<td>Trim hooves - all sheep, if needed</td>
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<td>May</td>
<td>Ad lib access to Bovatech salt - mature rams</td>
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<td>Ad lib access to Decox salt - ram lambs</td>
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<td>Clean pens and spread manure</td>
<td>5/15</td>
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<td>Annual spring tour of Fort with faculty</td>
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<td>June</td>
<td>Ad lib access to Bovatech salt - all sheep</td>
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<td>Implement grazing plan</td>
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<td>Harrow ram test pens and small pastures</td>
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<td>August</td>
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<td>Begin work on Targhee yearling rams (MT Ram Sale)</td>
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<td>Trim Hooves, Selection, Observation &amp; Trimm for pizzel rot</td>
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<td>Sale date = second Thursday in September = 9/11</td>
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<td>Clean bedding</td>
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<td>September</td>
<td>Ad lib access to Decox salt - rams</td>
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<td>Targhee MT Sale Rams</td>
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<td>Trim hooves, selection, obs &amp; treatment for pizzel rot</td>
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<td>Transport rams &amp; equipment to sale</td>
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<td>Cull excess rams</td>
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<td>Crutch, fecal sample, de-worm - all sheep</td>
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<td>Month</td>
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<td>Switch to Decox if coccidiosis detected</td>
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<td>All breeding rams:</td>
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<td>- Hoof trim, breeding soundness exam, bleed for B ovis</td>
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<td>- Fecal sample - deworm if needed</td>
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<td>- Targhee ram lamb selection - gain target = .5 lb/d</td>
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<td>- Vaccinate for over-eating</td>
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<td>- Check pellet supply</td>
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<td>Montana Central Ram Test Begins</td>
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<td>Cull excess rams</td>
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<td>November</td>
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<td>Maintain pens and bedding</td>
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<td>Move hay feeders for parasite control</td>
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<td>Fall tour of Fort Ellis with faculty</td>
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<td>Trim hooves - all sheep</td>
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<td>Ram loaned to Museum of Rockies - check w/ Pat</td>
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<td>Cull excess rams</td>
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LAMBING PROCEDURES BULLETIN

RED BLUFF RESEARCH RANCH

INTRODUCTION

The objective at Red Bluff is to maximize lamb and ewe survival and performance consistent with efficient labor, facilities and feed utilization. A little extra time, attention and effort during this critical period in the production cycle can pay big dividends.

It is our philosophy that, in the interests of efficiency and economy, as many ewes as possible with adequate milk should raise two lambs. Our native range forage is our most economical source of feed and can be utilized satisfactorily by the lamb only while nursing a ewe.

INITIAL CARE OF EWES AND LAMBS

Drop Picking  This is a critical operation and requires skill and dedication. Important considerations include:

1. Pick up lambs and ewe as soon after birth as possible to avoid chilling and mismothering.

2. Because we are conducting breeding and selection experiments; it is critically important that each lamb be identified and put in a jug with its true mother. Therefore, be very careful to avoid mix-ups.

3. Dip each navel with iodine when the family is put in the jug. Open each teat and observe for normal colostrum. Mark the tag of every ewe with big teats or a condition which might indicate a nursing problem for the lamb. If milk is bloody, or if the ewe has little or no milk, leave a note on the jug.

4. If you have room in shed, have several large jugs (3 to 4 times as large as regular jug) set up. Bring in lambing ewes before they have lambed and let them lamb in the pens. It will be much easier to observe them here and they can be more rapidly assisted if necessary. Move the ewe and lambs to regular jug when she has finished lambing and the lamb has been cleaned.

5. Use every precaution to avoid running over ewes in the drop lot.

6. If the drop is slow, utilize your time efficiently be assisting the shed person with suckling and grafting or cleaning pens, watering, etc.

7. If you have enough help, weigh all of the lambs at birth. Lambs will lose a little weight for the first 24 hours and then they should start gaining again. If not,
check ewe for milk or mastitis. Also, check to make sure that the lambs are being claimed.

**Suckling and Grafting**  Good shed personnel can make or break a shed lambing operation. Important considerations include:

1. Observe carefully every ewe and lamb as they come in from the drop herd. See that each lamb is up, nursing on its own, and getting enough milk.

2. Try to identify as early as possible those lambs not getting enough milk. As soon as such lambs are identified:
   a) graft onto another ewe with adequate milk, or
   b) if no prospective foster ewe with adequate milk is available, notify the manager that you are going to bum a lamb. Make sure the lamb is eartagged.

3. It is the shed person's responsibility to dip navels of all lambs born in the lambing jugs or alleys. Be careful not to miss any. Re-dip any navels that are not dried up within 12 hours.

4. Make the rounds of all jugs as frequently as possible and see that all lambs are nursing. If a lamb is not getting enough milk, determine whether it is the fault of the lamb or the ewe and take whatever corrective action may be necessary such as: suckle the lamb, tie the ewe, milk down big teats, then suckle the hungry lamb(s). Give such lambs special attention until they master the art of handling the big teats or are grafted to another ewe, etc.

5. Sick lambs or ewes must be called to the attention of the health person as soon as possible. If help is unavailable, treat according to your best judgement. Lambs with cold, wet mouths should be treated immediately and marked.

6. See that proper records are made and placed in the proper places every time a lamb is moved. (See section on record keeping immediately below.)

7. Any lambs put under heat lamps or other warning devices must be checked periodically to see that they do not become too hot.

**RECORD KEEPING**

Record keeping and ear tagging will be handled by the established team. Drop pickers and shed men need to help with records, especially when lambs are moved from their true mother.

All of the Red Bluff tags have 4-digit numerical codes plus 1 letter code. The letter (symbol) indicates breed. The 4-digit number is the serial number within a breed. The first
number indicates year born. All notes require both the serial number and the breed symbol. Ask the recording team to familiarize you with the letter and number system.

When a lamb is grafted, a note must be left on the jug of the true mother indicating the new location of her lamb. The note should include the lamb's eartag number (unless it has not been tagged) and the jug number. It must also be recorded in the lambing book.

Where no graft opportunity is available, but a lamb must be orphaned, a note should state "lamb number XXX was bummied". If the lamb has not yet been tagged, allow the tagging to be done first if possible.

A case not yet covered is movement of lambs to heat lamps and boxes. This fact should be noted on the jug of the true mother. At the heat box, a note should state to which jug a particular lamb should be returned.

In short, any movement of a lamb from the jug of its true mother must be accompanied by a note as to when, where, why the lamb was moved. Individual records such as sex and weight will be handled by the eartagging team.

Drop pickers are instructed to gather all aborted and dead lambs as well as live lambs. Aborted and dead lambs are placed immediately in front of the true mother's jug. Record necessary information in lambing book and dead lamb book. Make sure all dead lambs are given an ear tag number.

Please feel free to ask the recording team for specific details on all record work.

DOCTORING RESPONSIBILITIES

All individuals are responsible for herd health, daily treatment rounds, and treatment of individual health problems.

1. Lambs in jugs—Check in the morning and again in the evening. Get all lambs and ewe up. Observe lambs for general appearance and attitude, i.e. droopy ears, hunched up, sunk in, head down, labored breathing, lameness, etc. If the lamb doesn't look "right", try to determine the source of the problem, i.e. scours, dehydration, septicemia, pneumonia, starvation, injury, laid on, sick ewe, bad milk, etc. One system which seems to work well when peak lambing is underway is as follows:

   a) Lambs 0-24 hours old—Check mouth to be sure lamb is not chilled and check navel to be sure it has been clipped and dipped. Observe to see that ewe and lamb are mothering up. Although scours usually occur 12 to 24 hours after pasturation, always observe all lambs for scours and treat at the first sign.
b) **Lamb's second day in jug** Get lamb and ewe up. Observe attitude and see if lamb goes to suckle. Pick lamb up, check navel and clip if necessary; check mouth to see if cold and wet; check rear and for scours; see that umbilical cord is dry (if not, re-dip); and note if abomasum is full.

c) **Lambs branded to go out** If branded lambs are sick and/or weak and not ready to go into a mixing pen, put an obvious HOLD sign on the jug with a brief explanation, e.g. "sick lamb", HOLD. If the lamb looks gaunt or has not mothered up, check the ewe's milk and talk to the shed person in charge of that barn to see if they think the lamb should be held.

d) Warming boxes are used to warm up chilled lambs, but must be watched closely to avoid over-heating. Sign in lambs brought into the warming room and leave a note on the jug as to the whereabouts of the lamb -- especially untagged lambs. Try to use a warming box in the same shed as ewe's jug. Avoid unnecessary foot travel. If the mouth is dry (a sign of dehydration) lambs can be rehydrated with warm fluids administered either orally or parenternally and treated with appropriate antibiotics (septicaemia is our most common cause of death in baby lambs). Within an hour a decision should be made as to whether the lamb is strong enough to make it in the jug or whether it should go to the orphan barn.

2. **Mixing Pen Lambs** Rounds are made once daily. Observe lambs at rest first, then get the lambs up and see that they mother up. Again, check for lameness, pneumonia, scours, starvation, weakness, or any other abnormalities. Check for b ummers and lambs in the wrong pens. Any lambs that can be treated in the mixing pens should be treated, marked and left there to be observed and treated the next day. Lambs that probably won't survive in the mixing pens can either be brought back to the jugs with their mothers or bumbered. Note the side brand and check the ewe's milk. If the lamb is a single, talk to the shed supervisor or a shed person to decide the best course of action for the ewe and the lamb.

3. **Ewes**

a) **Jugs** Get ewes up. If reluctant to get up, depressed or lamb looks gaunt, check the ewe. Obvious things to look for include mastitis, metritis, retained placentas, pneumonia and dystocia. If a ewe is sick, check milk production and make a decision as to whether her lamb(s) should be left with her or removed and grafted to another ewe. Rectal temperature is not only a useful means of determining if the ewe is "off" but is also useful in monitoring the success or failure of your choice of treatments. Make a note of all treatments given and put on the jug. Have the ewe held in jug if necessary.
b) **Mixing Pens**  Be on the lookout for blue bag, pneumonia, bumble foot, uterine infections, vaginal and rectal prolapses, etc. If necessary, ewe and lamb(s) may be moved to sick pens.

c) **Sick Pens**  Keep track of ewes brought into sick pens, treat as necessary and cull those which are untreatable.

4. **Necropsy**  Each day collect tagged dead lambs from the garbage cans and they will be taken to the Vet Diagnostic Lab. Record each tag number (and letter), date, whether side branded (SB), if euthanized, or other cause of death with corresponding code, and any other relevant remarks in the dead lamb book.

Also, be aware and try to keep on top of possible outbreaks of coccidiosis, soremouth, enterotoxemia, etc. These are priority problems. See that these are dealt with properly and promptly and monitor results, making changes as necessary.

5. **Turning Out of Jugs**  A lamb's thermoregulatory mechanism is not well developed until the lamb is about 3 days old. Therefore, every management attempt possible should be made to keep the lambs in until they are a minimum of 2 days of age. Also, the bond between ewe and lamb(s) is stronger and the possibility of miss-mothering is less as the time in the jugs is extended. Further, a more accurate assessment of whether the lamb is getting enough milk can be made at 2 or 3 days of age. Numbered tags on the ewe's side indicated when she lambed. When facilities are inadequate to permit all lambs to stay in jugs for 2-3 days, the strong singles should be considered for early turn-out. Important considerations are:

a) Are the lambs 2 days old or nearly 3 days old?

b) Has a good strong bond been formed between mother and offspring? Be sure he isn't "fighting" one or more of the lambs.

c) Are the lambs thrifty, healthy and getting enough milk? Humped, hollow, weak, droopy, or scouring lambs should not be turned out. Is the ewe healthy? If undecided, hold back for a day or two as necessary.

d) Thrifty, healthy lambs, with a good mother-offspring relationship in the nursery, can be turned out of jugs to small mixing pens under the shed a day earlier than suggested above if the jug space is needed for new arrivals.

e) All twins (dam and offspring) are branded on the side. The number identifies when she lambed. All twins are branded with a bar above the lambing brand.
f) Ideally, twins are first turned into pens containing about 12 ewes and their lambs when the lambs are 3 days old. Single lambs should be started in pens of 25 ewes with their lambs.

g) The ewes with singles and twins are kept separate to permit feeding according to production. Ewes raising twins need more energy for milk production than ewes raising singles.

h) As the lambs get older, the smaller groups are moved farther out and "doubled" until the oldest lambs are in pens of about 200 ewes and lambs. They are turned out onto spring pasture and kept together in these small groups until the lambs are again "mothered up" with their dams after shearing. The range band is made up following shearing and mothering up.

FEEDING AND WATERING

Feeding and watering should be planned to optimize performance, to maximize labor efficiency and to minimize costs consistent with good production. The drop band is fed alfalfa hay at the rate of 4.2 to 5 lbs and 1.0 lb barley per day, depending on body condition. Water is supplied by a spring. Make sure we have free-flowing water in all pens.

JUGS  Ewes in the big shed are watered by bucket once daily. All ewes have pelleted feed available at all times. Care should be taken to keep feces out of the feed boxes.

CLEANING, LIMING AND STRAWING

Sanitation is a prerequisite to good health and performance. (Important -- make sure that all plastic bale ties, even little pieces, go in a barrel and are burned at the dump. Wool contaminated with even small pieces of this material can cause the entire clip to be rejected by the wool buyer and woolen mill.) Indoctrinate all help, misc. help, etc. on this twine problem before they step in the shed!

The jugs should be cleaned, limed and strawed after each ewe is removed from the jug. During occupancy by a particular ewe and her lamb(s), straw should be added regularly to keep the jug clean and dry. If a ewe and lamb(s) are held in a jug for long periods of time, the jug may need periodic cleaning. When jugs are cleaned, the contaminated straw should not be left in an area where sheep may be held. The contaminated straw can be a means of spreading lamb scours and other disease organisms.

The BIG SHED and outside drop area should be kept reasonably dry, clean, and comfortable. It is a matter of balancing comfort and performance with economy. The incidence of disease such as lamb scours, mastitis and pneumonia increase as damp, unsanitary conditions increase. Also, ewe performance goes down as ewes become uncomfortable. The frequency of
cleaning is a matter of good judgement and varies with concentration of sheep, the length of time the sheep are kept in each day, temperature, humidity, air movement, precipitation and amount of dryness of straw that is used. It is better to error on the side of cleaning too frequently than not cleaning frequently enough.

The SMALL MIXING pens should be well cleaned before the start of lambing and then kept satisfactorily dry and comfortable by adding straw as needed. These pens are a particular problem during wet, stormy weather. When conditions are bad, the most beneficial application of straw is the applying of liberal amounts of straw under the lamb shelters and on the high points, providing a reasonably dry, clean place for the lambs and ewes to lie down.

**Lambing Shed Aeration:**

In order to minimize problems for scours, pneumonia and other diseases, it is important to remove moisture and ammonia from the lambing sheds. This should be done by opening doors during the day and on nights when wind velocity is low.

**DOGS:**

Any dogs seen in lambing or mixing pen areas should be identified and the supervisor notified so that appropriate action can be taken to remove the dog and warn the owner. The owner of any dog which kills or seriously injures any lamb or sheep will be required to pay the University for the loss.

**EVALUATION:**

Please be a good observer. Make notes on management practices which should be implemented to reduce loss, improve performance and improve efficiency of labor utilization. Make these suggestions to the appropriate person at the appropriate time.