Greetings…

Happy Holidays, no matter how you celebrate them. My favorite is Christmas!


And, here is a great toast in any language…“¡Salud, pesetas, amor, y tiempo para gastarlos!” That is, “Health, wealth, love, and time to spend them!”

Happy Holidays!

Shelby Filley, Regional Livestock & Forage Specialist

Electronic Agent . . .

Website and E-mail are very useful tools. They have really helped me to communicate with producers that either are at some distance from my office or are not available during my office hours. I can provide technical information that otherwise would be difficult. Another useful thing about these electronic resources is that I can post on-line editions or send publications or links through the email, saving time and the expenses for printing and postage. So, if you like, contact me by email or visit my website...anytime (see above for addresses).
ANNOUNCEMENTS...

♦ County Livestock Monthly Meetings...  
   . . . business, educational & social meetings . . .

Benton County
Benton County Livestock Association  
Rick Wells, 541-929-4361  
Invited to join Linn County breakfast programs too.

Douglas County
Douglas County Farm Bureau  
1st Monday, 6:00 PM, (except Dec & July), location varies.  
Rich Holcomb 541-459-2621

Douglas County Livestock Association
* Board Meetings - 1st Tues. 6:30 PM  
  Douglas Co. OSU Extension Office, Roseburg  
  Doug Singleton 541-673-7965

* DCLA Stockman’s Breakfast Meetings  
  3rd Tuesdays, 7:00AM  
  Karen’s Coffee Cup  
  2445 NE Diamond Lk. Blvd, Roseburg  
  Woody Lane, 541-440-1926

Jackson & Josephine Counties
Jackson County Farm Bureau  
3rd Tues, 6:00 PM, location varies  
Ron Bjork 541-821-4249

Jackson County Stockman’s Association
Business and educational meetings  
2nd Wed., 6:00 PM The Black Bear Diner, Medford  
** Josephine County invited! **  
Duane Haas 541-826-7243

FARRM – Farming & Ranching Resource Management,  
Randy White 541-734-3143

Josephine County Farm Bureau  
Lynne Vanderlinden 541-592-3444 or  
van@cavenet.com

Lane County
Lane County Livestock Association  
Website: www.lcla.org  
Board Meetings 2nd or 3rd Tues., location varies.  
Jim Sly 541-895-2084  
Invited to join Linn County breakfast programs too

Linn County
Linn/Benton Livestock and Forages  
Breakfast/Board Meeting/OSU Edu. Program

County Education Meetings
Oregon State University Extension Service assists county livestock associations with monthly educational meetings. Guest speakers discuss various topics from cattle prices and production practices to vaccinations. Below are tentative schedules and other details for your county meetings. Call your local contact for more information.

Monthly breakfast meeting schedules for different locations are posted on the website of OSU Livestock & Forages at: http://extension.oregonstate.edu/douglas/lf , click on item 2.

Douglas County Livestock Association Stockman’s Breakfast (Woody Lane 541-440-1926)
3rd Tues. of each month (except July, Aug, Sept, and Dec.); 7 to 8 AM; Karen’s Coffee Cup, 2445 NE Diamond Lake Blvd., Roseburg.

Jackson & Josephine Livestock Meetings
FARRM – Farm and Ranch Resource Management group  
Randy White, Jackson SWCD, 541-734-3143  
General discussions on ranching and farming  
Tours of agricultural operations around the west  
Call for a schedule of programs

Lane County Livestock Breakfast Meetings
TBA - You are invited to attend the Linn/Benton meetings

Linn & Benton County Livestock Breakfast Meetings (Joel Pynch 541-466-5344)
Board Meeting & Educational Program, 6:30 to 8:00 AM  
Pioneer Villa Restaurant (Truck Stop), Halsey (Except Oct. meeting)  
2nd Tues. of each month from Sept. to May, Except June, July, August – Summer Break (no meetings)  
January 11, 2011 Preventive Measures to Avoid Problems. Dr. Aurora Villarroel, OSU Extension Veterinarian.  
February 8, March 8, April 12, May 10: 2011 Meetings (to be announced).
ANNUncEmEnTS...

♦ Educational programs...

For details or updates on programs, go online to the educational programs and/or producer organization pages of Livestock and Forages website: http://extension.oregonstate.edu/douglas/if, or contact your local Extension Office for information.

Douglas County OSU Extension’s Small Farms Program . . Raini Rippy  541-672-4461

♦ Animal Nutrition & Grazing Basics—January 5, 2011; 6:30-8:30pm. Shelby Filley, OSU Extension Regional Livestock & Forages Specialist. Come learn the basics of animal nutrition, including the quantity and quality of feed and specific nutrients required to meet your production goals for the cattle, sheep, goats, and horses for which you care. We will also review the nutritive quality of common feeds, including local hay and pasture, and see how that compares to animal requirements. Since pastures are such a large contribution to the animals’ feed, we will also go over some basic pasture/hay ground management and talk about grazing behavior and physiology, plus plant response to grazing. This class is designed to be at a basic level. However if participants desire, I can provide more in-depth information, including a simple ration balancing demonstration. Come ready to share your observations and experiences with the group. It makes for a better program when producers contribute to the learning.

* Douglas County OSU Extension, 1134 SE Douglas Ave, Roseburg OR
* For more details or to register, call 541-672-4461.
* Refreshments will be provided.

♦ Manure & Mud Management—January 20, 2011; 6:30-8:30pm. Shelby Filley, OSU Extension Regional Livestock & Forages Specialist. Winter is already here and livestock in small pastures, paddocks, or other confined spaces may already be up to their knees in mud. Now is the time to identify those areas that need treatment, such as high traffic areas and roof drip lines. If you want to reduce mud around your cattle, sheep, horse, or other livestock pastures this year, you don’t want to miss this class. Composting and fertilizer value of manure will also be discussed.

* Elkton Community Education Center, 15850 Hwy 38 W, Elkton OR
* Cost $10.00. Preregister & pay by Tuesday, January 18, 2011.
* For more details or to register, call 541-672-4461.
* Refreshments will be provided.

♦ Ultrasound Evaluation of Purebred Cattle

• Pre-registration is REQUIRED. For further instructions on enrolling your cattle, please contact Shelby Filley at: Shelby.filley@oregonstate.edu or 541-672-4461
• Ultrasound Carcass Data Collection for Expected progeny differences (EPD) – Susan McCalib, a certified ultrasound technician from Hillsboro OR, will be performing ultrasound scanning on your purebred cattle (yearling bulls or heifers) to determine carcass characteristics such as back fat thickness, intramuscular fat, rump fat, and rib eye area. These data will be reported to a central processing lab where they will be used to compile EPD for the individual animals. These EPD are reported to the breed associations and used as indicators of genetic merit for cattle producers to choose herd sires and dams to improve animal productivity. Also, some feedlots and livestock shows are currently using this technique for judging the degree of finish and other carcass characteristics in market cattle. See Susan’s website at http://mccalibultrasound.com/Ultrasound.htm for more information on the process.

• Frame Score Determination – We will be measuring frame scores on the cattle. Frame scores are used to predict cattle mature weight and finishing weight, which can be used in breeding and feeding decisions such as appropriate cow size for environment and cattle weight to finish a grade choice.

• Educational Information – Stop by the data collection event to see and learn more about these important processes and how they are used in the beef cattle industry. Fact sheets will be available for reference reading material. 4-H & FFA Youth are encouraged to attend.

* Date: February 2011 (date to be announced)
* Locations: Corvallis and Roseburg
* Cost: Approximately $16-$20 per head cattle (pay on site.) No charge for viewing the event.

Artificial Insemination School (Cattle)

A 3-day school designed to enable the producer to effectively artificially inseminate cows. We cover anatomy, physiology, and nutrition as it pertains to efficient reproduction in cattle. Equipment and supplies and technique for AI , including practice on cows, are covered. Successful participants will be awarded an AI Certificate. High School seniors are encouraged to contact their local Livestock Associations for scholarships to attend. Douglas County Livestock and Jackson County Stockmen’s Associations have offered these in the past.

* Date: March 23 – 25, 2011. 8 am – 5 pm
* Location: Roseburg (OSU Extension & area ranch)
* Instructors: Genex Corp. personnel & Shelby Filley, OSU Extension.
* Cost: $300 estimate
* Other: You must sign up for or be a current member of the Douglas County Livestock Association (insurance requirement)
* Co-sponsored by the Douglas County Livestock Association and OSU Extension Service
Hello, my name is Raini Rippy and I am the Natural Resources/Small Farms Instructor for Douglas County. I have been working as the Forestry Instructor here in the county for nearly three years but my position has changed to incorporate a small farms component. While my educational background is mostly natural resources, I grew up on a small piece of land with horses, chickens, cows, and dogs. My goal here is to help small-acreage landowners and I'm in the process of bringing new programs to the County to accomplish this. To sign up, or if you would like to be added to the Small Farms e-mail list to receive future program announcements, contact our office at (541) 672-4461 or e-mail raini.rippy@oregonstate.edu. Also, if you have suggestions for upcoming programs, please let me know.

Oregon State University Extension Service has Small Farms programs faculty in Lane, Linn, Benton, Jackson, Josephine and Douglas County. Education is available to assist small-acreage landowners with natural resources issues, including care for trees, maintaining water resources, mitigating wildfire risks, managing weeds, etc. New programs are under development to assist people with small acreages plan agricultural and natural resource business opportunities.

The OSU Extension Small Farms program concentrates on non-commercial small-acreage landowners and commercial small farm entrepreneurs. The goal of the OSU Extension Small Farms program is to improve the environmental and economic sustainability of small farms and other small-acreage landowners. Objectives of the Small Farms program include working with small-acreage landowners to improve stewardship practices, improving commercial small farm production, and improving community food systems.

Contact your local county Extension office to find out about the Small Farms Program nearest you. Or check the OSU Small Farms webpage at http://smallfarms.oregonstate.edu/.

The following information is part of an article on soil sampling to variable depths. Published in October of 2010, it can be found in its entirety at http://extension.oregonstate.edu/catalog/. Search for EM 9014 Evaluating Soil Nutrients and pH by Depth in Situations of Limited or No Tillage in Western Oregon

Nicole P. Anderson, John M. Hart, Donald A. Horneck, Dan M. Sullivan, Neil W. Christensen, and Gene J. Pirelli

INTRODUCTION
Collecting soil samples to a depth of 6 to 8 inches is standard protocol for western Oregon. When the sampling protocol was developed, this depth was typical of tillage for seedbed preparation. As well as preparing the seedbed, tillage controlled weeds and mixed nutrients and lime into the soil. Presently, tillage is not always used, so a single standard sampling depth may no longer apply.

Phosphorus (P), potassium (K), calcium (Ca), magnesium (Mg), zinc (Zn), and lime have limited mobility in the soil. When applied to the soil surface, these materials remain in the top 1 to 2 inches unless incorporated by tillage. Nutrient accumulation at the surface occurs frequently in no-till or direct-seed cropping systems, pastures, and fields in which perennial crops have been grown for 3 or more years. When soil is sampled to a depth of 6 to 8 inches, the top 1 to 2 inches, which have higher nutrient concentrations, are mixed with the lower 6 to 7 inches, which have lower nutrient concentrations. This situation results in uneven distribution of the surface-applied nutrients in the soil sample. In addition, continued application of ammonium-based nitrogen (N) fertilizers acidifies the soil surface.

To evaluate surface and below-surface conditions, collect soil samples from multiple depths. This sampling method helps identify areas where nutrient applications are warranted and reveals areas of low pH at the soil surface.

Several examples and explanations for different crops are excluded from this edition of the article, but can be found in the full article on-line or by order from your local Extension office.

Continued on page 5...
TILLAGE AND NUTRIENT STRATIFICATION

Nutrients accumulate rapidly in the soil surface as a result of repeated fertilizer applications without tillage. Surface nutrient accumulations can be measured after a short time and from continual low application rates.

Conversely, tillage mixes P, K, Ca, Mg, and lime, which have limited mobility in soil. Table 2 shows that conventionally tilled fields did not exhibit much nutrient or pH stratification and that nutrient stratification did not occur in fields with intermittent tillage. Minimal or infrequent tillage eliminates differences in soil test values between the top 2 inches and the 0- to 6-inch depth. Therefore, when a field is tilled at least once during a 3-year period, take soil samples at the conventional depth of 6 to 8 inches.

STRATIFIED SOIL SAMPLING: PUTTING THE IDEA INTO PRACTICE

Do not sample soil only from the surface; you need to know the nutrient and pH status of more than the surface 2 inches. To take a stratified soil sample, insert a soil probe 6 to 8 inches, and then separate the top 2 inches of soil from the remaining depth.

For no-till or direct-seed cropping systems, pastures, and fields where perennial crops have been grown for 3 or more years and have received annual surface fertilizer, wait 2 to 3 years after establishment to begin stratified sampling.

Use the following key to determine if collecting a stratified soil sample would be useful.

1. What is the purpose of sampling?
   o°Agronomic or to determine nutrient or fertilizer application rate
       → Go to Question 2.
   o°Monitoring or regulatory to follow nutrient movement or accumulation
       → Refer to Pacific Northwest Extension publication PNW 570-E, Monitoring Soil Nutrients Using a Management Unit Approach (Staben et al. 2003).

2. Is the field tilled at least once every 3 years?
   o°Yes → Use a conventional (6 to 8 inches) sampling depth.
   o°No → Go to Question 3.

3. Has fertilizer been top-dressed for more than 2 or 3 years?
   o°No → Use a conventional sampling depth. The crop will not respond to nutrient application even if the nutrient concentration differs between the surface (0 to 2 inches) and subsurface (4 to 6 inches) samples.
   o°Yes → Stratified sampling may provide a benefit because
       —the field has not been tilled for 3 or more years, which is sufficient time for stratification to develop;
       —when the crop grows rapidly and needs nutrients, roots are present in moist soil near the soil surface; and
       —the higher nutrient content in surface soil compared with subsurface soil means that a conventional sample will underestimate nutrient availability.

CONCLUSIONS

The idea of collecting shallow soil samples is not new. Comparison of soil tests results from before establishment with results from various depths continues to be important in western Oregon cropping systems. Measuring the surface soil pH can help you reduce potential stand losses, and obtaining similar information for soil surface nutrients such as P, K, Ca, Mg, and Zn will help you make informed nutrient management decisions and maximize economic returns.
BEEF CORNER
READY FOR CALVING
By Shelby Filley

Winter/spring calving time is just about here. This article provides information on preparing for calving. Part of the information was taken from the OSU Calving Handbook, available free on line at: http://beefcattle.ans.oregonstate.edu/html/publications/CSHandbook.htm

Support Team and Proper Facilities
It is always best to work with your veterinarian and other people with experience calving out cows. Make sure you have an established working relationship with your support team prior to you needing “mid-night” help. Another must is proper calving facilities. A viable example, outlined in Figure 1 (see next page), is a simple headcatch for the calving barn and a good calving area floor plan. A regular squeeze chute can be disastrous if a laboring cow goes down in it.

Pre-calving Checklist
Don’t wait until calving begins, set up ahead of time. Here is a partial list of what you should consider. Also, think back to previous years. What did you have to help you then? What did you not have that you wish you did? Go get your supplies together before the action starts.

- Ensure proper heifer weight gain
- Vaccinate heifers and cows for scours and enterotoxemia
- Give Vitamin A injection unless supplement is being fed
- When possible, use pastures for calving
- Calving lots should be clean and have not been used during the past 10 months
- Bring only springing heifers into the lot unless there is enough room to keep heifers scattered
- Gather equipment (tail rope, gloves, soap, lubricant, chains, bucket, disinfectant, navel dip, etc.)
- Be prepare to clean calving barn and stalls daily
- Be prepared to provide frozen colostrum if needed

Dystocia (calving difficulty)
Dystocia accounts for major losses in the cow-calf business. We need to do all we can to cut back on this. The main problem is having a calf too big to deliver through the pelvis of the heifer or cow. There are several things managers can do to decrease the amount of calving difficulty; the role of bull selection, nutrition, and exercise is addressed below.

Bulls - To cut back on dystocia, you should use a bull that has the appropriate birth weight and calving ease attributes for your cows and heifers. You can choose new bulls based on genetics by using EPD (expected progeny differences) listed with their breed association. Alternatively, you can use a bull based on previous experience with that him as a sire of low birth weight, easy calving offspring. Since it is a bit late for that this year, lets look at a couple other factors influencing dystocia, and revisit the bull issue next newsletter.

Nutrition - Proper nutrition is essential for a successful reproductive program. Good heifer development helps the young bovine to be physically (size and strength) prepared to deliver a calf. Heifers should be at least 75% of their mature weight at calving (65% at breeding). Similarly, proper body condition helps the female to be energetically prepared for the calving event. Cows should be at a body condition score of 5 at calving (BCS, scale 1 – 9, emaciated – obese). Heifers should calve at BCS 6. It takes strength and endurance to carry the 100+ pounds of calf and associated membranes and fluids and deliver them in a timely fashion. It is not hard to imagine (or remember) a weak cow or underdeveloped heifer trying to make it through a difficult birthing process. Obese cows are also prone to calving difficulty due to fat filling up the birth canal and causing abnormal presentations.

If calving is coming up on you very soon, it may be too late this year to get females developed or to the proper body condition. So, what can be done now with respect to nutrition? Make sure the diet of the animal has the required protein and energy levels for late gestation females. It is a mistake to under feed these animals at this time in hopes that the calf will not grow to be too big to deliver easily. In actually, under-fed cows and heifers become weak and unable to deliver smoothly, and calves are weak and have difficulty surviving the birthing process. Carefully controlled research trials show this to be true 99% of the time. That is, if in the past, managers were lucky enough to have observed easier calving on a year when they did not feed well, other factors were actually responsible for their success that year, not the feeding.

Low protein in the late gestation diet can also result in decreased calf vigor, delayed uterine involution, increased interval from calving to first estrus, and decreased conception.

Continued on page 7 . . .
rates following calving. Another negative result is poor colostrum production, which leads to poor immunity in calves throughout their lifetime.

Exercise – Research has shown that heifers and cows may benefit from moderate exercise prior to calving. It stands to reason that increased muscle tone in these animals would lead to easier calving. The difference in calving ease due to exercise depends on previous shape and condition of the cattle and the management system to which they were accustomed. Heifers and cows held in confinement benefited more than the females provided larger areas such as hillside pastures. Moderate exercise, if needed, could be accomplished simply by placing the hay feeder and the water trough at opposite ends of the field.

More detail on these topics can be found in the OSU Calving School Handbook.

Figure 1.

**Nutrition for Lambing**

Do you have your ewes nutritionally prepared for lambing and lactation? Late winter/early spring lambing is just around the corner, and now is the time to plan and implement a nutrition program for your ewes.

In relationship to lambing, two phases of the ewe’s biological cycle need special dietary consideration. The first phase is the last 4 to 6 weeks of pregnancy when 70% of fetal lamb growth occurs. In this late gestation period, ewes require significantly more dietary energy and protein than earlier in pregnancy. A good plane of nutrition here will help ensure that strong, healthy lambs are more easily delivered and have a good start in life. Ewes in poor nutritional condition are more susceptible to pregnancy toxemia, and may have weaker, lighter birth weight lambs to the point that lamb survival rate decreases.

The second phase of the ewe’s biological cycle for nutritional consideration is during lactation, especially during the first 6 to 8 weeks after lambing when milk production is high. This is the time when the ewe has the greatest nutrient requirements for energy and protein. Additionally, the size and productivity of your ewes also influences the requirements. Larger ewes pregnant to twins will require more nutrients than smaller ewes carrying a single lamb. And, ewes suckling twins need more nutrients because they produce 20 to 30% more milk than ewes suckling singles.

So just what and how much should you feed your sheep and when? Let’s look at the feed resources. Although early spring pastures may be nice and green, with nutritional quality no doubt high, the amount present will most likely be in short supply. Hence, the feed available from pasture may be too low to meet the demands of the ewe.

Many times, grass hay alone does not contain sufficient concentration of nutrients for the ewe. As you can see from studying Figure 1 and Figure 2, average quality grass hay grown in western Oregon does not meet the energy and protein requirements of ewes during various segments of the production cycle.
Since the forage examples used here don’t match the ewe’s requirements, supplementation would be necessary for optimal production. For example, a 154 pound ewe will eat about 4.5 lb of feed per day of a late gestation diet. For a 130-180% lamb crop, she would need a diet with 65% total digestible nutrients (TDN) and 11.3% crude protein. This could be met using 2 lb. of low quality hay, 1 lb. of corn and 1 lb. of peas. Expect delivery of lambs to begin approximately 142 days from when the ram bred the ewe. Count back 28 to 42 days (4 to 6 weeks) to give you the date you need to start slowly introducing this diet. Rapid diet changes have the potential to cause digestive upset.

After lambing, move the ewe up to full feed (6-7 lbs) of a diet containing 65% TDN and 15% crude protein (when suckling twins). An example diet that would meet this requirement could be 4 pounds of moderate quality alfalfa hay and 2 pounds of whole corn. Alternatively, you could feed 4 pounds of good quality grass hay and 3 pounds of grain (50% corn and 50% peas). Young ewe lamb mothers need additional requirements for their own growth and may benefit from being fed as a separate group if circumstances allow.

As the quantity of grass increases in your pasture, you can decrease the amount of supplemental feed offered to your sheep, eventually relying solely on grass. Remember to allow the pasture to get a good start on its growth by not overstocking it, or beginning to use it too early. Don’t forget to offer a trace mineral salt mix made especially for sheep.

You should also consider other pre-lambing practices such as vaccinating for enterotoxemia, treating for internal parasites, trimming feet, and shearing or crutching/tagging ewes. Also, prepare lambing barn, check supplies and equipment. Good Luck with your new arrivals!
COW/CALF CORNER
The Newsletter
From the Oklahoma Cooperative Extension Service
Five Cattle Market Factors to Watch in 2011
Derrell S. Peel, Oklahoma State University Extension Livestock Marketing Specialist

Cattle prices across the board are expected to post year over year increases in 2011. Cattle prices are approaching record levels in several markets at the end of 2010 and will likely take cattle prices into uncharted waters in the coming year. Any number of external factors could impact cattle markets in the coming year but the following market factors are expected to have the biggest impact on market prices.

➢ Beef Demand  Projected decreases in beef production in 2011 will pressure wholesale and retail beef prices higher. The ability to pass on the impacts of reduced beef supplies will depend on continued recovery in beef demand. Recessionary weakness continues to limit middle meat demand though signs of recovery are evident at the end of 2010. Increased competing meat supplies, mostly increased poultry production, may temper retail beef prices somewhat.

➢ Herd Expansion…or Not?  Limited cattle numbers are expected to result in reduced cattle slaughter in 2011. The magnitude of feeder supply squeezing will depend on the extent of heifer retention in the coming year. Though not yet confirmed by data, there are indications at the end of 2010 of limited heifer retention. The question of herd rebuilding will determine just how tight cattle supplies are in 2011 and also the timetable for potential increases in beef production in coming years.

➢ 2011 Crop Conditions  A 2010 corn crop that fell just short of record levels was enough to push corn prices sharply higher. Projected crop year ending stocks are at levels that make the feed grain markets extremely sensitive to anticipated grain supplies. Crop markets will likely be especially focused on evolving crop conditions that will have a large impact on overall feed grain price levels as well as increased volatility from the pre-planting period through harvest. Crop prices and volatility will continue to have a big impact on livestock industries in general and in cattle, especially on the feedlot sector.

➢ International Trade  Strong beef exports provided critical support for cattle markets in 2010. Beef exports are expected to increase again in 2011, albeit at a more modest rate of gain. Global demand for beef is expected to continue growing though country specific economic conditions and currency exchange rates will have a large impact on specific trade flows. Beef exports and imports both help the beef industry to improve domestic beef demand by changing the mix of products to better meet the preferences of U.S. beef consumers and increase total value to the industry.

➢ Forage Conditions  Beef industry responses to the twin forces of limited cattle numbers and high feed grain prices depend on forage use. There are continued strong incentives for increased cow-calf production and for forage based stocker production. The quantity and quality of forage will have a big impact on both the level of production and the timing of feeder cattle flows in the coming year. Currently, the La Nina weather pattern is producing dry conditions across much of the Southern Plains and Southeast regions that may impact winter grazing systems. Should dry conditions continue to develop and extend into the growing season, the impact on cow-calf production and summer grazing programs could be very significant. Widespread drought in major cattle regions could offset producer intentions with respect to possible herd rebuilding.
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Regional Livestock and Forage information brought to you by

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Regional Livestock & Forage Specialist  
OSU Extension Service  
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