

Supplemental feeding in cattle required for satisfactory performance

Cows graze selectively if given half a chance. The forage they actually consume will be slightly more digestible and contain more protein than the average of all the forage in the pasture. In order to obtain satisfactory animal performance, supplementation is usually required.

1. Keep a good salt plus 8-12% phosphorus mineral, of similar calcium content, out for the cows year round. An exception might be where phosphorus is supplied by complete salt limited supplements.

2. Begin protein supplementation before cows begin to lose weight or condition. A killing frost is a definite signal to start in the fall. Protein will also be very beneficial during drought periods when grass is dry. It's cheaper to save condition in late summer and fall than it is to feed a poorly conditioned cow back into shape during the winter.

3. Adequate protein is essential for normal feed or energy intake and digestion.

4. The energy in 1 to 2 pounds of high energy supplement may slightly stimulate digestibility (1-3%) and intake (5-10%) of poor forages.

5. The best way to handle energy deficient situations is to manage to avoid feed shortages. Improve hay quality. Control calving seasons so

quality forage is available when cows and calves need it most. Use fertilization and limited supplementation to be sure cows are in good condition starting the winter. This will reduce the need for high levels of supplementation during the winter.

Calories less available in high-fiber diet

Will a high fiber diet help you lose weight? Margaret Lewis, Oregon State University Extension nutrition specialist, says fiber can help in a well-planned weight management program.

If the fiber-rich foods you eat replace high-calorie foods you might otherwise eat, you will eat fewer calories. But, if you eat high fiber foods in addition to your regular diet, most of the advantage is lost.

The good news is that the calories in a low-fat, high-fiber diet are less available. In a recent study men ate two diets; one with 34 grams of fiber and 36 percent of calories from fat and the other with twice the fiber and half the fat.

When the 42 men at the higher-fiber, lower-fat diet, 4 percent more calories passed through the digestive tract unused than when they ate the lower-fiber, higher-fat diet.

6. If cows start to looking thin, feed the higher levels of supplement required to maintain proper condition, or pay the price of reduced calf crops and weaning weights.

7. This substitution effect also exists where hay is used to supplement pastures. See Cow Calf Management Guide/Cattle Producer's Library CL300 & CL301 for further information.

Another advantage to eating a higher-fiber, lower-fat diet (or eating more fruits, vegetables and whole grain breads and cereals) is that you increase your intake of vitamins A, C, several of the B-vitamins and some minerals.

Lewis reminds us that fiber is more than bran or oatmeal. There is insoluble fiber that is easily recognized as bran, vegetable fibers, and the seeds and skins of fruit. There is also insoluble fiber like pectin and other vegetable gums. Both types of fiber are important to good health.

The other thing to remember is that the study was based on added fiber from foods, not on a fiber supplement. There is no evidence that adding a fiber supplement to your diet will change the amount of available calories in your food.

The best weight management program includes a diet that is low in fat and includes 3 to 5 servings of vegetables, 2 to 3 servings of fruits, and 6 to 11 servings of whole grain breads and cereals; a regular exercise program; plenty of water and adequate sleep.



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The above individuals are devoted to extending research-based information from Oregon State University to the people of Warm Springs in Agriculture, Home Economics, 4-H Youth, Forestry, Community Development, Energy and Extension Sea Grant programs. Oregon State University, United States Department of Agriculture, Jefferson County and the Confederated Tribes of Warm Springs cooperating. The Extension Service offers its programs and materials equally to all people.
EDUCATION THAT WORKS FOR YOU

OSU publishes Oregon climate data

The Oregon Agricultural Experiment Station, headquartered at Oregon State University (OSU), has published 11 booklets that report on climate conditions in various parts of the state.

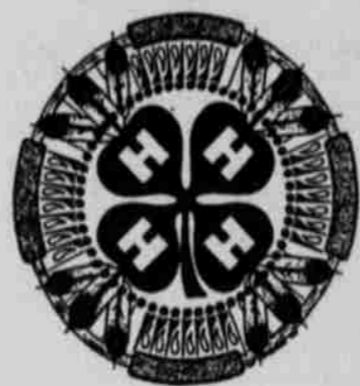
The booklets, developed by state climatologist George Taylor, are available through the Oregon Climate Service, Strand Agriculture Hall 326, OSU, Corvallis, OR 97331. Oregonians ordering the publications are asked to pay postal costs.

The publications and postal costs are: Climate of the Oregon Coast (Zone 1), 75 cents; Climate of the Willamette Valley (Zone 2), 75 cents; Climate of the Southwestern Valleys

(Zone 3), 75 cents; Climate of the Northern Cascades (Zone 4), 75 cents; Climate of the High Plateau (Zone 5), 75 cents; Climate of North Central Oregon (Zone 6), 75 cents; Climate of South Central Oregon (Zone 7), 75 cents; Climate of North-eastern Oregon (Zone 8), 75 cents; Climate of Southeastern Oregon (Zone 9), 75 cents; Local Climatological Data for Corvallis, Oregon, \$1.; and Climatological Data for Oregon Agricultural Regions, \$2.

Postage can be paid with checks, money orders or stamps, Taylor said. For more information call Taylor at 503-737-5705.

Clover speaks



What is a definition of a successful student? What do you consider to be successful in school? You might ask yourself and child what is an acceptable level of performance in school, what will you and your child consider successful? I am aware of many words associated with successful students. For instance, you often hear the words; confidence, motivation, effort, responsibility, initiative, perseverance, caring, teamwork, common sense, and problem solving.

If you were asked to define these words right now, would you be able to come up with an easily understood definition? By you and your child? Many people would need time to think about it. They may need to look them up in the dictionary just to be sure! Here is a list of definitions you might find helpful:

- Confidence: Feeling able to do it.
- Motivation: Wanting to do it.
- Effort: Being willing to work hard.
- Responsibility: Doing what's right.
- Initiative: Moving into action.
- Perseverance: Completing what you start.
- Caring: Showing concern for others.
- Teamwork: Working with others.

Common Sense: Using good judgment.

Problem Solving: Putting what you know and what you can do into action.

Most parents would like their child to have these skills, most parents would agree that if their child maintained these skills they would be successful not only as a student but in later life too. So how do we teach our children these skills in a way that they will want to learn? Will have fun and want to do more? 4-H can help promote these skills.

You are your children's best teacher and what they learn at home is called informal education. Many of the skills and values you informally teach your child at home can help them to be better students at school.

4-H is the way to informal, fun learning of school skills and that translates into successful life skills.

How does this happen? By giving children a fun, safe environment to learn and grow in. By caring parents who volunteer their time to teach

their child and other children too. Call or stop by the 4-H office today.

4-H Leaders new enrollment All 4-H leaders need to come in and re-enroll for the new 4-H year. Enrollment packets are available at the OSU Extension office located at 1110 Wasco St. Please return by October 5, 1993. Leaders and members this is important; you need to fill out the enrollment papers for continued insurance coverage.

4-H is Currently, over 50 4-H projects provide opportunities for career exploration from Agriculture to Fashion Merchandising to Engineering. Projects stimulate decision making skills and accountability through high standards of individual and group performance. The quality of these projects is enhanced by the level of

state and national support provide experiences for young people and their families to grow and benefit by:

Enriching self-esteem; teaching skills and knowledge; enhancing leadership development; developing communication skills; providing opportunity to do community service; building confidence in decision making; developing responsibility and cooperation; building social and recreational skills; and being family oriented.

These are the traits that will help your child be successful in school, sports, and later in life their occupation.

You can offer these wonderful traits to your family by becoming involved in 4-H. Stop by the OSU office at 1110 Wasco St. or call 553-3238 and ask for Crystal or Carol.

Vaccinate at branding to give stronger immunity

According to New Mexico State University research, vaccination at branding helps feeder calves develop immunity to several bovine viral diseases (BVDs) quicker. BVD occurs primarily in young feeder calves when they are weaned in the fall and enter marketing channels. This leaves calves vulnerable to viral diseases associated with shipping fever.

In the NMSU study, researchers tested 223 calves from 14 ranches at four different times for disease immunity. Half of the calves received a vaccine at branding time. All calves were then shipped at fall weaning to the research center where they were

vaccinated on arrival and again two weeks later.

Resulting immunity levels differed for the four diseases at the different points in time. For IBR disease, only 4-5% of the calves had positive antibody levels when they arrived at the feedlot. That means calves were not exposed to IBR during the summer suckling period and may not have protection against IBR coming into the feedlot.

When previously vaccinated calves reached the feedlot and received a revaccination, they responded faster and with a higher level of immunity, say researchers.

Plant and soil notes: Compost discarded plant material

At the end of the growing season gardeners face the problem of what to do with all the old vegetable plants. OSU Extension home gardening agent Ray McNeilan suggests recycling that old plant material into compost this fall.

Compost is a mixture of decomposing organic matter and soil. Compost can be used as an excellent mulch and a good fertilizer-soil conditioner when worked into the soil. Most of the soils here at Warm Springs are well drained and the addition of compost will greatly improve their ability to retain water and nutrients.

Good composting materials include leaves, grass clippings, corn husks, pea hulls, kitchen vegetable wastes and fine twigs from trees and shrubs. All those old garden plants can be composted along with the rest but don't use plant material from diseased plants.

Leaves make good mulch for vegetable or ornamental gardens but you should always compost them first. Raw leaves are flat and may keep water from entering the soil. If you have walnut trees be careful if

you plan to use their leaves in compost. Walnut leaves decompose slowly and contain a growth-inhibiting substance. Make sure that walnut leaves are less than one fourth of any quantity of mulch or compost that you are making and you should have no problems.

You can use almost any spare materials to make compost in but Ray McNeilan recommends the two-bin method. While one batch of compost is decomposing, the other can be ready for use. Compost bins can be constructed of wire fence, boards, blocks, etc. Make each bin three to five feet wide and whatever length you want. Make one side of the bin removable so compost material can be added and removed easily.

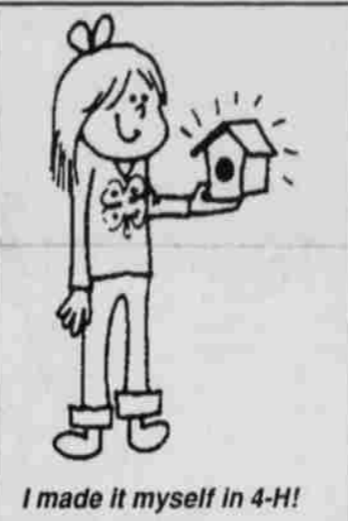
Build the compost pile by filling one bin with alternate layers of organic material six to 12 inches thick and garden soil about one inch thick. In order for the composted materials to decompose properly some nitrogen is necessary in the mixture. This can be accomplished by adding a small amount of nitrogen fertilizer or organic material that is high in nitro-

gen, such as fresh lawn clippings or livestock manure. The compost pile should be kept moist but not soaked. Remember that a compost pile is also a good place to get rid of kitchen wastes (no meat or grease) which reduces the amount of household refuse that has to be sent to the landfill.

Turning the compost pile periodically will keep the decomposition process going at a steady rate. Fork the material from one bin to the other with the material's drier outside por-

tion placed in the center of the bin. Turn the material every three to five weeks to keep the decomposition moving along.

Composting really isn't all that difficult to do and it gives you a place to get rid of all that end of growing season plant material as well as a source of high quality soil amendment for your garden. For more information on composting or some help in getting started please stop in or give me a call (553-3238).



Each county has a 4-H program

4-H is an experiential youth education program for boys and girls in grades 4 through 12. In Oregon, 4-H is a part of Oregon State University Extension Service. Each county has an OSU Extension office that administers the 4-H program. At the national level, 4-H is under the leadership of the U.S. Department of Agriculture.

This relationship is described in more detail in the publication 4-H and the Extension System, 4-H 0245L, which is available at your county Extension office.

Volunteer adults who serve as 4-H leaders are considered volunteer faculty members of Oregon State University. Through their county agent of the OSU Extension Service, volunteers have access to research and information from the university.

A good description of the 4-H program in Oregon is given in the publication Facts About 4-H (4-H 0244L). If you don't have a copy, please pick one up at your local office of the Oregon State University Extension Service.

How does the 4-H program work?

It's often said, "It is better to build a child than to mend an adult." This, in a nutshell, is the main objective of the 4-H program.

In 4-H, volunteer leaders encourage youth to gain knowledge and learn practical life skills and to apply both in their project area. Members learn to work together as a team and develop a sense of fair play. 4-H members learn decision-making skills through project work, judging contests, and other 4-H activities.

As 4-H members mature they have opportunities to learn and practice leadership skills within their own club and at county activities. They also begin to develop an appreciation and understanding of their community through individual or club service projects.

Members improve their communication skills through club interaction, 4-H record keeping, and presentations. They also develop positive attitudes about themselves and others, learn basic health and safety practices, acquire educational and vocational experiences, and learn

how to set realistic goals for themselves through individual time management.

All of this doesn't happen at once, but develops gradually as members continue their involvement in 4-H under the direction of their leader. **What's more important — the 4-H project or the 4-H boy and girl?**

The 4-H member, of course! 4-H is a people program. Its objective is to develop boys and girls. Projects are tools for teaching youngsters by stimulating their interest. Our ultimate goal is for the 4-H member to know more and be able to do more at the end of the year. A commonly stated example of the 4-H philosophy is, "A blue ribbon 4-H'er with a red ribbon project is more desirable than a red ribbon 4-H'er with a blue ribbon project."

What is the 4-H leader's job?

1. To help 4-H members learn specific project skills. 4-H members have fun with projects while "learning by doing." Youngsters remember better if they actually experience something and have an opportunity for some "hands-on learning."

Learning takes place within the learner — it is not something done to the learner. We encourage skills that will be useful to the youngster now and in the future. We help each member develop good habits, experiment with new ideas, and practice problem-solving skills. By doing this, we help them become self-directed, productive, and contributing members of society.

2. To teach 4-H members how to think, not what to think. We help develop creative thinking in young people by giving them a chance to make decisions on their own. They'll learn from their own choices.

3. To recognize and encourage each 4-H member so they feel noticed and important. The most significant recognition that can be given to members is praise, attention, or compliments — letting them know they are important and what they have done is worthwhile.

This is what 4-H is all about — the personal development of the boy and girl.

Welcome to the world of 4-H.



By Bob Pawelek
OSU Extension Agent
Livestock and Range

Unless you've been hiding out at Trout Lake for the past six months, you're bound to have heard something on the news about the North American Free Trade Agreement. NAFTA for all intents and purposes, if passed, will create the world's largest free trade area — 360 million

people producing \$6.2 trillion of goods and services and trading more than \$1 trillion worth of goods.

NAFTA will phase out 90% of all tariffs among Canada, Mexico and the U.S. over 10 years and eliminate remaining tariffs on politically sensitive products over 15 years.

Well, there's been a lot of negative press generated by consumer groups and environmental activists regarding this program. This time, however, they do have some legitimate arguments, and not a word about cows stomping on catfish in the Rio Grande.

Some of the gripes have been about the dumping of hazardous industrial wastes, loss of American jobs and dollars, and higher consumer prices. All but the latter are probably real threats to some parts of the country, especially along the Mexican border.

What about here?

What about here in Central Oregon and at Warm Springs? Well, near as I can tell, we're too far north to worry much about what happens to the yellowcats down at Laredo anyhow. As for beef and cattle, we are, according to USDA economist Terry Crawford, going to see some expansion in beef exports, and almost certainly dark meat poultry and pork to Mexico.

Therefore, NAFTA would be beneficial to U.S. cattlemen. Mexico is the third-largest importer of U.S. beef behind Japan and Canada. Clay Daulton, foreign trade committee chairman for the National Cattlemen's Association adds, "It gives us a market of about 370 million population, and the U.S. Meat Export Federation projects by the year 2000 we could be shipping more beef to Mexico than we do to Japan."

Looks like maybe the time is right to get into the cattle business.



4-H Volunteer Leaders Needed