

## Permanent pasture establishment aids in beef production

Permanent pasture is a good management tool for owners of small acreage's. Properly managed improved pasture can produce 600-800 pounds of beef per acre per year. Beef gains of 2 pounds per day are not uncommon for a period of 4 months.

However, before making decisions regarding improving your pasture, here are some factors to consider:

1. Establishment costs will run about \$100 per acre. These include machine costs, labor, seed, fertilizer, water application costs (sprinklers, etc.), taxes and interest.

2. Operating costs on established pasture can also run close to \$100 per acre. Some of the operating costs are fertilizer, irrigation and fence maintenance.

3. Grazing season is about four months long. Cost per animal unit per month at approximately 4.5 AUM rate is about \$12. Cost in cash per AUM, if you don't charge your own labor, will be about \$6.

4. Unless stocking rate is varied, mowing will be necessary following the rapid growing period in June on a part of the pasture.

### Seeding practices

Pastures are usually seeded in late April or the first ten days of August. Seed should be placed in a firm, fertile seedbed. Sprinkler irrigation is very helpful for good establishment.

### Mixtures and varieties

Orchard grass, Timothy, and tall fescues have proven to be best in

Central Oregon. Paiute Orchard grass is good as well as the Fawn variety of fescue. Orchard grasses are more palatable than the tall fescues, however, fescues start growth earlier in the spring and continue later in the fall than orchard grass. If the pasture is primarily for horses, Fawn fescue is the best choice.

### Seeding rates

With good seedbed preparation, use 14-15 pounds grass seed per acre. Add one pound clover or alfalfa to the mixture per acre. Drill the seed, or broadcast and harrow in each direction. Keep soil moist until plants emerge.

### Fertilizer

Pastures need nitrogen, phospho-

rus, potash and sulfur. Generally, potash is sufficient over most of the Warm Springs Reservation, and needs are determined by soil tests. Good pastures will use 120-160 pounds actual nitrogen and 80-100 pounds sulfur each year. This is best applied in two applications, half in early spring and the second in mid-June.

### Irrigation

Frequency of irrigation is determined by how sandy the soil is and how often water is available. Sprinkler systems can stretch the water supply and enable more accurate placement of available water. If land is reasonably level and grass is well-established, surface flooding is practical.

### Management

There will be a flush of growth in June. It is best to mow a portion of the pasture for hay if you cannot vary the stocking rate to utilize the flush. More production of grass can be obtained by dividing the pasture and establishing a grazing rotation. Graze the grass to a two inch level then rotate animals to another pasture and allow the grass to then grow to a seven-inch height (approximately 25-30 days) and return the animals to pasture.

Each pasture is different. No single recommendation fits any two pastures the same. Your goals and objectives will have the most to do with what's best for your pasture and your situation.

## Livestock Agent Helps Out with Home Ec Chores

By Bob Pawelek

When I hired on with this OSU outfit there wasn't anything in my job description that said that I had to take calls on how to sew or cook. Maybe that goes under, "Other duties as assigned." So, since Norma Simpson is at home recovering from her recent illness, I'd thought I'd help out as best I could.

The following is one of my favorite recipes:

### Elephant Stew

one elephant  
seasoned brown gravy  
two rabbits (optional)  
Cut elephant into bite size pieces, this should take about two months. Cover with brown gravy, and cook

over kerosene fire at 456 degrees for four weeks.

This will serve 3800 people. If

more are expected, add two rabbits. Do this only if necessary, as most people don't like hare in their stew.

Theresa Dzuik

## Clover Speaks

September is here once again and that brings everyone home to begin a new school year and new 4-H year.

Have you thought about ways you would like to be involved with your child or nephew and nieces during the school year? How can a parent have a positive relationship with their child?

Does this sound like dialogue between you and your child Monday through Friday? It's time to wake up. Get dressed for school wash your face, come eat breakfast. Did you sleep well? Brush your teeth, hurry up and catch the school bus.

Later after school and work, your family returns home to begin evening tasks such as doing homework, cooking dinner, feeding the animals and preparing for the next day, maybe you have time to view a movie or watch a favorite sitcom.

But wait, up to this point we've done quite a bit of maintenance parenting, which is asking your child to eat, get dressed, do your homework, etc., then you sat down and watched a TV program. The interaction up to this point is minimal. Maintenance parenting is an important part of parenting but there is more.

There is a way you can have fun with your child and teach your child important life skills at the same time.

There is a way you can build a good relationship with your child.

Wouldn't it be great to have some fun with your child while you were helping them to learn life skills in a positive and productive way?


Can you think of a better way to teach your child responsibility, build self-esteem and add to a list of completed projects than to lead a 4-H cooking club or how about computer project.

Children and parents can learn about geology, gardening, state government, consumer education, food preservation, career exploration, cultural heritage, cattle, swine, dogs...the list is endless. There are far too many topics to list them all.

We have leader guides and member guides that can help you to lead a successful 4-H project. Not only will you be helping your child to grow and learn, you will help other children in the community to grow and learn too.

Pick a topic you would like to learn about or increase your knowledge in and come to the OSU Extension office. The 4-H staff is willing to provide the information you need.

Our children change and grow daily. We can never recapture yesterday, but we can make today and tomorrow better. Now is the time to build your relationship with your



**OSU EXTENSION SERVICE**

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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.

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**Subscription to Search & Rescue newsletter**

If you would like to receive a copy of the Warm Springs 4-H Search and Rescue Cadet Newsletter, for \$6.00 per year: clip out this coupon and mail it to, or send the following information to:

**WS 4-H Search & Rescue Cadet Program**  
POB 429/1227/Avex Road  
Warm Springs, OR 97761

or you can drop it off at the Warm Springs 4-H Extension office at 1110 Wasco Street. Please include \$6.00, for expenses. Thank you.

Name: \_\_\_\_\_

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City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

## A special thanks to all the people who helped me with my bee sting at the Huckleberry Feast

By Norma L. Simpson

The police officers who called the ambulance officer on his way HeHe; the ambulance officer who checked to be sure I was not allergic to stings; the Natural Resources man who gave me some Tylenol; concession stands who gave me ice to reduce the swelling; and concerned friends who checked to be sure I was okay.

Why was all of this attention important for just a small sting?

Well, I'm taking prednisone for rheumatoid arthritis. This cortisone medicine makes your skin thinner and other bites that I've had lately have been terrible. Mosquito and spider bites have blistered and taken forever to heal. Since I know that many people at Warm Springs have RA, I thought you could learn from my experience.

Remove the stinger if it is embedded.

I haven't had a bee sting since I was a child, thanks to God, so I did not know if I have allergic reactions to stings. According to the National Safety Council First Aid and CPR manual, which the Extension Staff received during training session with Fireman Bob and EMT Tom, we learned to scrape the stinger out with fingernail, or back of a pocket knife. Don't squeeze the stinger, as a pouch of poison is attached to it. Scraping

away usually takes the stinger and pouch of poison away at the same time. Squeezing will break the pouch and give you more pain.

Keep part lower than the heart. If your hand is stung, as it was in my case, no problem. Keep the hand quite, below the heart and put ice on it.

If you have a sting on the face, lay down and put your head lower than your heart.

Seek medical attention immediately.

If you have instant swelling that seems abnormal, or you have any trouble breathing, get to a medical person as soon as possible. The Warm Springs EMTs have insect kits that will erase the effects of the poison. Injections that they give to you will open the air passages in your lungs. The air passages "constrict" or close up so that you fight for oxygen for your body. If a person has bluish or grayish skin (called cyanosis), or seizures, unconsciousness, or swelling of the vocal cords, these are life-threatening reactions. Many people die each year from these severe cases of bee stings.

If you know you have allergic reactions wear a medical alert bracelet and be prepared with self-treatment kits.

## Plant and soil notes

### Winter cover crop helps garden soil

Cover crops planted in late summer are an inexpensive way to build better soil for gardening. Mike Bauer from the Deschutes County Extension Office has some helpful information on garden cover crops.

Cover crops reduce compaction and erosion of garden soil, add organic matter, and improve soil structure. On the reservation, most of our annual precipitation comes in the form of rain and snow between the months of September and March. A cool weather tolerant grass or legume crop "catches" and uses nutrients such as nitrogen that winter moisture sometimes leaches away. When the cover crop is plowed under in the spring, these nutrients are returned to the soil, ready for your crop of vegetables.

There are many cover crops from which to choose, the most popular being Austrian field peas (also called winter peas) and winter rye (also known as grain rye, not ryegrass). It is recommended to sow a mixture of winter peas and rye at a rate of 1 pound per 1000 square feet of each kind of seed. Cover crops grow best if the plant remains from the previ-

ous year's garden are plowed under or removed. However, grass seeds may be scattered over the partially harvested garden and produce a cover crop without working the soil.

Here at Warm Springs early to middle October would be the best time to plant a cover crop. After everything has been harvested remove the old vegetable plants and compost them. This is also a good time to add manure to your garden. Till the manure into the soil, plant the rye and winter peas and water. The condition of your garden soil will be greatly improved when it is time to plant next spring. Good luck and if you have any questions or comments please get in touch (553-3238).

### Plant spring-flowering bulbs in late summer or fall

If you want colorful landscape flowers next spring you can plant daffodils, tulips, crocus and other spring-flowering bulbs in late summer and early fall. The bulbs will overwinter in the soil and bloom next year. OSU Extension home gardening agent Ray McNeilan has some helpful information.

When buying flower bulbs it is important to feel them in order to determine their quality. Healthy bulbs

are firm. Softness indicates dead tissues and a flower bud inside the bulb that may be barely alive.

If planting will be delayed, store the bulbs in a dry area at a temperature below 65 degrees. High temperatures damage the flower buds.

Flower bulbs can be planted as late as December but the earlier you plant the better chance spring bulbs have of blooming on time in the spring.

The bulbs should be planted in well drained, sandy soil where they will get as much sunlight as possible. Plant them in clusters leaving a space of four or five inches between bulbs.

Before planting, work the soil to a

depth of 12 inches. Plant tulips six inches deep; crocus, two inches; daffodils, seven inches; grape hyacinths, three inches; and hyacinths, four inches.

Set bulbs firmly in the ground and press out any air pockets that develop in the soil. Work in commercial fertilizer (example: 5-10-5) or some seasoned manure then soak the flower bed to dissolve the fertilizer and settle the bulbs. If the weather cooperates your yard will be much more colorful come spring.

Good luck with your gardening and please be in contact with any questions or comments that you may have (553-3238).

### Something to live by:

- Watch your thoughts,  
They become your words.
- Watch your words,  
They become your actions.
- Watch your actions,  
They become your habits good or bad.
- Watch your habits,  
They become your destiny.

**Natural Resources Youth Club seeking volunteer leaders**

Trying to find something enjoyable to do with your spare time? You might want to consider helping out with a Natural Resources Youth Club. All you need is a little time to spare and an interest in helping our community's young people learn about the world around them. You could make a big difference. Interested or curious people should contact me at the Warm Springs OSU Extension Office.

*Tim Wojtusik, 553-3238.*

## Stockman's Roundup: Management of the working cow horse



By Bob Pawelek  
OSU Extension Agent  
Livestock and Range

In the beef industry, the role of the cow horse is one built on tradition. This important role is still obvious today, easily recognized by the large numbers of ranch horse sales, cattle rides here on the Warm Springs Reservation and throughout the eastern side of the Cascades, and of course, rodeos.

A good cow horse has to be ready to use on a moment's notice, and the beef industry requires a well-broke horse that is sound, able to handle the work, easy to maintain and free of problems that prevent the horse from being used. To effectively keep and use horses on any cattle operation, there are some important management areas that must be given attention.

Horses must be 1.) fed correctly,

2.) conditioned to handle the work load, 3.) sound and properly shod or trimmed (preferably shod for work on the biscuit-scab lands) and 4.) on a good herd health program, as outlined recently in this column.

Working cow horses will require between 25 percent and 100 percent more energy than a non-working horse. These energy requirements can usually be met by providing grazing or hay, along with a concentrate feed. The amount of daily feed depends on the size of the horse, the amount of work being done and the energy in the feed.

Total daily intake of forage and grain combined will usually range from 1.5 percent to 2.5 percent of the horse's body weight (15 to 25 pounds for 1,000 pound horse). At least 7.5 pounds of this daily feed should be grazing or top quality hay. When the daily grain intake is over 0.5 percent of body weight (5 pounds for a 1,000 pound horse), horses should be fed in two separate feedings about 12 hours apart.

Cow horse feeds should normally contain between 10 percent and 14 percent crude protein, and urea should not be used as a nitrogen source. Horses apparently can tolerate urea at about the same levels as cattle, but urea serves very little benefit for horses and is best left out of the diet. Although some cattle feeds can be fed safely to horses, be careful and

avoid such feeds as Rumensin or Bovatec.

When a particular horse is in very thin condition or when a horse is working extremely hard, the use of fat-supplemented diets might prove beneficial. Adding up to 10 percent added fat makes the diet more energy dense and provides a good fuel source. However, remember, whenever one makes additions to diets, such additions should be gradual. Horses need a few weeks to adjust to supplemental fat as a source of energy.

Body condition and fitness are important. Cow horses that are thin will give out more quickly than those in moderate condition. And, horses carrying excessive body fat may have a harder time regulating body temperature. The best conditioning program is one that gets the horse in moderate condition and allows plenty of time and exercise for fitness prior to actual work.

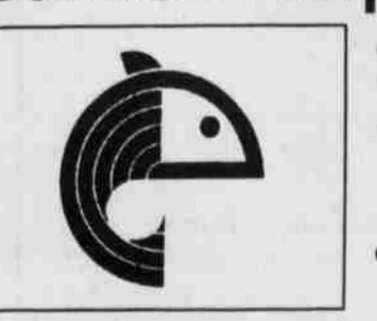
Exercise should be similar to the kind of work a cow horse does, and increasing workloads should happen gradually. Bone will rework itself in response to exercise, but little skeletal strength will be achieved by a horse that receives exercise only when grazing or walking around in a corral. On days when horses are not worked, free exercise can help decrease the chances of azoturia, as I have heard it described.

Cow horses are often ridden on a variety of terrain, especially here at Warm Springs, and special attention should be given to hoof care. Horses that are shod usually should be reset every four to eight weeks and a knowledgeable farrier can help keep the horse's feet in shape for the work being done. Owners should keep in mind that it often takes two or more shoeings to regain a uniform, balanced hoof after a horse has been turned out without shoes for a period of time. Moisture balance is also important to prevent a dry, cracked hoof or an excessively wet, thrushy-type hoof. Pick up the feet regularly to catch any hoof changes before a problem occurs.

The teeth of a cow horse are important because they obviously impact how well a horse eats and wears a bit. Horses that hold their heads sideways while eating or that slobber large amounts of feed may need to have their teeth floated. And some horse will have wolf teeth located just in front of the molars that interfere with bit placement and affect the horse's response to rein pressure while being ridden.

A healthy cow horse that is being fed well, is in adequate body flesh and has been conditioned for the level of work required, will be an asset to the cattle operation. These horses will be more enjoyable to ride and more effective in serving their purpose in the cattle industry.

## Salmon recipes offered



- Scalloped salmon**
- 1 pint canned salmon
  - 4 medium potatoes thinly sliced
  - 1/2 cup chopped onion
  - 1/3 cup chopped green pepper
  - 1 can cream of mushroom soup
  - 2 Tbs. flour
  - 3/4 cup milk
  - 1/4 tsp. sweet basil
  - salt and pepper to taste
- Mix soup, salt, pepper and liquid from can of salmon. Stir to mix. In buttered 2 quart casserole arrange layer of potatoes, onion and green peppers, salmon and another layer of potatoes, onions and green peppers. Pour over half the sauce. Add another layer salmon and cover with remaining potatoes. Add remaining sauce. Cover and bake in preheated 350 F. oven 50 minutes. Remove

cover and bake for 15 minutes longer. Serves 4.

- Simple seafood salad**
- 1 pint canned salmon
  - 1 cup chopped celery
  - 1/3 cup mayonnaise dressing or plain yogurt
  - 2 hard cooked eggs, chopped
  - 2 Tbs. chopped sweet pickle salad greens
  - Drain fish. Break into large pieces. Combine all ingredients except salad greens. Toss lightly chilled. Serve on salad greens. Makes 6 servings.

- Salmoncado buns**
- 1 pint canned salmon
  - 1 small avocado diced
  - 1/2 cup chopped tomato
  - 4 burger buns
  - 2 Tbs. chopped onion
  - 1/3 cup mayonnaise type dressing
  - salt and pepper to taste
  - Drain and flake salmon. Combine with avocado, tomato, onion, salad dressing and salt and pepper. Spread on bottom half burger buns. Garnish with cherry tomato and watercress. Makes 4 bun servings.