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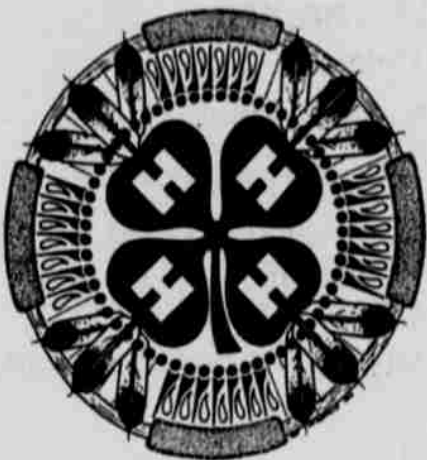


The Oregon State University Extension Service staff is devoted to extending research-based information from OSU to the people of Warm Springs in agriculture, home economics, 4-H youth, forestry, community development, energy and extension sea grant program with OSU, United States Department of Agriculture, Jefferson County and the Confederated Tribes of Warm Springs cooperating. The Extension Service offers its programs and materials equally to all people.

## The Clover speaks

by Sue Ryan

Summer Day Camp has wrapped up at the Warm Springs Early Childhood Education Center. We had a week of fun August 18th -22nd with teachers and kids both! This day camp was a first time collaboration between our two departments and was held on the grounds of E.C.E. We want to thank our helpers-especially our volunteers Lois Smith and Julie Johnson for their help throughout



stayed overnight. Larry Switzer, Nelson Wolfe, Cody Switzer, Cameron Nathan, Melissa Danzuka, Verna Mitchell, Carina Miller, Lucy Wolfe, Shanina Made, Pasha Smith. Here are the answers to the 4-H Quiz from the last edition of Cloverspeaks. **Hands** is the word that represents the 3rd H. **White** is the 4-H color that is symbolic of purity. 4-H'ers can live on farms, in towns, or cities. **Health** is the word that represents the 4th H. The 4-H motto is "To Make the Best **Better**". **Green** is the 4-H color that is symbolic of youth, life and growth. The U.S. Congress allocates 4-H federal funds through the U.S. Department of **Agriculture**. **Heart** is the word that represents the 2nd H. The 4-H emblem is the four-leaf **clover**. 4-H is learning by **doing**. **Head** is the word representing the 1st H in 4-H. 4-H public funding occurs on local, state, and **federal** levels. In Oregon, anyone between the ages of **five** and nineteen can be a 4-H member.

the week. Plus Chris Barney, Martha Gomez and Allison Mitchell for their assistance on the overnight campout in the backyard. We also had the invaluable assistance of our 4-H Agent Arlene Boileau's husband-the wonderful, the stupendous, fabulous **Mickey Boileau!!!!** Here are the names of those who

## History of 4-H from the Webpage

4-H began as a simultaneous response to needs throughout the country, rather than the idea of one individual. The goal of the program was to extend agricultural and home economics education to rural youth by organizing boys and girls clubs and through "learning by doing". The roots of 4-H began at the turn of the century when progressive educators started to emphasize the needs of young people and to introduce nature study as a basis for a better agricultural education. Boys and girls clubs and leagues were established in schools and churches to meet these needs. To spark the interest of young people, Farmers Institutes cooperated with school superintendents by promoting production contests, soils tests and plant identification. By March 1904, several boys and girls clubs had already exhibited projects. Most states organized clubs outside the schools with rural parents acting as volunteer leaders and County Extension agents providing materials. Farmers saw the practical benefits and public support and enthusiasm for 4-H grew throughout the nation. The Morrill Act of 1862 provided federal lands to establish land-grant colleges and universities. In 1890, colleges and universities for black citizens were established in the southern region to insure that all people were served.

The state land-grant universities and the Cooperative Extension Service of the USDA maintained close contact with the development of 4-H. The land-grant institutions recommended organizing a distinct administrative division in each land-grant institution to direct the many Cooperative Extension activities that were developing. By 1912, virtually all of the land-grant institutions in the southern states had signed cooperative agreements with the USDA and had organized Extension departments. Congressional appropriations to the state land-grant institutions began in 1912 for development of early Extension work within the states. In 1914, the Smith-Lever Act established the Cooperative Extension System within the USDA, the state land-grant universities and the counties. Since the early legislation, Congress has continued to support 4-H. State and county public funding is provided virtually everywhere as well. Through the years, the overall objective of 4-H has remained the same: the development of youth as individuals and as responsible and productive citizens. 4-H serves youth through a variety of methods: organized clubs, 4-H special interest or short-term groups, 4-H school enrichment programs, 4-H instructional T.V., 4-H Centers or as individual members.

## Putting thought into action with FCL training

**Norma L. Simpson & OSU FCL Book**  
The FCL Training book is full of useful guides for being a better group leader. There is more than being the leader, it is getting the group to Put Thought Into Action. Once the group has made decisions about the most desired solution for accomplishing a goal, the next step-generally one which frustrates groups the most-is to develop a sequence of actions which will lead to the accomplishment of the goal. "Such a plan should specify who does what and at what time," says Greg Tillson, OSU Family Community Leadership specialist. In developing a plan, the group might consider some of the following questions, the answers to these questions will help to

identify potential barriers that prevent groups from putting thought into action. \* Does the action plan specify a series of sequenced tasks which need to be completed if the goal is to be reached? \* Does the action plan clearly identify **who does what and when**? \* Are all the needed resources for completing each of the tasks clearly identified? \* If necessary, does the action plan include getting the required authorization from those in authority or from constituents? \* Does the plan clearly assign responsibilities for carrying out each of the tasks and coordinating the process? \* Does the plan clearly define the roles of all persons involved? \* Does the plan provide for evaluation and revision if they are needed at some future date?

## STOCKMAN'S ROUNDUP: Horse health starts with common sense



by Bob Pawelek  
OSU Livestock Agent

The good horseman wants what's best for his stock. Sound management, good breeding and a sensible nutrition program are all wise practices. The horseman should also adhere to a strict sanitation and disease prevention program designed to protect the health of his animals. The exact program will differ with each horse owner, but the basic principles remain the same. With this thought in mind, the following program of horse health, disease prevention and parasite control is presented with the hope that the horseman will use it: 1) to compare your existing program, and 2) as a guidepost so that you and your vet, and perhaps myself, may develop a similar and specific program for your own enterprise.

- mended for all horses:
1. Have on hand 1st aid supplies, and know when and how to use them in case of accident or sudden illness.
  2. Vaccinate against the most common diseases.
  3. When signs of infectious disease are encountered, promptly isolate affected animals, provide them with separate water and feed containers.
  4. **ALWAYS FOLLOW LABEL DIRECTIONS ON ANY MEDICINES** as well as any prescribed treatment by the veterinarian.
  5. Prevent or control parasites by adhering to the following program:
    - a. Provide good sanitary practices and a high level of nutrition.
    - b. Have adequate acreage; practice rotation grazing when possible.
    - c. Pasture young stock on clean pastures, never allowing them to graze on an infested area unless the area has been either plowed or left idle for a year in the meantime.
    - d. Don't spread fresh horse manure on pastures grazed by horses; either store the manure in a suitable pit for at least two weeks or spread it on fields that are to be plowed and cropped.
    - e. Keep pastures mowed and harrowed.
    - f. Keep hay, grain and water free of manure.
    - g. Follow a worming program and schedule to control internal parasites.
    - h. When external parasites are present (bot eggs on legs, flies, etc.) apply the **PROPER** insecticide.
    - j. If possible, alternate the use of pastures between cattle and horses, since horse parasites will die in cattle.
  6. Avoid overgrazing as there are more parasites on the bottom inch of the grass.

**Management of the Working Cow Horse**  
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 elsewhere on this page. 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 a 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

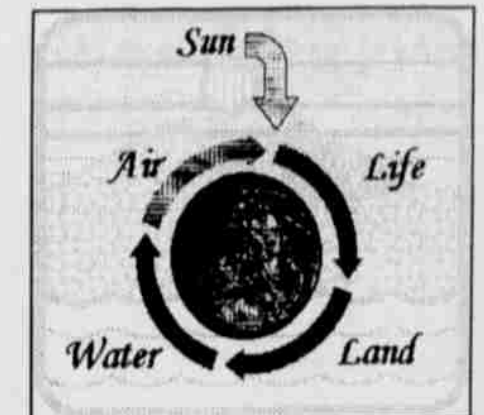
will rework itself in response to exercise, but little skeletal strength will be achieved by a horse that receives exercise only while grazing or walking around in a corral. On days when horses are not worked, free exercise can help decrease the chances of azoturia or "Monday morning sickness," as I have heard it described. Cow horses are often ridden on a variety of terrains, 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 horses 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.

## Natural Resource Notables

**Tansy Ragwort Makes not-so-big Comeback in Oregon**  
by Bruce Pokarny  
Tansy ragwort, a scourge of the 70s, is popping back up with its bright yellow flowers in 1997. The noxious weed should not be ignored, but experts anticipate biological control agents will keep the poisonous plant in check. As the tansy ragwort population grows, so do the populations of tiny bugs that feed off of the weed. But is tansy ragwort truly making a comeback? Put the question to weed control specialists with the Oregon Department of Agriculture and get a reassuring answer. "No, it's just kind of sticking its head up a little bit," says entomologist Eric Coombs. "It won't last long, it never does. I really don't think it will ever reach the economic potential that it had back in the seventies." "We're getting a lot of calls lately from concerned landowners about the resurgence of tansy ragwort," adds ODA weed control specialist Tim Butler. "But, as is typical with biocontrol, once the insect populations build back up, they will again control the tansy." Two decades ago, much of Western Oregon was covered with tansy ragwort. Clearcuts and overgrazing were among the practices that often left the soil bare or the ground disturbed, paving the way for ragwort seeds to become flowering plants. The weed contains poisonous alkaloids that can kill livestock if ingested. Cattle and horse owners in Oregon were reporting more than \$4 million in losses each year as their animals grazed on pasture containing ragwort. It's hard to imagine that a weed can cause so much damage. But tansy ragwort has the distinction of being the only weed for which a Governor's Task Force was established. That all led to a control program housed in ODA that has made effective use of biological control agents. The cinnabar moth eats the leaves of tansy ragwort. The flea beetle attacks the roots. The ragwort seed fly goes after the seeds of the weed. The fearsome threesome has worked wonders-almost too good, since so much of the ragwort over the past 20 years has been destroyed that there hasn't been enough of the weed to maintain real high populations of the bugs. It's all part of a biological cycle, says Butler.

"It's not in the biocontrol agent's best interests to totally eradicate the plant," he says. "They need to have some available at low levels to maintain themselves." The insect levels have decreased as the weed has decreased. Fewer bugs has allowed a bit of a resurgence in tansy ragwort. Weather has played a role, too. "This year has been a wetter than normal year," says Coombs. "When the cinnabar moths come out and we have rain, it keeps them from flying around. The caterpillars don't do as well when it's cold and wet. Flooding and standing water in a lot of the lowlands may have killed off or reduced populations of biocontrol agents. The flooding also created disturbances in the plant community that allowed ragwort to come on." The population levels of the bugs may be down, but not out. The insects are expected to make a comeback of their own, much bigger than the weed they are designed to destroy. "The primary thing we are concerned about is livestock losses," says Coombs. "As long as we're not having animals dying right and left, even though we may have some of this resurgence, that means the insects are still doing their job and generally we just need to wait a couple of years for their populations to build back up." In the meantime, ODA's Weed Control Program is still receiving the calls from farmers and ranchers in Western Oregon, wondering what is going on and whether they can "borrow" a few of the bugs for any tansy hot spots on their land. ODA will oblige but first wants to make sure the handouts are absolutely necessary. "We want people to check their pastures to find out whether or not the insects are already present," says Coombs. "If they've seen cinnabar moth larvae-the little orange and black caterpillars-that's a good sign. Then this fall, when the flea beetles are active and are attacking the plants, we want people to pull some of the larger leaves on the rosettes of the ragwort-which is the major source of poisoning for most animals-and hold the leaves up to the sky to see if there are little holes in them. If they see those little holes, then the flea beetles are present. All we have to do is wait about a year or two for the populations to build up.

In most cases, that's all it will take." Coombs and Butler say proper land management can also help. Promoting competitive vegetation-fertilizing grasses for good



growth-could be like a no vacancy sign to tansy ragwort. Irrigating the grasses will also help. So will reduced grazing. In some cases, the biocontrol agents will have to be reintroduced to the area. Tillamook County, with its recent history of flooding and its high number of dairy cattle, is one Oregon location that may need the reintroduction. ODA and OSU Extension will work with landowners to assess the needs. But some farmers and ranchers who think they have a problem may actually have a solution. The bugs may be there all right. And in high numbers. "A lot of times when people have called and wanted us to deliver insects, we've gone to the site and have actually ended up asking them for permission to collect insects to take to other places where they really aren't present," says Coombs. Good monitoring, proper land management, a little bit of luck with the weather, and a whole bunch of patience is ODA's prescription for the current tansy comeback. "By the time tansy ragwort is really starting to get noticed, the insects have already been given advanced notification," says Coombs. "They are there in good numbers. It's just a matter of waiting another year or two and the problem is usually taken care of." For more information, contact Tim Butler or Eric Coombs at (503) 986-4621 or Bodie Shaw at 553-3238.

## Shared time by moms

**Sally Bowman, OSU Extension Family Development Specialist**  
It defies conventional wisdom about working mothers and families. Statistics show that in 1975 married mothers spent more time in direct child care (defined as bathing, feeding, dressing and driving a child around while doing nothing else) per family and per child than they did in the 1920s. Family life researchers examined the statistics that come from time-use surveys conducted in 1977-78. The researchers also discovered that as mothers spent most time working outside the home, it was the mix of parent-child time that changed, not the overall amount of time they shared. Mothers who spent more hours in the paid labor force actually devoted more time to shared-housework and shared-leisure time with their children. "Mothers spent less time in direct child care, but only with the oldest child, and fathers appeared to compensate for this decrease in the mother's time." The study also demonstrated that household activities shared by parents and children were gender typed, according to Sally Bowman, OSU Extension Family Development specialist. Mothers shared more time with daughters in meal preparation and family care activities, while fathers shared more time with their sons maintaining the yard, car, and home and taking care of pets. The research information came from the Winter 1997 *Human Ecology Forum* at Cornell University and the February 1996 *Journal of Marriage and the Family*.

## Non caloric sweetener available

by Norma L. Simpson  
For several years I have been waiting for the Food and Drug Administration to approve the use of a natural non-caloric sweetener called Stevia. On July 7, an extension service colleague called from southern California to say that Kaá Jeé, a Paraguayan plant has seed (called Royal Sweet) that can be grown in the USA. We enjoyed the leaves of the plant when we plucked them from the wild bushes to mix with the local herb tea. One leaf would sweeten the tea the entire day, serving after serving after serving. It was tasty in either hot or cold drinks. A Paraguayan botanist, M.S. Bertoni, identified the wild plant and named it in 1899. Much of the recent research was conducted in Japan and in Paraguay, when I worked for the Texas A and M University/Paraguayan Extension Service project funded by the US Agency for International Development. Japan bans artificial sweetener and therefore has been interested in natural sweeteners that would grow in Japan. Unfortunately the soil in Japan is not ideal for growing Stevia. Most of the plant is grown in the border of Brazil and Paraguay.

I checked the Internet under Yahoo. Sweeteners, Stevia. When I emailed to one address, I learned that FDA still has not approved Stevia as a food ingredient or as a sugar substitute but it is ok to sell it as a dietary supplement. Stevia is 200 to 300 times sweeter than sugar, yet does not have any sucrose in it. Unlike sugar, it does not trigger a rise in blood sugar. Stevia is available in several forms - crude green powder and brownish liquid extract. It is then processed to become a white powder used to create a "Working Stevia Solution" made of filtered water and white powder. It is so sweet that only a small drop of solution is mixed from other ingredients. It is stored in a bottle with an eyedropper to control the amount of sweetness used. One woman has developed lots of recipes using Stevia. Nicolette Dumke has a book called *Allergy Cooking with Ease*, with carob cake and cookies for healthier cakes especially for birthday parties. I tried to contact them for more information about the "Working Stevia Solution" and we'll try it this fall in the Healthy Cooking Classes in the Wellness Center Kitchen. Let me know if this research-based information is of interest to you. Call Norma at 553-3238