



Countering the High Cost of Bedding

by Alan Shank, Farm Planner

Have you noticed that the cost of sawdust, shavings and wood pellets have been going up lately? Or that they are becoming hard to find? You're not alone. Dairies are also being hit hard by the increased sawdust price when feed and fuel costs are also going up substantially. Whether you keep your horse at home or run a commercial stable, escalating bedding prices are adding to your expense of owning a horse.

What's causing it? According to Doug Goebel of Gem Shavings in Auburn (www.gemshavings.com), the national new housing market is in a slump. Lumberyards have a large inventory of cut lumber to sell, but fewer buyers. The result is a major reduction in the amount of boards being cut and therefore a shortage of sawdust and shavings. Mr. Goebel said a few Western Washington lumber mills have shut down while others are running on a shortened workweek. To save money, the remaining mills have switched from heating their kilns with natural gas to sawdust.

Industries, such as particleboard manufacturers in Oregon, and agriculture, are also competing for the remaining scarce lumber by-products. Add this scarcity to increased fuel and shipping costs and the result is, bedding prices go up. Solutions to the high price of bedding vary depending on barn design and whether you're caring for a couple of horses or a large stable.

Neal and Serena Friedman, owners of two 1,500-pound Friesian horses near Woodinville, have been experimenting with bedding alternatives to reduce all the waste they have to store and handle. The problem Neal set out to solve was a very slow composting rate that created a shortage of waste storage space. First he relocated the compost bins closer to the horse barn. This immediately reduced his time and labor. Next he consistently covered the compost bins with tarps. Keeping the waste from becoming saturated with rain accelerates the rate of composting. That reduced the volume of stored waste and largely eliminated runoff from the compost piles. However, there was still too much waste material for the size of his compost bins.

Neal's next move was to switch from 'white shavings' to wood pellets. "Just switching to pellets reduced my barn's total output by about one-third to one-half, and it also made the stall-cleaning chore go much faster," said Neal. "It's easier to separate waste from pellets and sawdust than from shavings." This saved even more time and labor.

To reduce odors, Neal lets the stall mats dry before adding more bedding. He first applies zeolite, a mineral that absorbs odors, to the mats where the horses urinate, then puts a layer of wood pellets over that, and another dash of zeolite on top of the pellets.



The Friedman's two horses, Sietse and Wouter, enjoy clean paddocks and stalls. The Friedmans have learned how to manage the two horse's bedding to reduce their waste stream as well as chore time.

Neal's stalls open into his sacrifice paddock. "My newest experiment is letting the horses have access to a small run outside each stall," he said. He described the improvement in his stalls as dramatic. "They're pristine and my use of wood pellet bedding is nearly zero."

Neal found out that, if given a choice, the horses will defecate outside rather than in their stalls. He still collects manure from the paddock, but the paddock is gravel and hog fuel, so he gets 95 percent manure with just a little hog fuel. "The horses prefer to be outside. Even in the rain or snow they stand or sleep outside, only going into their stalls to eat or drink," said Neal. Proper flooring in the stalls, such as rubber-like stall mats, is required for Neal's system to work.

Some horsekeeping facilities may not readily be able to duplicate Neal's system. You may have horse stalls that do not directly access paddocks or you may run a commercial stable where customers demand a certain type of bedding for its eye, smell, and texture appeal. While some parts of Neal's solutions may not be an option for your farm, conservative use of bedding, properly covering waste storage facilities with tarps, and locating compost bins for ease of use are things all horse owners can do to reduce their bedding expense.

If you'd like to learn more, or see it for yourself, Neal and Serena are hosting two farm tours on Saturday, May 12 at 10:00 AM and 1:00 PM. The tours are sponsored by Horses for Clean Water and the Snohomish Conservation District and funded by the Department of Ecology. You'll be able to glean more details from Neal's bedding experiments as well many other best management practices, including pasture management, mud management, gutter design, drainage, fly control, barn lighting and wildlife enhancement. To register, contact Alayne Blickle of Horses for Clean Water at 425-432-6116 or horsesforcleanwater@comcast.net.

Spring 2007

Serving Snohomish County
and Camano Island

Assessment Update

For those of you interested in Snohomish Conservation District's bid for a more permanent source of stable funding, the District will again be going forth with efforts this summer to acquire an assessment.

We are currently scheduling public meetings for May. Check our website for updates on when and where these meetings will be held.

There will also be opportunities to voice your opinion on these efforts.

Election Results

Almost all Washington State Conservation Districts hold open, public elections for board members around February and March every year. SCD was no exception, with our election being held on March 13th.

Duane Weston was re-elected unanimously and will be providing leadership for another three years. We also had an appointed position this year and we are awaiting confirmation from the Washington State Conservation Commission on Cam Allen's nomination to that position.

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"The first day of spring is one thing, and the first spring day is another. The difference between them is sometimes as great as a month."

Henry Van Dyke

Spring is Here, Are Your Pastures Ready?

by Bobbi Lindemulder, Lead Small Farm Planner



Lacey, a half Pinto, half Arabian, enjoys her pasture near Snohomish.

Are your pastures ready for the grazing season, or are they thin stands of sad looking plants that are overgrazed and weedy? You aren't alone as this is often the case on small acreages this time of year.

Western Washington pastures, although resilient, are very susceptible to compaction during the rainy season and wet times of year. Yearlong use and winter grazing does not allow for a rest period that

pastures in our region need. There is little grass growth during the winter and over-grazing is inevitable. The best pasture growth occurs in the spring. In fact, half the total grass production is produced from late April to early June. So what can you do now?

Pasture is a crop and, like other crops, it benefits from the use of improved seed varieties, fertilization, weed control, and grazing management. Renewing an old pasture is easier (and cheaper) than establishing a new one. Often, pastures can be brought back into good condition by controlling weeds, fertilizing, and managing livestock. The steps to improving a pasture begin with an inventory of what is there, the grasses, forbs, and legumes, as well as weeds and plants that may be toxic to livestock.

Test your soil to determine fertilizer needs. Applying more fertilizer than plants can use is money lost. Plus, excess fertilizer may leach into groundwater, streams, and wetlands. Next, fertilize your pastures using split applications: one-third of the total needed should be applied in early-mid spring, one-third late spring-early summer, and the final one-third should be applied in the fall.

Assess fencing and livestock water systems, and their impact on the current status of the pasture. Improve your pasture by managing it better, here's how:

- ♦ control undesirable plants by clipping, managed grazing, or chemical control,
- ♦ improve livestock distribution by adding water sources and/or changing fencing,
- ♦ overseed your existing pasture with improved grasses and legumes,



These two bulls graze a mix of orchardgrass, rye, and fescue.

- ♦ Confine your animals to a sacrifice or winter confinement area to give grasses a rest and to keep compaction to a minimum. Confining animals during droughty summer periods is also advised so they don't pull dormant plants out by the root, killing them.

If possible, divide the pasture into the smallest possible units, depending on the management available. Typically, the smaller the unit and the more intensively it is grazed, the better the grass production. Destroy existing vegetation only as a last resort, and if renovation is in order, do not renovate more than 20 percent of the total area at a time.

What is your best bet for grass seed?

Although many seed varieties are on the market, annual and perennial ryegrass, orchardgrass, and tall fescue are best suited to Western Washington. Ryegrass should only be used for intensively managed pastures due to its high palatability. It often gets overgrazed in mixed pastures which can lead to "islands" of other, less desirable grasses, left in the pasture.

Orchardgrass is well adapted to our environment and is an excellent choice for cattle and horse pastures, although less tolerant of heat and drought than tall fescue. It also requires at least moderate drainage. Tall fescue is the toughest pasture grass in our region. Although excellent cattle and horse pasture, it can carry a fungus (endophyte) that causes fescue toxicosis. For this reason it is important to request "endophyte-free" seed.

Well, there you have it. Spring is here so pull those animals off, get your soils tested, and get out the fertilizer spreaders and mowers. Have a great grazing season!

If you have any questions about pastures, contact Bobbi at 425-335-5634 ext. 109 or email bobbi@snohomishcd.org.

Reference: "Coastal Pastures in Oregon and Washington" OSU bulletin EM8645

Sky Valley Team Takes Second at Envirothon

A five-member team of students from Sky Valley School in Monroe finished second in the Northwest Regional Envirothon competition held March 29th at Padilla Bay National Estuarine Research Center in Skagit County. The team is now eligible to go on to the state competition in Pend Oreille County in May. They are coached by longtime Monroe educator, Deb Schuldt.

The regional competition tested the students' knowledge in five areas: soils, aquatics, wildlife, forestry, and an environmental issue. A presentation in front of judges was part of the environmental station. Many of the tests feature actual animal pelts, teeth, skeletons, water samples and other hands-on items that help make the stations interesting and challenging. The winning Washington State team can go on to the North America competition, which is sponsored by Canon. Congratulations to the winning Monroe team!



Members of this team from Sky Valley Environmental School will go on to compete at the state competition in Pend Oreille County.

Youth Camp Promises a Fun Week in June!



Campers help a forest ranger make trail signs.

June 24 - 30, 2007
Cispus Learning Center
Randle, Washington

Cost: \$300

Deadline for registration: June 18th, 2007

Natural Resources Youth Camp is a fun week of hands-on activities taught by career professionals in forestry, soils, geology, wildlife biology and aquatics. Youth ages 13 - 17 spend the week in the beautiful Gifford Pinchot National Forest while staying in heated dormitories and eating in a cafeteria-style lunch room. A full-time nurse is on staff, and each dorm has their own counselor. Activities include: hiking, a ropes course, camp games, a nightly campfire and visits to angel falls and laser cave. Teens thinking about a career in natural resources can get a preview of potential jobs. The price is reasonable for a week-long camp and scholarships are available through the camp. Call Kathleen at 360-754-3588 for more information or email info@nryc.org. Check the camp website: www.nryc.org.

Recycle Plastics for Free

Did you know?

Many agricultural plastics can be recycled into black plastic nursery items, drain pipe, truck bed liners or plastic lumber for benches, posts and pilings. If you have any nursery pots or trays, plastic baling twine or empty hay bale bags, don't throw them in the trash – start saving them, instead. If the materials are dry and relatively clean, you can recycle them at these special collection events:



Saturday June 9 - Marysville

9 a.m. to 2 p.m.

Former Livestock Auction Barn

15714 Smokey Pt. Blvd, Marysville

Sunday June 10 - Monroe

9 a.m. to 2 p.m.

Evergreen State Fairgrounds parking lot

14405 - 179th Ave SE, Monroe

A third site in Stanwood may be added. At all sites, you'll be asked to sort your materials into specially marked storage bags and containers.

How to prepare plastic baling twine:

- ◆ Shake to remove loose dirt and straw
- ◆ Pack loosely in large plastic bag
- ◆ Store in dry location

How to prepare hay bale covers:

- ◆ Shake off any dirt
- ◆ Fold in bundles of about 25 pounds or less, as dense as possible
- ◆ Tie with a strip of plastic cut from the bale cover itself (don't mix plastics)
- ◆ Keep plastic dry

How to prepare nursery pots and trays:

- ◆ Empty pots; brush off loose dirt
- ◆ Sort by number printed on the bottom of the pot (store unnumbered pots in separate box or bag)



There is no charge for these special one-weekend-only recycling collections, which are sponsored by:

**Snohomish Conservation District,
Snohomish County Economic Development,
Snohomish County Solid Waste,
RE Sources for Sustainable Communities,
Silverdale Recycling Ltd., and
Washington State University Extension**

If your business generates large quantities of greenhouse plastic, drip tape, or other plastics, you might qualify for on-site collection. Call the RE Sources agricultural plastics recycling program at 800-760-8434 for details.

You can also find information on-line at:

<http://www.re-sources.org/wastereduction.htm#agplastics>

Safer Grass Expo

Katy Watts, the creator and researcher behind www.safergrass.org, is coming to Western Washington for two days this month. Katy is a Colorado-based researcher who has been studying the effects of sugars on non-structural carbohydrates related to horse health.

Two days - two classes

Katy will be giving two presentations. The first one will be in Preston on Friday, April 20th, from 1:00 p.m. to 5:00 p.m. This class is geared for veterinarians, farriers, agency staff, and other professionals in the equine industry. Katy will cover factors affecting sugar content of forage and management of the carbohydrate-intolerant horse.

The second class will be held in Monroe at the Evergreen State Fairgrounds 4-H building. This is an all-day class with lunch on your own. The cost is \$25 per person or \$40 per couple/household.

Here are some questions you will explore:

- ◆ Have you been wondering about the sugars in grass and how this affects your horse's health?
- ◆ Do you hear conflicting information on whether morning grazing is 'safer' than evening?
- ◆ Are the horses in your 'diet pen' still foundering?
- ◆ Do you have horses with insulin resistance/Equine Metabolic Syndrome, Cushings, or laminitis?
- ◆ Are you concerned that your horses may be at serious risk for metabolic disease?
- ◆ Do you know how to choose hay appropriate for your horse?

For more information on managing pastures for grass and better horse health, join Katy and these sponsors for this jam-packed day:

- ◆ **Horses for Clean Water**
- ◆ **King Conservation District**
- ◆ **Pierce Conservation District**
- ◆ **Snohomish Conservation District**
- ◆ **WSU Extension, King County**
- ◆ **WSU Extension, Snohomish County**

To register for the **Preston class**, call King Conservation District at 425-277-5581, ext 125. or email Roseanne.Campagna@kingcd.org.

To register for the **Monroe class**, call Snohomish Conservation District at 425-335-5634, ext 4 or email workshops@snohomishcd.org.

If you have questions on either event, please call Alayne Bickle, Executive Director of Horses for Clean Water, at 425-432-6116 or email: Alayne@horsesforcleanwater.com.



Come join me for a jam-packed day!



This pair of customers is heading home to plant their new trees. The little conifers are just her size!

2007 Tree & Shrub Sale

Thanks to all the great volunteers, groups, students, and crews that came out for a bitter cold week at the fairgrounds to help us prepare for our sale in March.

As always, we suffered many complications, including a crop failure on the sequoia, our entire load of conifers rejected for lack of 'homeland security paperwork' at the US-Canadian border, a snowstorm, and the weeklong cold temperatures. What a hardy bunch of volunteers we had though, including Margaret Bridge, who showed up faithfully every day with a smile on her face! We also had a kind-hearted volunteer (Joan Olson) who showed up Friday morning with an entire box of hand warmers!

We couldn't pull off this big event without the dedication of so many folks. We have a small staff, with other job responsibilities, and spending the week meeting and getting to know so many like-minded individuals and our (mostly) happy customers makes it all worthwhile!

Thanks again, and we hope to see many of you next year!

Lois, Ryan, and the SCD staff

Thank you

WSU Master Gardeners: Don Bloom, Terry, Mary, etc.
Mike's crew, Stillaguamish Tribe Banksavers
Deb Schuldt's class, Sky Vally School in Monroe
Margaret Bridge
Chad & Claudia Pompella
Aleta Mueller
Elaine Campbell
Joan & Dennis Olson
Ryan Williams
Pam Pritzl, Friends of Camano Island Parks
Julia & Joe Sohlberg
Darryl & Zack Bayes
Dena Petersen
Ann Buzaitis
Pam Grudin
Jim Herron
Conrad Olsen
Bill Best
Josh & Josh's Mom
Washington Native Plant Stewards: Stan Lundgaard, Janet Heineck, Rita Moore and Fred Hodge
and several other folks whose names we didn't catch!

Announcements

April

- ♦ **Safer Grass Expo - April 20, 21 - Monroe/Preston, (See page 3)**
- ♦ **Home & Garden Show - April 20, 21, 22 - Everett Events Center**
Come see the District's booth on Rain gardens.
- ♦ **Earth Walk Adventure - April 21, 10 AM to 2 PM - Marysville**
Jennings Nature Park and Marysville Wastewater Treatment Plant. Highlights include: Guided Bird Watching at Ebby Slough, Qwuloolt Marsh and the Sewage Lagoon; aquatic bugs of Allen Creek; testing water quality; and revegetating Jennings's Nature Park. Dress for the weather and wear good walking shoes. Please RSVP: Contact Cara Ianni at cara@stillysnofish.org or 425-252-6686.

May

- ♦ **Firewise Event - Sat. May 5, 8 AM - 4:30 PM, Cottontree Inn, Mt Vernon** - This interactive workshop is for those all who are contemplating becoming Firewise leaders or are well-established. Topics include understanding the risk factors, community action/inaction, a demonstration and much more. The Skagit Conservation District is offering scholarships to cover over-night lodging cost at the Cotton Tree Inn. Register online at <http://www.skagitcd.org/> or call the office at (360) 428-4313. Scholarships will be handed out on a first come-first served basis.
- ♦ **Friedman Farm Tour - May 12, 10 AM and 1 PM (page 1)**
To register, email workshops@snohomishcd.org. Please put your name, phone number, email address, and number attending in the email.

June

- ♦ **Plastic Recycling Events** (see article on page 3)
Former Marysville Sale Barn - **June 9, 9 AM-2 PM**
Monroe Fairgrounds - **June 10, 9 AM-2 PM**
- ♦ **Agricultural Field Day - June 9, 8 AM-3 PM**
Join Gerry and Stacy Labish at "Rivers End Ranch" to learn about raising baby calves, ultrasound for meat quality, facility layout/management, marketing beef, and hay/haylage production, plus booths from other groups. Lunch provided. Cost is \$15 payable at the door.
To register, call or email: 425-335-5634 or workshops@snohomishcd.org. Please put your name, phone number, email address, and number attending in the email.
- ♦ **Natural Resources Youth Camp - June 24-30, Randle, WA, \$300**
To learn more, go to the camp website: www.nryc.org.

2006 District Award Winners

At the Open House in February, Snohomish Conservation District honored these landowners for the progress they have made in implementing best management practices on their properties, and for supporting the district by hosting farm tours and attending other district events. Congratulations to all of our 2006 winners!

Cooperators of the year

Small Farm

Event Horizon Farm, Dave Lucas & Marla Hamilton Lucas

Dairy

Stangeland Farms

Commercial

Bellfire Stables,
Mike & Nona Clifton

Wildlife Farm

Polestar Farms Inc,
Mark Salser & Meika
Decher

Merit Farms

Greg & Leil Morgenroth
Daniel & BJ Lee
Flip & Mary Hudon



Mike and Nona Clifton receive the 'Commercial Farm of the Year' award from Bobbi Lindemulder, Lead Farm Planner.



Partnership Awards

Roger Nichols, USDA Forest Service,
Darrington Ranger Station
Jim Brown, WA Association of Conservation
District's Plant Material Center, Bow
Curt Moulton, Washington State University
Extension, Snohomish County

Employee of the Year

Alan Shank (pictured at left)

Website Available on Disposal of Carcasses

Mount Vernon, WA

A new website (www.mortcompost.info) is now available that provides information and resources for farmers, county extension agents, university faculty, and the general public about on-farm mortality composting. On-farm composting is an environmentally and economically sound alternative to conventional ways of disposing of animal carcasses. A full-grown cow can be fully composted in two to four months with minimal cost, labor, and equipment.

In any livestock farming operation, animals die from old-age, injury or disease. The cost of commercial disposal is often prohibitive while disposing of the animals on-farm can cause bio-security issues, attract pests, and use valuable land space. "Washington State farmers need another option for disposing of livestock mortalities" said Caitlin Price, project coordinator. "For many, it's no longer just an alternative, it's a necessity".

The On-Farm Mortality Composting Research and Education Project is a joint effort between the BIOAg program at Washington State University (WSU) and the Washington Department of Ecology, with additional support from the Washington Department of Agriculture. The purpose of this project is to promote on-farm composting as a viable method to dispose of dead livestock over 300 pounds. The project focus is both on-farm research and education.

The research portion of the project consists of six trial sites in Washington State that range in size from one to over twenty animals. One site is at the WSU compost yard in Pullman. The other five sites are in Skagit, Adams, Grant, and Yakima counties. These trials compare management techniques and the effects of climate and material differences (by region), on the rate of carcass decomposition.

The education portion of the project consists of field days at farm trial sites in the spring, county extension bulletins, print media, classes and presentations, and the website. The website and printed materials will be available to farmers, educators, and state agencies to share information about the best composting methods in different regions and situations.



Many resources on mortality composting are available from other states and universities, but until now nothing was specific to Washington. The new website is a concise and accurate source of information including clear instructions, photo galleries of the trial sites, material and climate considerations, regulations, frequently asked questions, and links to further research.

Price, now living in Mount Vernon, Washington, became interested in this topic while still a student at Washington State University. She decided to create a website after doing her own research and finding that information on large animal mortality composting was difficult to locate. "Farmers don't have time to sort through pages of information" she said. "They need information that is easy to find, and easy to use".

For more information on this topic, contact:

Caitlin Price
On-Farm Mortality Composting Research
and Education Project
(206) 920-3732

pricecm@wsu.edu
www.mortcompost.info

Finished compost is great for helping your pumpkins grow big!



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