

SNOHOMISH CONSERVATION DISTRICT

The Nexus



The City Chicken Craze Takes Hold

by Donna Gleisner, *The Written Edge*



Cute chicken coop from the Riverside Neighborhood Coops de Chicken Tour last summer in Everett. Photo by Ritch Carbaugh.

In case you haven't noticed, chickens aren't just for farms anymore. According to a June 2009 Los Angeles Times article, raising backyard chickens has been gaining ground all across the country, from Baltimore to Seattle, Chicago to Los Angeles. The city chicken craze has steadily picked up speed since the early 2000's. Today, almost two million chicks are delivered to homes and farms by the Murray McMurray Hatchery, the world's largest supplier of rare-breed chicks.

City Chickens 101

Seattle Tilth, a nationally recognized non-profit educational organization, coordinates an annual Chicken Coop Tour where visitors can check out a variety of coops and ask questions of chicken owners. They also teach a very popular 'City Chickens 101' workshop four times a year, where people learn what's involved in caring for a small flock of chickens. With the demand so high, more classes are being planned. (Classes can be found at <http://seattletilth.org/>)

Top Ten Reasons to Raise Chickens

adapted from myPetChicken.com

- ✓ Great-tasting nutritious eggs
- ✓ Chickens have personality galore – seriously!
- ✓ Get one step closer to sustainable living
- ✓ A healthy lawn without chemicals
- ✓ Kitchen scraps are a chicken's feast
- ✓ Create a more balanced compost pile
- ✓ On-site leaf/weed/grass clipping by the hens
- ✓ Low maintenance companion for your family
- ✓ Show children where their food comes from
- ✓ Be the coolest neighbor on your block

In the early 1900's, just about everyone raised chickens as a matter of course. Flash forward almost one hundred years to 1990, and the opposite was true. Even the 1994 Martha Stewart Living magazine article showcasing Martha and her chickens was considered 'unglamorous'. So why the resurgent interest in chickens?

The Meaning of Chickens

Some people fondly recall childhoods where grandparents and even parents raised chickens. They have a desire to rekindle those memories now and 'bring a little country' into their backyards. Others have chickens because they want more control over the food they eat and how those animals are raised. The locally-grown, urban farm movement is the focus for some.

Others like the ultimate ease and unexpected fun of raising chickens as pets or semi-pets (who knew they had personality?!). Plus, they provide the wonderful side benefit of nutritious, fresh eggs. Some parents want their children to know where their food comes from, and to understand the cycle of life and death. Our depressed economy is another reason urbanites are growing their own eggs and meat.

Are You Ready for Chickens?

If you're considering raising chickens – whether you live within a city's borders, or in an unincorporated part of the county – it's important to know the following:

- ❖ Is it legal to raise chickens where you live?
- ❖ How many chickens can you legally have without a license/permit, and with one?
- ❖ What are the building and setback regulations in your area regarding chicken coops? Contact your city or county government for answers.
- ❖ Do you have enough space for a chicken coop?
- ❖ How many chickens do you want (how many eggs can you use every week?)
- ❖ What color eggs or variety of chicken do you want?
- ❖ Do you want chicks or adult chickens?

How to Care For Chicks



If you're going to start with chicks, you'll need a young chick brooder, which can be as simple as a sturdy cardboard box or a small (rabbit-size) animal cage. Place it inside your house or garage - somewhere protected from the weather.

Wood shavings work best on the floor as traction for little legs. Keep the temperature at 90 to 100 degrees F. for the first week, then decrease it five degrees each week. A 100-watt bulb pointing in one corner (not over the whole brooder) works well.

Winter 2011

Serving Snohomish County and Camano Island

70 Years and Growing!

2011 marks a special anniversary for the Snohomish Conservation District. Initiated into state law in 1941, the District has been helping urban and rural landowners for seventy years.

Many changes have occurred in those seventy years, but the Conservation District has remained a constant presence in the protection and enhancement of natural resources, youth and adult education, native plant distribution and water quality improvements.

To celebrate this 70-year milestone, the District is hosting an anniversary event in late March and a photography contest. Watch our website and Facebook page for updates and new events and plan to help us celebrate!



Inside

- ❖ Plan for Pastures Now
- ❖ Pull-out Section
- ❖ Mortality Composting
- ❖ Winter Disaster Plans
- ❖ Staff News
- ❖ Farm Bill Options
- ❖ Free Manure Program



City Chickens *-continued-*

Your chicks will also need:

- ❖ Food and water, such as chick crumbles/starter and a chick waterer
- ❖ Time to get used to being around people, pets, noises, etc.
- ❖ Outside time, so section off part of your yard where chicks can explore, scratch, etc. (Make sure you can catch them when it's time for them to come in! Throwing some feed inside should help encourage them in.)

A Home for Your Hens

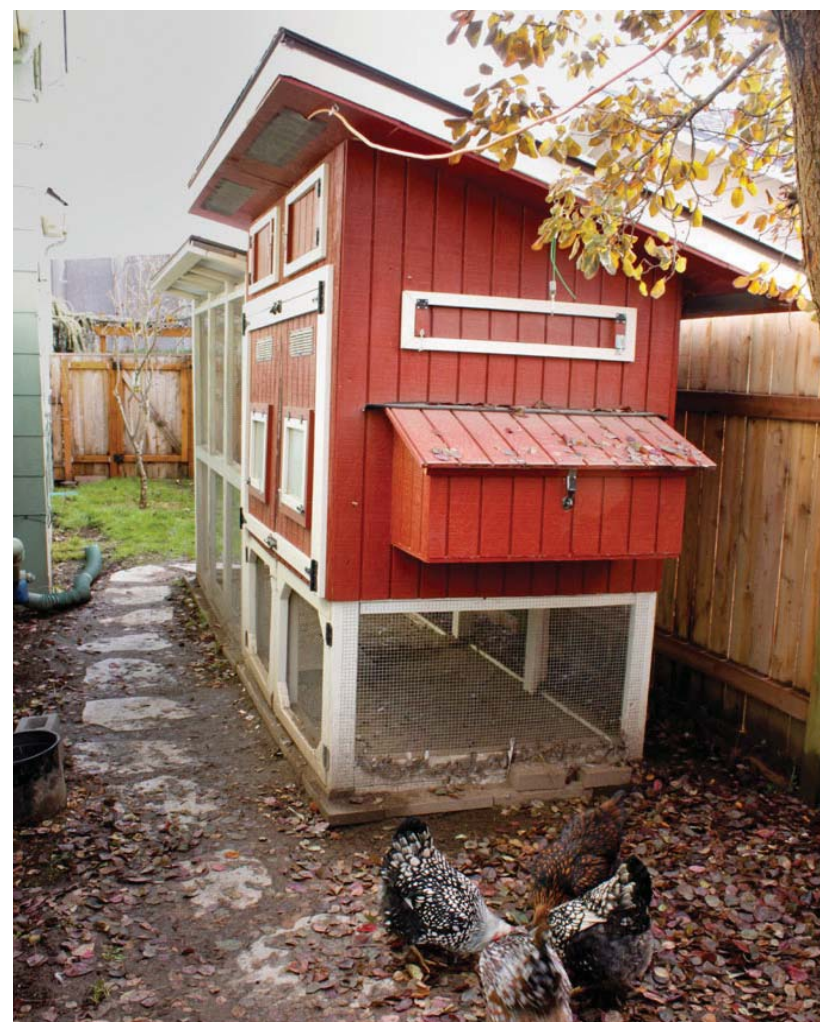
Once your chicks have feathered out (in about 60 days), you'll want to move them from the brooder into a chicken coop. A coop usually includes nest boxes for laying eggs, and perches for sleeping and resting. You can buy a ready-made coop, or build your own, and make it permanent or portable. Plans and designs abound in books and on the Internet. You can be thrifty, spending \$100 or less, or go all out and spend \$1,000 or more.

Space is an important consideration for you and your chickens. The rule of thumb is you will need about two to three square feet per chicken inside your hen house. Build it tall enough for you to walk in or hinge the roof or sides so you can reach all the way in. This will make it easier for you to clean, gather eggs, and check the health of your flock.

When deciding on the perfect spot for your chicken coop, be sure to put it on high ground, away from drainage areas and wet patches. Whatever design you choose, add gutters and downspouts so that rain runoff is directed away from your coop and chicken run.

While this might sound silly for a smaller coop, it helps keep things dry. For instance, if your coop is five feet by five feet, or 25 square feet, and the annual rainfall for your area is 35 inches, the total amount of rain flowing off your coop roof is 547 gallons of water a year - and that means lots of mud!

In your coop's attached, fenced pen (or run), the space rule of thumb is four to five square feet per chicken. Putting a roof on the run is critical - it helps keep everything dry (as do the gutters and downspouts), which helps your chickens stay free of disease.



The Red Roost Inn is home to four chickens in this Everett backyard.

Chicken Coop Essentials

Your adult chickens will need the following to stay safe, healthy, and productive:

- ◆ **Clean Flooring/Litter.** Chickens technically do not urinate. They pass urine with their feces. Keeping this ammonia smell at bay is important for odor control and the health of your chickens. Wood shavings, wood chips, sawdust or straw all work well inside the coop for easy cleaning and good hygiene. Many local chicken owners like using sand as the run floor due to our rainy climate.

You can pick up chicken poop on a daily basis, every other day or even weekly - it depends on your preference as well as the size of your coop and the number of chickens you have. Replace all litter with new litter every month to every three months, again depending on the size of the coop and the number of chickens. Some people use the 'deep litter' method, adding new bedding over the old and letting it build up over time. As it slowly decomposes, it heats the coop up and keeps the chickens warmer. This method involves less frequent cleaning, however, wear a mask and keep children away from the coop on cleaning days to avoid inhaling dust.

- ◆ **Food and water.** Most people use chicken layer feed or pellets. Use a dispenser that triggers food each day in a specific amount. Additional dispensers for grit or oyster shell are useful, too. This provides enough food for your chickens so you can leave for a weekend, but have a neighbor check on them anyway. Hanging feeders tend to be less messy and create less waste. Chickens also need access to fresh water daily.

- ◆ **Treats.** This includes fruit, yogurt, vegetables, cottage cheese, bread, bugs, chicken scratch (cracked corn, milo, wheat), flax, sunflower seeds, etc. Some owners let chickens eat most of their kitchen food waste, and in turn add the chicken manure and bedding to their compost pile. Too much food scraps can attract rodents though so feed only what will be eaten in a day.

- ◆ **Lighting.** An electric light source is a necessity to trick your hens into laying. Light bulbs can also keep the coop warmer in cold weather.

- ◆ **Ventilation.** This is the most important piece to odor control. Make sure there are secure windows in your coop for cross ventilation. They should stay open even during the winter months to help keep your coop odor-free.

- ◆ **Yearly Sanitation.** This requires the removal of everything in the coop, once a year, so you can give it a 'top to bottom' scrub down. It's also a good idea to thoroughly clean the waterer, too. Again, wear a mask.



Wolfgang Bauer with one of his backyard chickens.

Beware of Predators

Keeping poultry will no doubt attract predators. Chicken coops provide predators with free room and board, great hiding places, and access to free food and water. In other words, easy-pickin's!



Here is a line-up of the usual suspects

Rats and Mice

Rats and mice live everywhere, including near you, even if you never see them! Rodents don't like to be in open areas, so mow your grass, clip back your bushes and clean out wood and/or junk piles to deprive them of hiding places. Rodents have extremely strong jaws and can chew through wood, some plastic and alas, feed bags. To avoid this, make sure all chicken food is stored in strong plastic or metal containers, with a tight-fitting lid. And make sure your coop and run are rodent-proof. Lastly, make sure there are no other areas containing water on your property (buckets, tires, flower pots, etc).

Unleashed Dogs, Feral and House Cats

Sometimes it's a neighborhood dog or cat that is terrorizing your hens. This is when good fencing becomes important. Woven-wire fence or an electric fence about ten feet away from the coop and chicken run or access areas (if they are "free range") will help keep a good distance between predator and prey. If your neighbor's dog is a "digger" consider burying chicken wire around the area; this could also work for raccoons.

Coyotes, Raccoons, and Other Critters

Locking up your chickens at night is the best way to protect them from predators. However, 'handy' raccoons have been known to pull the chicken wire off coop windows to get the birds. Keep all windows and entry points high, and make sure there are no easy ways onto the coop roof via a fence, tree or other structure. If your chicken coop is on the ground, laying chicken wire on the ground around the perimeter of the coop will keep raccoons at bay.

Predatory Birds

Owls and hawks will also eat chickens. Using overhead bird netting in open runs helps deter avian chicken thefts. Also, consider making your chicken runs narrow. The wide wing span of hawks and larger owls will discourage their raids.

Compiled by SCD Farm Planner Megan O'Brian

Photographs on this page by Donna Gleisner.

Watch for the next issue of the NEXUS for more on backyard chickens!

The Season for Grass

by Alan Shank, Certified Farm Planner

Nothing helps getting through our cold, wet winters better than actively preparing for spring's promise of sun and warmth. Gardeners know this - they cheer themselves in winter by scouring seed catalogs and visualizing spring gardens full of flowers and produce. If you're a horse or livestock owner, you too can lift your spirits by planning for greener pastures.

Why Would You Want a Healthy Pasture?

- ❖ You're either paying taxes or rent for your pasture - that's a fixed cost whether you're growing weeds or grass
- ❖ You can grow two to four tons of grass per acre and save money. (Hay costs an average of \$200 per ton. That's \$400 to \$800 per acre that you don't have to spend on hay.)
- ❖ Some weeds are toxic to livestock and could result in an expensive veterinarian visit
- ❖ Healthy grass uses and filters manure nutrients, and keeps sediment and fecal bacteria out of our streams
- ❖ Horse or livestock quality of life
- ❖ Aesthetics



Test Your Soil – Now!

Good grass grows in good soil. You can start improving your pasture by assessing your soil below and above the grass line. Take a soil test now to determine its fertility needs. That way, come February or March, you'll be prepared with the right type and amount of fertilizer.

January begins the countdown to the start of the grass growing season. Proper timing of fertilizing when grass is growing prevents wasting any fertilizer by missing the optimum application window.

In the Winter 2010 issue of the Nexus, I wrote an article on T-Sum 200. T-Sum 200 is a formula for accurately determining when existing pasture grass will start growing in your location. (See "How to Know When Your Grass Will Start Growing" for details at <http://snohomishcd.org/newsletters> - page 3.)

T-Sum 200 usually arrives in Western Snohomish County around February 7, but has arrived as early as January 23, and as late as February 23. Contact Conservation District farm planners to find out when the T-Sum 200 date will be in 2011.

Inspect Your Pasture Plant Population

One of the biggest decisions you'll make is whether to totally renovate your pasture, or just improve the existing grass. Renewing an existing pasture is easier and less costly than starting over. Total renovation should be a last resort.

If your pasture contains mostly desirable plants, simply work to maintain them. If your pasture is about half desirable plants, think about weed eradication and over-seeding. But if your pasture is mostly weeds, it's probably best to renovate it. If you do decide to start over, renovate a section of pasture at a time (some in spring, some in fall). Then you can use at least part of it throughout the year.

Fall is the best time to renovate or reseed because the ground is dryer and you'll be taking livestock off pasture for the winter anyway. Select a pasture seed mix developed for the Northwest. For the best grass species for your conditions, see the Web publication "Pasture and Hayland Renovation for Western Washington and Oregon" at <http://cru.cahe.wsu.edu/CEPublications/eb1870/eb1870.pdf>.

Identify the most problematic weeds, so you can determine whether tilling, mowing, pulling, or herbicides is the best way to get rid of them. If an herbicide is appropriate, learn which one to use and the proper time of year to apply it. Herbicides work best when weeds are actively growing. That may be in the spring or fall, depending on the plant. Consult an agronomist at a farm supply store or consult the "Pacific Northwest Weed Management Handbook" on the Internet at <http://uspest.org/pnw/weeds>.

Place for a Paddock

To improve year-round pasture management, you'll need a place to keep livestock at various times, such as when new grass is being established or needs a rest. If possible, isolate livestock to one pasture or paddock so the rest of your pastures can recover from trampling or overgrazing.

If livestock are still on your pasture when it's overgrazed with too many weeds, bare spots or muddy areas, start planning a winter paddock or sacrifice area. This is where your animals can be comfortably away from mud and off the pasture. Ask a District farm planner to visit now and help determine the best paddock location and design so you are ready to install one come spring time.

So go ahead; dream, scheme and plan for greener pastures. If you have any questions or need more information, contact District Planner Alan Shank at alan@snohomishcd.org or 425-335-5634 ext 120. Check out the next two pages for timely tips to keep your pastures green, your animals healthy, and your chores easy.

Noxious Weeds to Watch Out For

Many weeds are poisonous to livestock. In most cases, livestock poisoning from plants occurs when there is little else to eat in the pasture (due to overgrazing and poor management), or the hay you are using contains toxic plants.

The Central Washington Animal Agriculture Team has a great fact sheet called "Selected Poisonous Plants of the Pacific Northwest" (#1007-2005) available at <http://www.animalag.wsu.edu/forages/Kerr-PoisonousPlants1007-2005.pdf>.

A few common weeds to watch for in the Northwest include Tansy Ragwort, Bracken Fern, Buttercup and Common Groundsel. It is important to note that these are not very palatable to livestock. Poisoning usually occurs when the plants are mixed with hay, or when an animal is turned out in a pasture with very little else to eat. The best way to prevent poisoning livestock is to keep pastures well managed (to prevent weed issues) and to use good quality forage.

Tansy Ragwort contains a liver toxin. Signs of poisoning can appear months after the plant was ingested. Symptoms include lethargy, poor appetite, weakness, nervousness, colic, aimless wandering, blindness, abdominal distension, incoordination, jaundice, coma and death from liver failure.



Mature tansy in a field.



Know Your Tansy

The tansy rosette. This is the form you will see the first year.

Bracken Fern causes thiamin deficiency in single-stomach animals like pigs and horses. Signs of poisoning include weakness, depression, muscle tremors, incoordination, decreased heart rate, poor appetite and weight loss, and convulsions. In ruminants like cattle and sheep, Bracken Fern suppresses bone marrow activity. Symptoms include a marked fever, bloody urine and hemorrhage from multiple orifices.



Bracken Fern

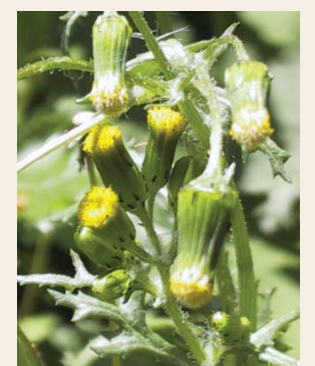


Buttercup

Buttercup is toxic when consumed fresh, but not when dry. Signs of poisoning include drooling, nasal discharge, diarrhea, colic, depression or excitation, labored respiration, a wobbly gait and sometimes blindness. Buttercup also contains a chemical that causes blistering and inflammation of tissues.

Common Groundsel is in the same family as Tansy Ragwort and also contains a liver toxin. Signs of poisoning are similar to those caused by Tansy Ragwort.

Livestock poisoning from Common Groundsel is most common when it is consumed with hay. Check hay carefully for the seed heads, which will be little white puffballs (similar to dandelions).



Common Groundsel

Noxious Weed Resources

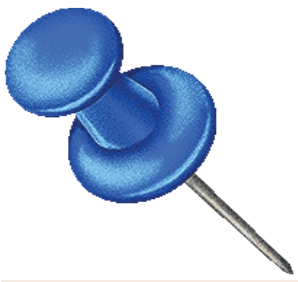
Snohomish County Noxious Weed Control Board

Call 360-435-7830 or visit the website:

http://www1.co.snohomish.wa.us/Departments/Public_Works/Divisions/Road_Maint/Noxious_Weeds/

Washington State Noxious Weed Control Board

Visit the website: <http://www.nwcb.wa.gov>



Farm Pullout

Post this on your farm bulletin

January

- ❖ Test your soil to determine fertility needs for the year
- ❖ Restrict livestock from wet pastures and surface waters
- ❖ Collect manure and store it covered
- ❖ Hang nest boxes now for orchard mason bees and birds, and be sure birds have water available during freezes
- ❖ Check with the District at the end of the month for T-Sum 200 status



What is T-Sum 200?

T-sum is an indicator of when existing grass will begin to grow in the spring. It is based on each day's high and low temperature, starting on January 1.

Soil temperature mirrors air temperature so instead of putting a thermometer in the ground, you use the 'T-sum 200' formula. Find out more by reading Alan's article in the winter 2010 Nexus on-line at: <http://snohomishcd.org/newsletters>.



February

Even though grass begins to grow now, February is a bit early to be grazing. Wait until the grass is at least six inches tall. That will probably not be until March. It's also too cold to seed now.

- ❖ A small portion of compost can be applied, but watch the weather - you don't want frequent rains to wash it away
- ❖ Make sure you have portable electric fencing to divide your pasture into smaller paddocks when the fields are ready to be grazed
- ❖ Order plants for windbreaks, buffers, wildlife habitat and restoring streams
- ❖ If your manure pile is getting large, contact the District's manure share program manager to find a user, hang out a road sign, or place an ad for free manure



March

Begin grazing in March when your grass is at least six inches tall and soil is no longer saturated. If it is saturated, limit animal traffic on the grass. Introduce horses gradually to grass to prevent laminitis.

Once you start grazing, it's wise to practice rotational grazing, moving animals from one area to the next after they've grazed the grass down to three or four inches. This maximizes the use and production of grass and helps it recover.

- ❖ Begin rotational grazing if warranted (if your grass is higher than six inches)
- ❖ Plant native trees and shrubs
- ❖ Restrict livestock access to surface water, wells, and septic drainfields
- ❖ Cut or mow weeds when buds appear
- ❖ Review your farm plan for fertilizer and lime needs for the upcoming season

April

If you are planning to reseed or broadcast seed over an established pasture, try to do it around April 1st, and no later than mid-April. New seedlings will need moisture to sustain them. Planting in May could require irrigation to keep the grass viable, depending on precipitation. If you're tilling up an old pasture stand, now is a good time to spread lime and till it into the soil.

It's best to keep livestock off a newly seeded pasture until fall or next spring. Use the "pull test" to determine if grass is ready to graze. If the grass blade breaks rather than pulling up the roots, you can start grazing. Be sure not to graze new seedlings too frequently, and don't let them get below four inches tall.

- ❖ Apply fertilizer or spread compost if soil isn't saturated
- ❖ Apply 35% of total amount of fertilizer recommended by soil tests
- ❖ Reseed or overseed pastures
- ❖ Reseed confinement areas

May - Watch that grass grow!

- ❖ Rotate animals off pastures when grass height is down to three inches
- ❖ Mow pastures after grazing to ensure all plants are 3" tall and to prevent weeds from going to seed
- ❖ Don't allow livestock back on pasture until grass is six inches tall
- ❖ Apply up to 40% of annual fertilizer needs. Add compost now too
- ❖ Spread manure and drag pastures to evenly distribute it



out Section

in board for future reference



June

- ❖ Avoid under-grazing -- don't allow grass to "get ahead of livestock"
- ❖ Mow pastures to prevent them from going to seed and losing nutritional value, or set aside some pasture to grow hay
- ❖ Continue weed pulling or treatment, mowing, and dragging

July

July and August are generally dry months when grass is dormant. Don't let animals graze grass below three inches in height. If your pasture is small, take your animals off entirely until the grass begins to grow in September.

- ❖ Continue to rotate, drag, and clip pastures
- ❖ Check for erosion where livestock congregate and move feed, water and mineral blocks away from gates and shade to more evenly distribute your animals
- ❖ Plan for a winter confinement area and footings
- ❖ Stay vigilant on weed control, it's imperative to keep weeds from going to seed
- ❖ Purchase additional feed (hay) now



August

- ❖ Avoid overgrazing as grass growth slows
- ❖ Apply remaining 25% of annual fertilizer needs
- ❖ Do not feed animals hay or grain on the ground when the soil is dry (They will create bare spots where weeds can invade; horses can get sand colic from ingesting dirt in their feed)
- ❖ Plan to reseed -- order seed, lime and fertilizer and reserve equipment now (remember, total renovation should be done only as a last resort when pastures are unproductive or unhealthy for your animals)
- ❖ Purchase additional feed (hay) now

Late August/September

- ❖ Spread composted manure and seed new grass or broadcast seed over established grass
- ❖ Spread seed just before predictions of a light rain. (You have until about October 10th to seed before the soil becomes too cold and daylight too short for seeds to germinate)
- ❖ Apply some lime to increase the pH of your soil. (You can lime any time of year but fall is the best time. Lime takes time to react with soil chemistry). If you haven't already, apply the remaining fertilizer needs for the year
- ❖ Install or check existing gutters and downspouts on buildings adjacent to livestock pens
- ❖ Purchase additional hay if you haven't yet
- ❖ Make sure your sacrifice areas are ready for your animals. Order hog fuel, chips or other footing material before paddocks get muddy.

October

The rain begins! It's time for livestock to be removed from winter pasture. This rest also gives lime time to alter the soil while the pasture is not in use.

- ❖ Restrict livestock from pastures when soil is saturated
- ❖ Prevent manure nutrient run-off into groundwater with buffers around animal areas (size of buffer will vary)

- ❖ Store manure covered and at least 100 feet from any well to prevent contamination
- ❖ Collect manure from horse paddocks twice a week to prevent nutrient leaching, runoff, or manure build-up
- ❖ Clean gutters

November

- ❖ Continue to keep animals off pastures when saturated
- ❖ Make sure manure stays covered -- have extra tarps handy if necessary
- ❖ Use fallen limbs and branches from winter storms to create brush piles for wildlife
- ❖ Keep water troughs/tanks from freezing (clear ice if needed)
- ❖ If weather predictions look daunting, this may be the year to think about investing in a generator

December

Prepare for winter storms and the damage they can cause. Do you have all you need to keep your family and your animals fed and warm? Stock up on batteries, feed supplements, pet food, and anything else you may need if you

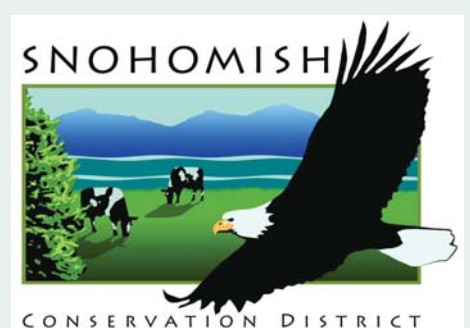


can't get into town for a couple of days. Make sure propane, diesel and gas tanks are full. Is the chain saw ready in case a wind storm causes tree or limb damage?

- ❖ Continue to restrict livestock from pastures when soil is saturated
- ❖ Protect wetlands from livestock access to prevent damage to wetland functions and habitat
- ❖ Store manure covered
- ❖ Make sure birds and other wildlife have access to water during freezing weather

Snohomish Conservation District
528 91st Ave NE, Ste A
Lake Stevens, WA 98258
Phone 425-335-5634, ext 4
FAX 425-335-5025

Website: www.snohomishcd.org



After an Animal Dies, Then What?

by Caitlin Price, Small Farm Planner

Our wet, windy and damp winters can be very hard on aging and sick animals. Winter can also be a difficult time to bury a carcass on your farm, or remove it. Mud makes it difficult to drive through pastures and around barns, roads are slick, and the groundwater table is high. If you believe you may lose an animal this winter, think ahead about where to bury or compost it on your farm, or if you would prefer to have the animal picked up for rendering or cremation.

Several businesses offer rendering or cremation services in Snohomish County (see “Resources” - bottom right). When an animal carcass is rendered, the various parts are made into products such as pet food and fertilizer. If you choose cremation, you have the option of a private or communal cremation. In the case of a private cremation, you can choose to have the ashes returned to you, or not.



Laws Governing Disposal

Snohomish County code requires that the carcass of a dead animal be properly disposed of within 24 hours of death. If you choose to bury an animal on your farm, it is important to know the applicable state and county regulations.

Washington State law requires that “a person disposing of a dead animal by burial must place it so that every part is covered by at least three feet of soil; at

a location not less than one hundred feet from any well, spring, stream or other surface waters; not in a low-lying area subject to seasonal flooding or within a one hundred-year flood plain; and not in a manner likely to contaminate groundwater” (WAC 246-230-121).

Snohomish County code has similar requirements, and adds that an animal must be buried in a manner to prevent other animals from digging up the remains, and enveloped in unslaked lime (in cases of death from a communicable disease). For questions, contact Peter Jorgenson at the Snohomish County Health District’s Environmental Health Division at 425-339-5250.

On-Farm Composting

Composting dead livestock on your farm is also a viable option. Most on-farm composting operations (whether they include dead livestock or not) are exempt from reporting or permitting. If compost is being distributed off your property, or the total amount of finished compost and raw feedstocks is greater than 1,000 cubic yards, additional reporting or permitting may be required.

When done correctly, composting dead livestock is a low cost, safe, and effective method of disposal. An additional advantage of composting is that nutrients stay on your farm in the form of a valuable soil amendment. While the process is simple, it does require some basic knowledge of compost principles. If you are considering a carcass compost pile, you are encouraged to contact the District office for additional information or assistance.

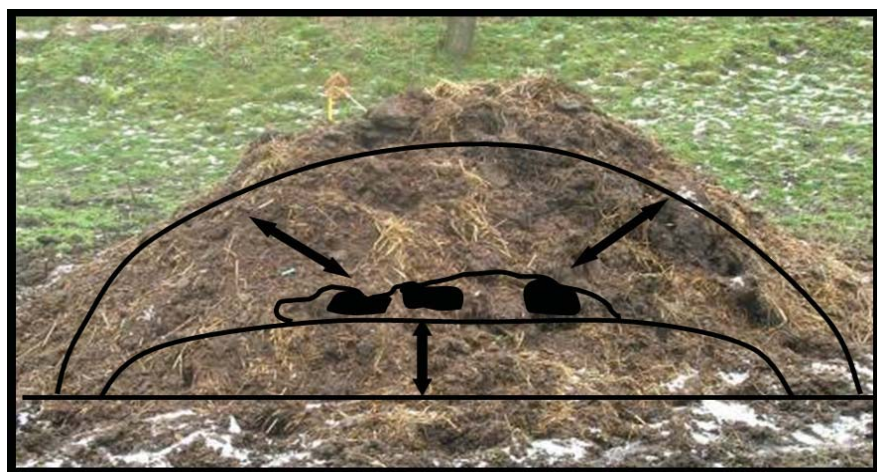


Diagram of a compost pile with a carcass. Leave a minimum of two feet of material on all sides of the carcass and keep adding if it subsides.

Key Steps to Successfully Compost Dead Livestock

1. Location

Choose a well-drained site, at least 300 feet from any stream, lake, pond or well. Also consider the location of neighbors, other animals, and access roads. Be prepared to leave this compost pile alone for a full year if necessary, and make sure it is accessible in case you need to cover it with more compost material.

2. Building the Pile

Start with a base of absorbent high-carbon material, such as sawdust, shavings, or old hay, that is two to three feet deep. If high moisture or poor drainage are concerns, a base of large wood chips or similar coarse material under the primary composting materials will increase air flow and drainage. Place the carcass on this base so that it is at least two feet away from any edge.

3. Covering the Pile

Cover the carcass completely with two to three feet of high-carbon compost material, such as manure, bedding, old hay, silage, straw, and sawdust.

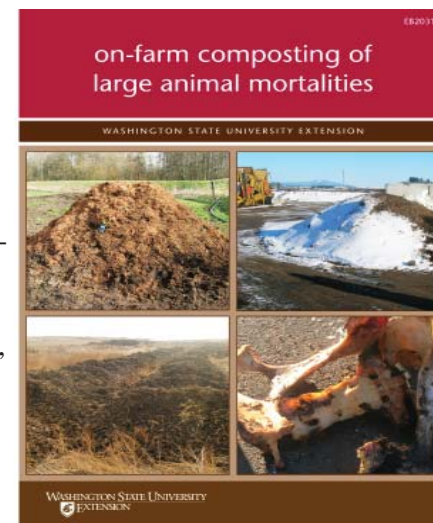
Again, make sure all edges of the pile extend at least two feet beyond any part of the carcass. This is critical - an exposed carcass will smell bad and attract pests!

4. Managing the Pile

After building the pile, watch carefully for signs of disturbance and settling. This is especially important during the first few weeks. It is normal for the pile to settle a little, but if any part of the carcass becomes exposed, immediately add more compost material. After about six to 10 weeks of composting, the pile can be turned with a tractor to speed up the composting process. Depending on the size of the carcass, type of materials used, and management, this compost will be ready to use in about four months to a year.

Managing the pile correctly is the tricky part! Look for additional information or contact the Conservation District before actually starting a carcass compost pile.

The WSU Extension Bulletin “On-Farm Composting of Large Animal Mortalities” provides a more detailed description of the process, and includes photos. Stop by the District office to pick up a copy, or download it for free at <http://cru.cahe.wsu.edu/CEPublications/eb2031e/eb2031e.pdf>.



For questions about compost methods or materials, or for help with setting up and managing a carcass compost pile, contact Caitlin Price at 425-335-5634 x 114 or caitlin@snohomishcd.org.

Resources

Livestock Mortality Resources

Washington State Department of Ecology: “On-farm Composting of Livestock Mortalities” at <http://www.ecy.wa.gov/biblio/0507034.html>.

Washington State University Extension: “On-farm Composting of Large Animal Mortalities” (EB2031e) at <http://cru.cahe.wsu.edu/CEPublications/eb2031e/eb2031e.pdf>.

Washington State Department of Agriculture: “Livestock Disposal Manual” at <http://agr.wa.gov/FoodAnimal/AnimalHealth/docs/LivestockDisposalManual10709.pdf>.

Snohomish County Environmental Health: 425-339-5250
http://www.snohd.org/Shd_EH/Default.aspx.

General Compost Resources

Washington State University Extension: “Backyard Composting” (EB1784e) at <http://cru.cahe.wsu.edu/CEPublications/eb1784e/eb1784e.pdf>.

To learn more about the compost process, be sure to attend the Country Living Expo, January 29, 2011 at Stanwood High School (see page 8). Caitlin will be teaching classes on both soil and compost.

Area Disposal Companies

These local businesses may be able to help in the event you lose an animal. The Conservation District does not provide recommendations for businesses or services; the following list is provided for informational purposes only:

- Q.A.R. Dead Animal Disposal: 800-924-8690. Rendering fee for one horse is between \$250 and \$500, depending on location. Accepts all small and large livestock, plus cats and dogs. Also provides cremation services, starting at \$1.10 per pound.
- Tri-County Dead Stock: 360-815-4219. Rendering fee for one horse is \$250. Rendering fee for a llama or cow is \$150.
- Longhorn (formerly Rawhide Haulin’): 253-686-7732. Rendering fee for one horse is \$325 to \$350, depending on the location and size of the horse.
- Petland Cemetery, Inc.: 800-738-5119. www.peturnspl.com. Offers cremation services. Will accept any animal, except cows. Costs vary depending on size of the animal and type of service (private or communal).

Are You Prepared for Winter Disasters?

by Melissa Michael, USDA Farm Service Agency

This time of year means the start of our rainy season and possible flooding, freezing, wind storms or other natural disasters. When you need assistance after a natural disaster, several programs are available through the U.S. Department of Agriculture's Farm Service Agency. Some of these programs are only available after a disaster is officially declared in Snohomish County by the Secretary of Agriculture. Other programs require that you have purchased one of two types of insurance through the U.S. Department of Agriculture prior to the disaster event.

Available Insurance/Assistance Coverage

- ❖ For insurable crops, producers must buy, at a minimum, catastrophic insurance through the U.S. Dept. of Agriculture's Risk Management Agency.
- ❖ For non-insurable crops, producers must buy Noninsured Crop Disaster Assistance Program coverage from the Farm Service Agency. This covers all non-insurable crops grown on your farm, including hay ground.

For more information or a list of local insurance agents, contact the Lake Stevens Farm Service Agency at 425-334-3131 ext 104. The deadline to buy insurance or assistance coverage for all spring planted crops will be March 15, 2011. In addition, most assistance programs also require that you fill out an annual Total Farm Crop Acreage Report.

Disaster Assistance Programs Requiring Coverage

1. Supplemental Revenue Assistance Payment Program (SURE)

This program is available to eligible producers on:

- ❖ Farms in disaster counties (including contiguous counties) that have crop production losses and/or crop quality losses during the crop year
- ❖ Farms which, during the calendar year, have at least a 50 percent loss of production because of weather

Disaster counties are included in a geographic area covered by a qualifying natural disaster declared by the Secretary of Agriculture. Snohomish County was designated for 2009 and may be designated for 2010.



2. Tree Assistance Program (TAP)

This program is for orchardists and eligible growers who produce nursery, ornamental, fruit, nut, or Christmas trees for commercial sale, that lose in excess of 15 percent mortality (after adjustment for normal mortality) because of a natural disaster as determined by the Secretary of Agriculture.

3. Emergency Livestock Assistance Program (ELAP)

This program provides emergency relief to producers of livestock (including honey bees and farm-raised fish) due to losses from weather or other conditions not adequately covered by any other disaster program.

4. Livestock Forage Disaster Program (LFP)

This is for eligible livestock producers with grazing losses due to:

- ❖ Drought, on land that is either native or improved pasture with permanent vegetative cover, or planted to a crop specifically for grazing
- ❖ Fire on rangeland managed by a federal agency, if the producer is prohibited from grazing the normal permitted livestock on the managed rangeland

Insurance on your grazing land is required to be eligible.



Flooded South Fork of the Stillaguamish River.

Disaster Assistance Programs Not Requiring Coverage

1. Livestock Indemnity Program (LIP) This program is for farms that have livestock deaths in excess of normal mortality due to hurricanes, floods, blizzards, disease, wildfires, and extreme heat or cold. Insurance requirements do not apply, however you must report livestock inventories before and after the disaster event.

2. Emergency Conservation Program (ECP) This program rehabilitates farmland and conservation structures damaged by wind and water erosion, floods, hurricanes, and other natural disasters. To be eligible you must produce a food, feed, or seed commodity, and have been affected by the disaster (program authorized for 2009 flood).

Contact Melissa Michael, North Puget Sound Farm Service Agency Director, at 425-334-3131 ext 104 or melissa.michael@wa.usda.gov.

Resources in a Disaster

Disaster, Traffic and Weather Alerts-

www.rpin.org

Weather Reports-

www.weather.gov

Snohomish County Flooding-

www.co.snohomish.wa.us/pwapp/swm/floodwarn/

King County Flooding-

<http://www.kingcounty.gov/environment/waterandland/>



Bobbi Lindemulder Wins Special Service Award



Bobbi Lindemulder, Lead Small Farm Planner for Snohomish Conservation District, received the coveted Washington Association of Conservation Districts 'Special Service Award' on December 1, 2010.

This award is given to an individual who has made an outstanding contribution in the field of conservation. The award was presented at the annual meeting of the Washington Association of Conservation Districts in Cle Elum.

According to District Manager Monte Marti, "Bobbi received this award for her tireless efforts at the District. She has worked with a wide variety of partners to promote the wise and proper use of natural resources and the implementation of projects. Her efforts and contributions have had a positive impact on natural resources within Snohomish County and Washington State, as well as nationally."

Bobbi and her husband Chuck run a grass-fed beef operation on the family farm in Duvall. She has been with the District for 16 years.

Composting Specialist Joins Us

Caitlin Price is our new Small Farm Planner for the Stillaguamish Watershed. She offers landowners technical assistance and farm planning, and will work with a wide range of partners to address farm and livestock-related issues within the watershed.

Caitlin's primary focus is helping landowners improve their operations so as not to impact water quality and the health of the watershed. Before coming to the District, Caitlin worked as a ranch manager and summer camp director at Ekone Ranch in Goldendale. She has also worked as a research assistant on several projects for WSU Extension.

Caitlin holds a B.S. in Animal Science and an M.S. in Soil Science, both from WSU. Her thesis research project focused on large animal mortality composting research and education. She is also a Certified Livestock Adviser (WSU Extension) and has completed the Compost Facility Operator Training through the Washington Organics Recycling Council. You can reach her at caitlin@snohomishcd.org or 425-335-5634 ext 114.



Upcoming Events

Low Impact Development Tour Saturday, March 12!

The Sustainable Development Task Force of Snohomish County is planning a tour of homes that use residential designs to control rain water runoff, pollution and flooding.

Come see how others have gently reshaped their landscape to clean runoff and enhance the aesthetics of their communities using rain gardens, cisterns, rain barrels, permeable paving, and more. Get ideas and inspiration for how you can help reduce water pollution and flooding, while beautifying your yard. To learn more or suggest a stop, contact Stacy Smith at stacy@snohomishcd.org or 425-335-5634 ext. 102.



Rain garden installed and photographed by Stewardship Partners.

Classes at Skagit Farm Store - Stanwood

Saturday, February 12, 2011 - 11am

Mud, Manure Management and Sacrifice Areas

Saturday, February 19, 2011 - 11am

Habitat Restoration and Native Plants for Wildlife

Saturday, Feb 26, 2011 - 11am

Rotational Grazing and Pasture Management

Saturday March 19, 2011 - 11am

Rain Barrels, Rain Gardens, and Permeable Paving Options

Natural Yard Care Series - Mill Creek

April 6, 13, and 20, 2011. Find out more at the website below.

Find more workshops at <http://snohomishcd.org/workshops>

Farm Bill Options for Landowners

Did you know?

The Natural Resources Conservation Service offers 15 different programs to landowners interested in conservation through its 2008 Farm Bill. Some programs offer annual conservation payments; others offer payments for long-term contracts and conservation easements. Whether through an agreement or easement purchase, all programs include federal funds to assist with or offset the costs of conservation practices and activities.

The 2008 Farm Bill offers agricultural producers and non-industrial private forest landowners more assistance than ever before to voluntarily conserve natural resources. Technical and financial assistance is also provided to help producers implement conservation practices that reduce erosion, protect water, conserve energy and improve fish and wildlife habitat and air quality.

Here's a Sampling of What's Available:



Wildlife Incentive Program (WHIP)

This is a voluntary program for developing or improving high quality habitat that supports fish and wildlife populations of national, state, tribal, and local significance. The Natural Resource Conservation Service provides technical and financial assistance to private and tribal landowners to develop upland, wetland, aquatic, and other kinds of habitat beneficial to wildlife.

Environmental Quality Incentive Program (EQIP)

This program provides financial and technical assistance to farmers and ranchers who face threats to soil, water, air, and related natural resources on their land. The Natural Resources Conservation Service develops contracts with agricultural producers to implement conservation practices that address environmental natural resource problems. The organic Environmental Quality Incentive Program is similar, but it is for producers using organic farming methods, or who are transitioning to organic farming.

Conservation Stewardship Program (CSP)

This program encourages agricultural and forestry producers to voluntarily maintain, manage and improve existing conservation activities, and adopt additional ones on their property. Eligible lands include cropland, grassland, prairie, improved pastureland, rangeland, non-industrial private forestland new to this program, and agricultural land under the jurisdiction of an American Indian tribe.

You can submit an application to your local service center at any time. Contact Gale or Kelly at the Natural Resources Conservation Office at 425-334-2828. More information on these and other Farm Bill programs can be found at: <http://www.nrcs.usda.gov/programs/farmbill/2008/index.html>.

Don't Let That Manure Pile Up!



This huge manure pile had been pushed into a ravine for many years. It all finally gave way taking out all the trees in its path. Note, it is NOT advisable to walk onto piles, they can give way, combust, or otherwise harm people and animals.

Snohomish Conservation District is restarting the popular Farm Manure Share Program for residents of Snohomish County and Camano Island. This program connects manure producers with gardeners, landscapers, and farmers looking for free manure.

If livestock owners have more manure than they can use, and are willing to share the wealth with others, they can be added to our list as a provider. Manure can be fresh or composted. Please keep in mind that raw manure may contain pathogens and weed seeds, and can contaminate surface water if improperly stored or spread on pastures. Participants will receive a fact sheet to review.

The list will be provided by request only. It will be the responsibility of manure users to contact manure producers and arrange for pick-up. The District is providing this list as a service to landowners, and does not make any statements about manure quality. Contact Caitlin Price at 425-335-5634 x 114 or caitlin@snohomishcd.org with questions or to add your name to the list.

More Great Opportunities

Country Living Expo & Cattlemen's Winterschool

**Saturday, January 29, 2011
at Stanwood High School**

Hosted by Stanwood FFA
Presented by WSU Extension and
WSU Livestock Master Foundation

www.skagit.wsu.edu/CountryLivingExpo/



This popular all-day event has classes on a multitude of topics including: beekeeping, animal husbandry, agribusiness, and other farm and home-stead-related topics. Network with other small farmers, enjoy a prime rib lunch and visit with local agricultural businesses. See website to register.



26th Annual Conservation Plant Sale

March 4 & 5, 2011

**Evergreen State Fairgrounds
Monroe**

Find out more at:

www.snohomishcd.org/plant-sale

Snohomish Conservation District

Board of Supervisors

Mark Craven, Chair
Adam Farnham, Vice-chair
Karl Hereth
Steve Van Valkenburg
Jeff Ellingsen
Associate Member
Duane Weston
District Manager
Monte Marti

Phone 425-335-5634, ext 4
FAX 425-335-5024
Contact: Lois Ruskell
425-335-5634, ext 108
Editing: Donna Gleisner
The Written Edge
425-923-7110



www.snohomishcd.org

The NEXUS is published quarterly and distributed free of charge to residents of the District. Funding provided by Snohomish County Surface Water Management, Washington Department of Ecology, and the Washington State Conservation Commission.