



Coos Soil & Water Conservation District

COOS SWCD MISSION:

Promote wise use of renewable resources through locally led voluntary conservation. Conserve, protect and develop natural resources for the economic benefit of the people of Coos County. Encourage measures for the protection of waters of Coos County. Assist local landowners in the developing and utilizing of their resources to reduce soil erosion and improve water quality and support the Coos County economy.



Fall Newsletter 2010

COOS COUNTY FAIR NATURAL RESOURCE TENT 2010



The Natural Resource Tent was donated by the fair for the second straight year and once again was a great success. The tent was in a different location this year, adjacent to the animal exhibits. Tristan Huff from OSU extension organized the tent this year. The tent had a few new displays this year, for example the Coquille Tribes display. Once again the Coquille Watershed Association hosted the popular button making booth where kids and adults were able to select the colors they wanted and make buttons of their choice. The ODFW fish tank showcasing local fish was visited by every adult and child that came into the tent. This was a great opportunity to get a lot of information.

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First Annual Free Manure Pick-up at the G-G Ranch



This Coos SWCD sponsored event on April 24, 2010 was an opportunity to help a landowner that needed help managing the amount of manure that she had in her storage facility. The manure storage shed was built in 2008 but due to the amount of horses using her ranch there was a need to find a way to distribute this surplus of a very valuable soil additive. The Coos SWCD looked at this a win-win for both the landowner and the community. The landowner was able to get rid of a surplus, but also gave her a way to sell the compost to returning visitors. This event was advertised by the Coos SWCD to be a one day free family event complete with pony rides, balloons, and gift bags for the kids.



This event was also an opportunity to involve the OSU Master Gardeners. Darlene Judd and her husband Mark Judd did a one hour talk about composting and garden secrets. The presenters had about 15-20 people that came and talked with the two of them. She had a lot of great handouts for example the "Territorial Seed Companies Spring 2010 Catalog". The Coos SWCD also took this opportunity to give a lot of handouts about manure management. A lot of questions were asked by visitors and quite a few people came just to talk to her about composting and gardening.



Overall people came for the free poo! A total of forty-six pickups came with a few repeat offenders. The landowner got rid of over 50 cubic/yards of horse manure and reduced the amount of manure in her 24'x32' storage shed by two-thirds! Thanks to everyone involved! P.S. this event will mostly likely be done again in the spring of 2011!

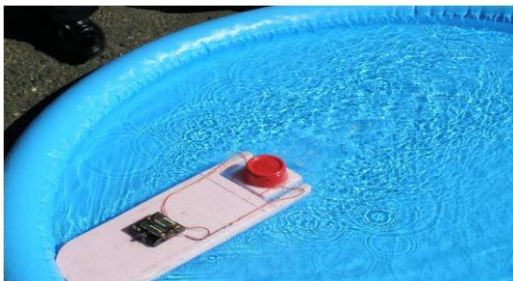


Innovative Thinking: **Non-propeller Boat Motor**



Virgil Atkinson's boat motor runs on vibrations created by a generator and battery to produce wave energy through harmonics. The motor can be adjusted to fit and power any size of boat.

The Coos Soil and Water Conservation District (SWCD) were given a demonstration by Virgil Atkinson and his oil & gasless boat engine in July of 2008. Since that time Virgil has continued to work and perfect his design. The reason Virgil came to the district first was he strongly believes that this eco-friendly design of having no propeller or gas or oil leaking into the water is the way of the future. The boat would work almost like an airboat used in the everglades which is powered by a large fan. So without a propeller the risks to wildlife would be a lot less. Atkinson's design has sparked some interest, including boat manufactures that wanted to build a life sized model of the engine. The same day Atkinson did his demonstration project at the Coos SWCD office a small boat business next door took a look. They were interested in making a prototype, but nothing ever came of that idea. Atkinson's models did work really well, and propelled the boat all over the small pool that was used for the demonstration.



Atkinson said the cost of building such a model would cost a few thousand dollars, mainly the cost of a generator and marine batteries. Atkinson said you can make the boat even more efficient by installing solar panels to allow the batteries to be recharged by the sun. The photo seen on the top is a single engine design, but it can be designed as a twin engine for larger boats.

The engines are designed to use harmonics or wave vibrations to move the boat, therefore the motor must be mounted outside the boat, so it doesn't vibrate the boat itself. Instead of a propeller the motors transfers the energy to thin surfaces (ex. fiber glass or plastic) to form a material that will vibrate but not break. The material would be on both sides of the motor to allow the boat to go both forwards and backwards.

Atkinson has continued to talk to the Coos SWCD and has brought in handouts, models and DVD's to help keep the district in the loop. Virgil would really like to see this idea take off. He knows there is potentially money to be made with this idea but he is driven by the opportunity of creating something that has a great benefit for the environment.

The Coos SWCD would like to thank Virgil for all his hard work. If you would like to learn more about Virgil's work, or see a demonstration please call Virgil at (541) 572-2528.

COMPOST – Pure Garden Gold

By: Darlene Judd, Mater Gardener & Garden Coordinator for Pioneer Coquille Community Garden



Darlene Judd educating landowners at the Coos SWCD Free Manure Pickup Day on April 24th 2010

There are many different ways to compost your used household, garden and yard waste. This session is to encourage you to start doing something! There are many different techniques to accomplish that "pure garden gold." We will take a look at several ways to accomplish that perfect masterpiece for your garden use.

Different Composting Types:

- 1) Vermacomposting – This the use of worms to compost your inside garbage. You keep the worms in a container in your home for composting your kitchen scraps. They love the inside temperatures and will take care of all of your scraps and reward you with worm castings...great stuff for house and outdoor plants as well as your garden.

- 2) Cold Composting – This is layering your compostable material in a bin made of wire, wood or whatever, however this is a much slower composting method. It is a lot less work, but may not be suitable for your situation, because it does not kill weed seeds, because the pile never heats up since it is not stirred to combine the materials and produce the heat it takes to kill things.
- 3) Lasagna Composting – This is a way to compost right in the area where the compost will stay, no moving it from one place to another. You put it right on your area where you are going to plant and let it do its thing right there. It is a great way to use those dead leaves and extra garden stuff to make a great planting area.
- 4) Bale Composting – This is a way to use up those bales of hay you have lying around. You simply put some soil right on top of the bale of hay and proceed to plant right on top of the bale! This takes all the work out of preparing the soil, simply plant on the bale, let it decompose right in place and take the work out of moving everything around again.
- 5) Hot Composting – This will get hot! Up to 150 degrees depending on what you add to your pile. This type of pile means you will be turning it at least once per week (pay the neighborhood kid to turn your pile for you.) This will be ready much quicker than the other types of composting. It kills all types of seeds in the process... people have actually used the pile to cook meals in!

Whatever method you choose, get started! There is so much waste that is generated by the average family that you need to be thinking about your garbage bill being reduced. It's not that complicated to get started, you can use what you have to start your compost. It depends on what type of composting you will be doing on what materials you will need. It is a great family project, it gets rid of garbage you are already producing and it makes free "garden gold" while you are at it for FREE! It is a nutrient rich source of goodies that plants inside and outside really LOVE and respond well to. So take a little time to make a difference for your plants today. You can inspire a whole new generation to learn to turn trash to treasure...using what you have or getting elaborate and purchasing items that will complete your pile.

Here are some good items for your Compost:

Green Materials:

Fruits and vegetable scraps
Coffee grounds and filters
Tea leaves and bags
Grass Clippings
Garden Trimmings
Green Leaves
Livestock manure
Alfalfa hay or meal
Seaweed
Egg shells
Cotton fabric
Leather

Brown Materials:

Nut shells
stale bread
Straw and hay
Dry grass and leaves
Shredded paper
Wood chips and sawdust
Shredded yard wastes
Pine and fir needles
Well aged sawdust
Hops and hulls
Sand
Wood ashes

No not add:

Fats, meats, bones, oil or myrtle leaves

When building a pile you want a ratio of ½ green items and ½ dry items. The smaller you can make the items, the quicker your pile will break down. Be sure to add water every 7 days or so. Cover your pile to prevent leaching of the composting goodies and to make it so rain will not make it too soggy. When done the pile will be dark and crumbly and have no smell. If your pile smells you have not added the right ingredients or have kept it too soggy. Everything breaks down to be just like regular soil, and will smell like good clean earth! Think of all the money you will save, you can go by the store and laugh when you see the price of a bag of “compost,” and you won’t be paying \$35 per yard for the stuff at the nursery either.

Recommended Resources:

OSU website at <http://extension.oregonstate.edu>

Gardening When it Counts by Steve Solomon

Lasagna Gardening by Patricia Lanza

Getting Livestock Farms Ready for Winter

By: Dr. Susan Kerr, WSU Klickitat County Extension Director



When you find yourself with a few spare moments this autumn, use this article as a guide to think about all the odds-and-ends tasks needed to get your farm and livestock ready for winter. Most of these tasks are much more enjoyable during sunny 60-degree weather than during the rainy, blowy, frosty days ahead.

Fencing: Good fences make good neighbors—they keep animals safe and where they need to be. Check fence posts for frost heave, breaks, and other damage; stabilize them now to avoid 3am calls about livestock at large. Walk your entire fence line and look for down wire, grounded-out areas, weed overgrowth, troublesome tree limbs and other potential problems. If you post your property against trespassing or hunting, make sure signs are visible and numerous.

Pastures: Fall is an excellent time to perform essential pasture management tasks. Mowing mature plants will encourage late season growth of grasses, strengthening roots and nutrient supplies that will be needed in early spring. Harrowing will distribute manure nutrients; it also makes parasites more susceptible to sun and freezing temperatures. Weed control, either through grazing or chemical means, is worthwhile in the fall to reduce the number of annual weed seeds available in the spring and to reduce perennial weeds.

Soil Testing: Soil testing is performed to learn if nutrients or soil amendments should be applied to achieve optimum production from land. Some nutrients such as nitrogen should only be applied when plants are actively growing so harmful runoff of excess nitrogen can be avoided.

Pasture plants will still actively grow in September and October and, depending on moisture and temperature, perhaps even into November. However, after plants become dormant, nitrogen fertilizers should not be applied until plants emerge from dormancy next spring. Fall is a good time to apply lime if soil pH is too low, however; lime takes a long time to move through the soil profile and modify soil pH. Lime applied to acid soil in the fall will raise the pH to proper level by spring. Soils in our area tend to be neutral or slightly basic, so lime may not even be indicated.

Water: Which would you rather do a critical assessment of your water lines on a sunny fall afternoon or emergency patching at 1am on a freezing winter night? That’s a no-brainer! Evaluate the ability of all components of your livestock watering system to withstand the coldest possible temperatures experienced in your area. Pay particular attention to any sections that have been trouble in the past. Develop a plan for livestock watering in the event of frozen pipes. Consider leaving faucets dripping during cold snaps. Know how to turn off the water if pipes break.

Hay and Feed: If you have storage room, it is usually more economical to purchase a winter’s worth of hay at one time. It can be difficult to find the type of hay you want in late winter and the cost can rise, depending on supply and demand. To know how much to purchase, you need to know livestock body weights, nutritional needs and average dry matter consumption. The numbers shown here are just guideline; individual animal’s needs may be higher or lower depending on issues such as shelter, health, work, body condition, age, pregnancy and many others.

Species	Dry matter intake as % of body weight
Beef cattle	1.5 - 3
Dairy cattle	2 - 3
Horse	1.5
Swine	Ad lib (growing)
Sheep	2 – 5
Goat	2 - 5

Calculate the pounds of hay needed per animal per day and multiply by the number of days to be fed during the winter, then by the number of animals of that class to be fed. In some areas, hay will only need to be fed for a few months; for others, hay may need to be fed nearly year-round. Although it is good to purchase too much instead of too little hay, try not to have great quantities of hay left over because the new year’s crop will usually have higher protein and vitamin content than last year’s stored hay. Feed (grain concentrates) are also more economical when bought in bulk, but storage can be an issue. Keep stored feed dry, cool and protected from vermin. It should be well ventilated to prevent mold development. Again calculate the amount needed per animal per day and multiply by the numbers of feeding days and head fed to determine amounts to purchase.

During cold weather, animals’ maintenance nutritional requirements can increase substantially. Although roughage generates greater heat of digestion, there are limits to the physical capacity of animals; digestive tracts that limit their ability to meet increased needs through more roughage; in these cases, high energy concentrates should be slowly added to the ration for more calories during cold snaps. For some species (horses, goats), it is practical to use blankets to help keep animals warm.

Mud Control: Your farm may be dry now, but remember slogging through all that mud last winter? Work with the local Water conservation district to control runoff, mud and waste water. Cost-share programs are also available. Adding gutters, sacrifice areas, geo-textiles, gravel, tiles, and revising livestock traffic flow can help reduce and control mud and bare ground on your farm. Mud control in sacrifice areas used for prolong feeding periods through the winter is essential—mud is not healthy for livestock or the environment.

Records: While you are spending more time inside, spend some time with your records; you and your accountant will be glad you did. Update animal health records, organize receipts, list expenses, and summarize revenue to date and so on. Evaluate herd genetic progress and plan future breedings. Look for ways to reduce expenses and consider alternative marketing time, methods or channels.

Health: To prepare animals for the stress of winter, review vaccination and de-worming programs with your veterinarian. Assess and record body condition scores of as many individuals as possible; re-assess at least monthly through the winter, grouping and feeding animals as needed to maintain healthy body condition. Remember body condition scoring is a hands-on activity; it can't be done from afar, especially on animals with deceptively thick winter coats.

Shelter: Be sure ventilation is adequate if animals are housed so air is always fresh but no drafts exist. Also make sure shelters are safe and sturdy and will protect livestock from wind and precipitation. Make provisions for bedding so animals will stay clean and dry. Check the roof for leaks and repair as needed. Remove tree branches that may damage the shelter. Make sure electric wiring is up to code. Use extra caution when using heat lamps – don not allow them to contact anything, especially wooden walls or bedding.

Emergencies: Finally, are you ready for an emergency on your farm? Flashlights, fire extinguishers, generators, first aid kits (both human and livestock), emergency numbers, signage and blankets are just a few of the items to have on hand to help see you through an emergency on your farm. Think through and develop a written plan of what you would do in the event of fire, flood, ice storm, prolonged deep freeze, windstorm, or power outage. If you have four-footed animals depending on you, forewarned is indeed forearmed.

NEWS & UPCOMING EVENTS

Dorothy & Tom Guerin



- 1) The deadline for the “**2010 Guerin Memorial Essay Contest**” for Coos County students in grades 7-12 is **November 12th**. Please call the Coos SWCD office at (541) 396-6879 for more information. Donations to help continue these future contests are very welcome, thank you.
- 2) The **Coos SWCD new website** will be up and running shortly at coosswcd.org and there will be an opportunity to sign up for electronic district newsletters through the website in the future.
- 3) The “**Coos SWCD Annual Meeting**” will be December 3, 2010 at the Bandon Community Building from 5 p.m. – 7 p.m.

INVASIVE SPECIES ALERT

BROOMS AND GORSE

Scotch broom (*Cytisus scoparius*), French broom (*Genista monspessulana*), and Gorse (*Ulex Europaeus*)



Removal of scotch broom along highway 42 in Coquille



Huge infestation of gorse near Whiskey Run Beach

Class B: *Oregon Noxious Weed for all brooms and gorse: please report locations to www.Weed Mapper.org.*

IDENTIFICATION:

- Shrubs to 6 ft tall with green stems, small, inconspicuous green leaves and, pea-like yellow flowers.
- Gorse has distinctive 1 inch long thick spines.

HABITATS INVADED:

Grasslands, prairies, pasture and rangelands, roadsides, cut-over forest lands and sand dunes.

ECONOMICS:

Increases rapidly, rendering infested land almost worthless. Gorse has natural oils that **make it an extreme fire hazard!**

CONTROL:

All brooms and gorse are extremely difficult to control. Picloram + 2, 4-D applied to young plant, or triclopyr applied in the spring appear to be the best method of treatment.

Biological control: insects are available, and may be beneficial on larger infestations.

THINGS YOU SHOULD KNOW:

- Over 12,000 seeds can be produced by each mature shrub!
- Seeds can survive in soil up to 50 years!
- Adds nitrogen to soil and provides highly flammable fuels for wildfires!
- Flowers and seeds are toxic to humans and most livestock!

“A Guide to Selected Weeds of Oregon”, and “Garden Smart Oregon a guide to non-invasive plants”

On the Lookout for Aquatic Invaders *Identification Guide for the Pacific Northwest* Sea Grant Oregon



Coos Soil & Water Conservation District
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COOS SWCD EVENTS & PROGRAMS

- **Regular Meetings:** 4th Thursday of every month
- **Landowner Resource Guides available at office**
- **Conservation/Farm Planning**
- **Technical & Financial Assistance**
- **Weed wrenches available for rent:** for extracting noxious weeds on your property ex. gorse and scotch broom are available at the Coos SWCD (396-6879) and NRCS (396-2841) offices in Coquille.

