

# Northwest Native Plant Journal A Monthly Web Magazine

# Regular Features

About this Journal3
On the Cover4
Rare Plant Puzzle
Name this plant!5
Garden chores to do now6
Sparky's Corner7
Native plant resources online62
Wally's personal notes65



## In This Issue

Garden product review

Green and not so green...8

Rubber mulch

Earth friend or foe?.13

Toads in your garden

Seen any lately?.....16

How green are you?

Time for a reality check.19

Recycling questionnaire

Print and share.....21



Colorado Columbine (Aquilegia coerulea)

ecial Earth Day Section	.22
What is Earth Day	23
Two Celebrations/One Goal	24
Equioctial Earth Day24	-30
April 22 Earth Day31	-38
What you can do	
At home	39
In your community	45
At school	.49
At work	53
While shopping	55
Earth Day Take-Home Kit	.56
Events in your area	.58
EPA Progress Report39	-48

Jennifer Rehm, Editor, author, webmaster for The Wild Garden: Hansen's Northwest Native Plant Database website: www.nwplants.com; e-Mail: chillipepper6@comcast.net

All rights reserved. This entire publication Copyright © 2012 The Wild Garden: Hansen's Northwest Native Plant Database. No part of this work may be reproduced or used in any form or by any means--graphic, electronic, or mechanical--without the written permission of Jennifer Rehm, The Wild Garden, except for reviewers who may quote brief passages. Any request for photocopying, recording, taping or information storage and retrieval systems of any part of this publication shall be directed in writing to the publisher: Jennifer Rehm, The Wild Garden: Hansen's Northwest Native Plant Database.

# About this Web Magazine

This Journal was created under the direction of Wally Hansen – a dedicated Grower, Aficionado and Passionate Lover of Northwest Native Plants.

This Journal is not 'commercial.' Our goals are:

- A To generate interest, even passion, concerning the magnificent Native Plants of the Pacific Northwest.
- B To help you create your own Native Plant Gardens, large or small, for home or work.
- C To help you propagate and "grow on" those species that interest you the most.
- D To inform both Home Gardeners and interested Professionals of many disciplines concerning trends and news items from my little corner of the world.
- E To help the reader enjoy native plants more by understanding the historical and cultural role of native plants (i.e.—use by Native Americans, Pioneers, Early Botanists, etc.).



A planet for all seasons Vine Maple
(Acer circinatum)

Gardeners are key land managers. Our choices therefore lie not in whether but in how we manage the land. We would all agree that we must do it in an ecologically responsible way.-George Seddon, Gardening Responsibility



# On the Cover

## **Oregon Iris (Iris tenax)**

A beautiful native grass iris, growing 1-2' tall. Oregon Iris, as the name suggests, is at home in the Willamette Valley, Oregon. It is also found scattered across western Washington and northern California. It can be successfully grown outside of this range, as it is hardy between USDA zones 5-9.

It is a low growing iris with narrow grass-like blades and showy dark blue, short tube flowers on thin stems. Oregon iris grows in open, sunny sites, and sometimes in dry areas such as meadows, pastures and woodland openings with an acidic soil. It has an almost ethereal aroma, quite delicious!

"Tenax" means tenacious and indeed the leaves were renowned for their strength. Natives used them for rope.

This photo was taken by JoAnn Onstott at the nursery last year.





# Rare plant puzzle

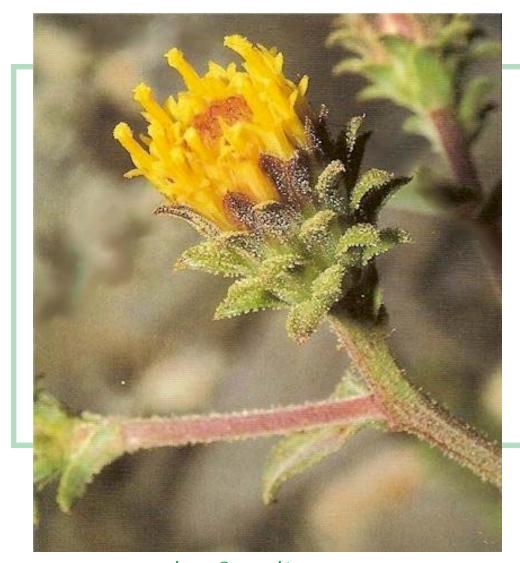


Photo © Donald C. Eastman

### Name this plant!

A clue to help you on your quest for the correct answer:

"Come to the mountains to see me bloom! I resemble a dandelion but don't assume I'm a weed. No, I'm a NW native And never cause for gloom."

Send me an email with the correct <u>botanical</u> name of this plant . A small prize to those who correctly identify by April 10!

Good luck! Wally

## **Answer to last Journal's puzzle:**

Phacelia verna

Congratulations to all who correctly answered!



To Do List: Caring for your NW Native Garden

- 1 Make sure every new plant you put in your garden/landscape is native to your area.
- 2 Compost your garden waste and use the nutrient rich results instead of chemical fertilizers.
- 3 Mulch around your plants to conserve water and discourage unwanted plants.
- 4 Use a contained composter for non-vegetable kitchen waste like meat fats and chicken bones and stinky stuff. See example at right. Plant heavy feeding shrubs around it. They will 'beautify' the composter and thrive in the plentiful natural food.
- 5 Select a planting site to match what your plant requires. Plant shade-lovers in the shade and sun-lovers in the sun.
- 6 Use big trimmings from shrubs and trees to build trellises or fences or chairs or supports for other plants.
- 7 Include plants that provide food and shelter for wildlife in your yard instead of spraying for bugs. The wild things will entertain you and keep destructive bugs to a minimum. For instance, frogs, toads, snakes, blackbirds, thrushes, robins, starlings, crows, jays, ducks and owls love to eat slugs!
- 8 Remove invasive plants like English ivy and Scotch broom and Himalayan blackberries. Plant native vines and shrubs and bramble berries in their place. (You can put the invasives in your compost digester! The high composting temperature will render them sterile and turn them into mush.)

Wild Strawberry
(Fragaria vesca)
with Gray
Hairstreak
butterfly.
Illustration by
Heidi D. Hansen

Self-contained, sealed compost digester. This simple type of composter will turn almost anything into liquid fertilizer in record time! Works for meat and bones and dog waste--sll those problem materials. Does not stink!

Choose your non-vegetable composter carefully. Black ones compost faster, tight sealing lid is a must. The bottom is open. The sides should be smooth. Proper installation is critical. Pick a site that gets as much sun as possible. Dig a hole about 6 inches deep to fit composter bottom. Line the hole with heavy duty hardware cloth, 1/2 inch mesh. Place your composter in the hole, mound dirt up around the sides about 6 inches. This will keep critters out. Plant NW native shrubs around it for esthetics. Start piling in the waste and screw the lid down tight after each addition. No chemicals are needed. Once established, you'll find thousands of worms have made themselves quite at home.



# Sparky's Corner

# Monkeyflower (Mimulus guttatus)

## A special message from our frisky contributor

So many visitors have come to the nursery lately we've been having a great time! Living in the nursery, we have the best food and huge oak trees for nesting and when two-leggers come out we love watching them. They are so funny with their silly noises and the way they walk around.

We try to get them to race with us but they don't seem to get it. So we just run around them and then scamper up the trees and laugh at ourselves.



Once in a while one will pick up those portable food caches and one of my buds will get upset but I remind them that there's plenty more left. Besides, maybe one of those acorns that they buried will sprout into a tree and surprise the two-legger. Won't that be confusing? Or maybe another squirrel will find it by accident and get a treat. That would be nice.

Now that it's warmer we feel more like playing. I think two-leggers are like that too, especially the little ones. We call them squeelers because they hoot and chase each other sometimes until the big ones make them quit. We'd really like to play with the little ones. They seem more like us than the bigs.

Guess what--I have a secret. I'm in love! I think. Her name is QT and she is so pretty! She runs really fast, almost as fast as me but then she hides behind a tree and winks at me when I find her. OOOh! I never had a girlfriend before and maybe I'm not too good at it. But I think she likes me. She sits by me in Grandma's nest when we go for story time at night. Do you think she likes me? I hope so. She's so pretty! Don't tell anybody. I don't want my buds to tease me. Keep your fingers crossed!

Your friend, Sparky

Nature is not a place to visit, it is home. ~ -Gary Snyder



# Garden Products: Issues & Suggestions

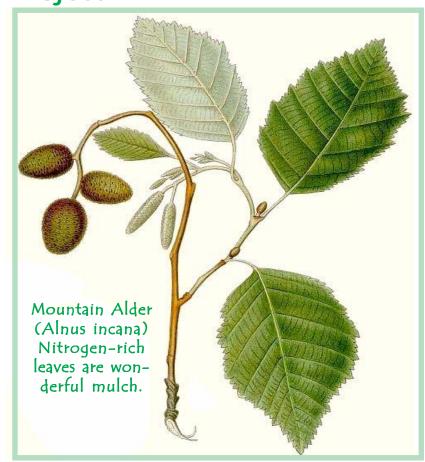
This article is from Green Choices, a group of people in the UK--"Green Living is a World Wide Project"

#### Garden products: issues and suggestions

If you visit a garden centre, you may be struck by the sheer volume of stuff that we buy for our gardens. Gardening consumes astounding quantities of plastic, bamboo, wood, and metal. Not all garden products are toxic or have a high environmental impact in themselves, but everything has to come from somewhere, and everything has to go somewhere once it's outlived its useful life. Stones and aggregates are natural products, but your tranquil gravelled area may have been made possible by an intrusive quarry somewhere else. And stone is heavy - the energy needed to transport exotic pebbles from overseas will be quite considerable. Pondliners made from low density polyethylene may be marketed as "recyclable" but as there are very few plastics recycling facilities available in the UK, most will probably end up in landfill. (See editor's notes on page 12.)

As with all green thinking, a balance is needed. All of us need beautiful places which make us feel good about ourselves and our lives. Some of the loveliest garden corners are simply grown, not bought or put together, with time and thought and love, from bits and pieces that come to hand.

# GreenChoices



#### "Green Choices - Your Guide to Greener Living"

"GreenChoices is about the choices we can make in our everyday lives to protect our environment, for the benefit of all. We aim to empower you with simple, direct information on green alternatives which make a real, lasting difference."

--Compost and soil improvers. The really big issue here is peat. Peat bogs are a rapidly vanishing natural habitat; wetlands which support diverse wildlife, which help to stabilise groundwater, preventing droughts and flooding. Yet 94% of UK lowland bogs have been damaged or destroyed and 60% of peat compost is bought by gardeners. The good news is that you really can make a direct, immediate difference: simply buy alternatives instead - or make your own! (See tips at right)

- --Check the label: if it's peat free, it'll say so.
- --Look for products made from waste/ recycled material (i.e. bark or some other natural by-product).
- --Some of the available products work beautifully, some don't. As with anything else, choose the one which works for you and don't be put off the whole idea by just one brand.

To make your composting easier, Marion County Master Recyclers Program sponsors Composters at Cost. See http://www.co.marion.or.us/PW/ES/composters.htm

The University of Oregon Extension Service has a booklet called Backyard Composting at http://cru.cahe.wsu.edu/CEPublications/eb1784/eb1784.pdf



Compost turner-Plunge into the compost pile, the paddles flip up.
Agitate by pulling up and down and the paddles open and close.

Easy!

Serviceberry
(Amelanchier alnifolia)
abundant white flowers and delicious fruit

Compost: Make your own

Compost is the start of soil health; recycling nutrients and building soil structure, improving water retention or drainage as needed. Making compost is also a cornerstone of green gardening; it's your very own on-site, biological recycling system and an integral part of your backyard ecology. At best, it's also very cheap, and good fun.

Making good compost is an art, and it's worth getting it right. Good compost is a pleasure to make and an asset in your garden. A badly maintained compost heap, on the other hand, can be a source of methane (a powerful greenhouse gas) - and a slimy horror to deal with.

There's a lot of advice available these days, as local councils are promoting home composting for its superb ability to reduce waste at source. Advice often conflicts, so it's worth reading around to find the techniques and equipment that suit you and your situation best:

- HDRA's compost guide is available free at www.gardenorganic.org.uk/ organicgardening/gh\_comp.php
- The Centre for Alternative Technology has tips sheets www.cat.org.uk/
- Even a tiny back yard or a patio is easily big enough for a worm bin. See Mary Appelhof at www.wormwoman.com/
- · Worm composting bins are available at www.wigglywigglers.co.uk/
- · Wiggly Wigglers are mail order suppliers whose core business is worms and compost. They offer an almost bewildering variety of composting aids, but backed up with plenty of enthusiasm and advice. See them at www.wigglywigglers.co.uk/
- Composting products and information are also available from http://
   www.recycleworks.co.uk/

  More⇒

- · Wood products:
  - Amazing as it may seem in this day and age, fragile forest ecosystems are still being plundered to provide us with mundane consumer goods furniture, decking, planters, bird tables, fencing and so on. Always look for the Forestry Stewardship Council label, especially when buying hardwoods. Try the FSC product search facility all your favourites should be there, and most are available from national retail chains. Be wary of vague claims about "well-managed production forest", and "from managed sources", as these may be doing no more than cashing in on your concerns. The FSC standard is the only one endorsed by major environment charities such as WWF, Friends of the Earth, Greenpeace and the Woodland Trust.
  - Wooden garden products are often tanalised impregnated under pressure with highly toxic substances such as arsenic. Look for a pale green stain soaked into the outer layer, typically on roughly sawn softwood which otherwise wouldn't last any time at all outside in the wet. We advise against buying such products: at the very least, don't burn them! Burning releases arsenic, a cumulative poison, into your immediate atmosphere.
  - You may not immediately think of barbeque charcoal as a wood product, but that's exactly what it is. Again, check for a FSC label. Or go the whole hog and look for <u>Bioregional Charcoal</u>, helping to support UK wildlife and to make traditional British coppiced woodland viable once more.
  - Barbecue lighter fuel? It may be just one more toxic product you don't need.



Oregon's Douglas Fir (Pseudotsuga menziesii) is one of the finest timber trees. This native is grown specifically for harvest in areas managed by the Forest Service.

Photo by JoAnn Onstott



If you love to barbeque and don't have one those gas grills, a starter like this eliminates the need for lighter fluid. Put the briquettes or wood pieces in the top, stuff the bottom with paper and light from the bottom with a match. The lighted paper will ignite the wood without resorting to lighter fluid.

You have succeeded in life when all you really want is only what you really need. ~ Vernon Howard



#### Recycling

The biggest contribution any householder can make to reducing waste is to compost! Filling skips full of green garden waste then buying in

Grow a fence! This Tall Oregon Grape (Mahonia aquifolia) grows quickly, is evergreen, has bright yellow flowers and delicious fruit. Illustration by Heidi D. Hansen

soil improvers has got to be one of the craziest habits we've got into. Kitchen scraps are an even bigger issue, because in landfill they create methane, a potent greenhouse gas, and polluting leachates. Composting at home is the best possible solution - your council may be one of the many that offer free compost bins and advice to encourage more households to get involved.

- Adding paper and cardboard to your compost heap is particularly important for stopping your compost being too wet or sour technically speaking, it both aerates the mix and increases the carbon: nitrogen ratio. Practically speaking, it just happens to work very well and deals with yet more of your household waste.
- Look for recycled products on the internet
- · Glass 'gravel' is an alternative to freshly mined rock
- Roll old newspapers into cylinders and tuck in the bottom for seed starting pots
- · Fencing is readily available made from recycled plastic

Designing and running a garden gives lots of opportunities for being creative with all kinds of cast-offs, especially when it comes to containers and planters. Don't just look to the garden centres for inspiration - check out what other gardeners are getting up to, use your imagination, and have fun!

Source: Green Choices, www.greenchoices.org

#### From the editor: Further help and inspiration

University of Oregon's campus recycling program has good info on where and how to find products made from recycled plastics and other materials. See http://www.uoregon.edu/~recycle/Buy.htm

Metro Recycling and Waste Prevention has an easy to use recycled materials search engine at http://www.metro.dst.or.us/article.cfm?articleid=2728

The Rebuilding Center in Portland is a wonderful non-profit place to find scads of used materials. They have everything from roofs to the kitchen sink. A great place run by great folks. http://www.rebuildingcenter.org/



Tumbled glass gravel

#### Editor's Notes:

About plastic recycling--Here in the US, we are very fortunate to have facilities that recycle plastics. In Oregon, Agri-plas, a Brooks company, specializes in recycling plastics used at farms, greenhouses and plant nurseries. Their innovative approach to developing new markets in plastics (mostly in the United States) has made it possible to recycle those hard-to-recycle plastics.

Agri-plas makes chips or pellets out of the materials and then sells them to other manufacturers who make a multitude of items. Plastic Pots are mostly made back into plastic pots. Plastic bags mostly become plastic lumber. Markets come and go for various other resins of plastics. If Agri-plas doesn't have a specific market for materials they are combined as miscellaneous plastic. The miscellaneous plastics often get chipped together and mixed with recycled wood powder to become railroad ties, replacing rotting wood ties that require toxic chemicals to maintain. Railroad companies have to replace 1000's of wood ties every year. They have yet to have to replace the plastic ones.

Agri-plas is known for their exceptionally well sorted and contaminant-free plastic, making it easier for manufacturers to use. They are a part of Northwest Ag Plastics, Inc which is a group of companies in Washington, Oregon and Idaho that collects and granulates pesticide containers for the agricultural industry. Portland Master Recyclers, http://www.masterrecycler.org/plastic-recycling.php

#### **Peanuts**

In Salem, there is a 'cooperative dropoff system' for recycling styrofoam packing peanuts.

Oregon Link, http://www.oregonlink.com/recycle/plastic\_peanuts.html



The Forest Service's Celebrating Wildflowers website has some very good ideas about building a native plant garden. http://www.fs.fed.us/wildflowers/nativegardening/index.shtml

They offer several brochures you can download and/or print at no charge. The front page of their brochure, Wild Ones, is shown at right. You can download it at http://www.epa.gov/greenacres/wildones/wo\_2004b.pdf

Creek Dogwood (Cornus sericea ssp. occidentalis) Drawing by Heidi D. Hansen



# Rubber Garden Mulch--Is it Safe?

Earthtone

Black

Some of these rubber mulches look

almost like the real thing but

they're made from old tires dyed to

various colors.

Western
Wild Grape
(Vitis
californica)

Redwood

At a local home improvement center recently, I saw bags of garden mulch made from recycled tires. It seemed like a good idea but I wondered about the 'side effects.' It looked almost real, it would not compost or need replacing but what would it do to the earth? Here's a part of two articles that ask that very question.

June Fletcher writes for the Real Estate Journal: From at least one environmental standpoint, you've got to love rubber mulch — no trees die in

its creation. Made from some of the more than 290 million tires discarded each year, the shredded stuff saves landfill space, too. One manufacturer says that 80 scrapped tires are used to create one cubic yard of shredded

mulch.

Blue

Green

Though it hardly looks real up close — indeed, many manufacturers play up its fauxness by dying it bright red, teal or other bold colors — and it costs more than twice as much as wood mulches, it does have good qualities.

Unlike wood chips or bark, it doesn't wash away in rainstorms, attract termites or carpenter ants, or rot. Its inherent bounciness has proved especially

Consumer Product Safety Commission gave it the highest shock absorption ratings of any kind of common playground covering, surpassing wood chips, gravel and sand. The U.S. Special Operations Command in Virginia Beach, Va., said it plans to use rubber mulch as a ground covering under a military obstacle course.

useful in playgrounds; the U.S.



This brown looks like wood but the green, blue and purple are obviously garden fashion statements.

**⇒**More**⇒** 

The Wild Garden: Hansen's Northwest Native Plant Database

# Rubber Garden Mulch--Is it Safe?, continued

But the mulch is controversial, with many people worried, as you are, about the material's possible harmful effects. I've seen several studies that have declared rubber mulch to be non-leaching, non-flammable and non-toxic to both plants and animals, but all were sponsored by the

companies that process the mulch. A Washington State University study indicates that rubber can leach chemicals that contaminate water and hurt marine life. Rufus L. Chaney, an environmental chemist at the U.S.D.A. Agricultural Research Service, says that his research shows that small amounts of zinc in rubber will leach into soil over time. If your soil is alkaline and starved for zinc, as many soils are in Western states, that could be a good thing. But if your soil is acidic and has an adequate amount of zinc, as is typical in the East,

the zinc released by the tires could cause a chemical overload that kills shallow-rooted flowers, shrubs and vegetables. "Save rubber mulch for paths and playgrounds," he says.





CAMO



More colors: Ultra earthtone mimics wood mulch. The camo could be fun and the black is quite dramatic.



'Redwood'



Different textures for different uses.

Brands also differ. Steel-belted radial tires are used in many mixes, and the magnets employed to remove them don't always get all the tiny wires out. Though processors say the steel rusts in about six months, in the meantime, you could get nasty pricks from the chopped up wires while you're spreading the mulch around. So buy mixes that are at least 98% steel-free. Also, check out the warranty for any coatings used on the mulch. Black tires can oxidize over time, giving them a chalky surface; look for a mulch that has a UV-protective coating.

**Source: Real Estate Journal, The Wall Street** Journal Guide to Property, http:// www.realestatejournal.com/columnists/ housetalk/20050930-fletcher.html

# Rubber Garden Mulch--Is it Safe?, continued

Excerpt from an article in the Hillsboro Argus. Marci has written several articles for the nursery and done many drawings of plants as well.

Marci Degman - Gardening

Consider pros, cons of new products Friday, February 16, 2007



Marci Degman

I am slow to fall for anything that promises too much. I remember the microwave oven. Everyone wondered about the health risks.

Now, plastic garbage bags are being recycled into plastic landscape lumber and crumbled tires are placed under play structures or used to mulch around landscape plants. The controversy humming around the recycled tire products does not surprise me. We would all like to find a way to safely dispose of rubber tires, but placing rubber on top of the soil seems a bit daring. When water runs through any material it is going to leach out. The problem at this point seems to be zinc. While it is a naturally-occurring mineral, too much can be toxic to plants. I would guess that with certain plants and enough water to dilute the excess, it might be fine in some situations. But I wouldn't chance it around anything I cared about at this point.



As for a child's play structure, that is a much more complicated issue. The good and bad of crumb rubber is that it does not decompose which means it will rarely need to be replaced. But should more problems arise, it will need to be removed and then - you guessed it - back to the landfill.

There are some decorative landscape products made from melted down glass bottles and broken tiles pressed into outdoor materials. That's a good idea since glass and tile do not harm the soil even if they are buried in it.

To choose the right landscape materials for your project you just have to consider the pros and cons. When in doubt about a new product, sometimes it is best to wait it out.

This gardener has used tumbled glass pieces as mulch beneath the Dwarf Huckleberry (Vaccinium caespitosum). It will not leach into the soil, nor will it biodegrade. However it may heat the soil too much from the sun. Good for shady spots. I love it in my birdbaths.

For fast acting relief; try slowing down. ~ Lily Tomlin



# Toads in Your Garden



## Toads in Your Garden: Have You Seen Any Lately?

From Linda Knox Adams County (Pennsylvania) Master Gardener

For the last several years I have noticed few quiet, little toads hopping about devouring garden pests. In our region the spadefoot toad (Scaphiopks holbrooki) eats beetles, crickets, spiders and other small insects and worms. The American toad (Bufo americanus) can consume 86 flies in 10 minutes, several thousand insects in a month, and 2000 output marks in a summer. Share and applie are an their manual.

and 2000 cutworms in a summer. Slugs and snails are on their menu as well as mayflies, midges, gnats and mosquitoes.

All amphibians like toads need wet places to maintain body moisture, since they breathe partly through their skin. When marsh or wetland areas are filled in for people to build housing developments and malls, toads and frogs experience a shortage of environment.

Swamp Lantern (Lysicitum americanus)
Unusual plant for your toad pond.

Toads have an amazing ability to cope with adverse conditions. In summer they burrow underground to avoid extreme heat (aestivation), and in winter they can survive several weeks with two-thirds of their bodies frozen. They thaw out and begin feeding on insects. Because of these talents to adapt, scientists disagree about methods of counting and years necessary to verify declining numbers.



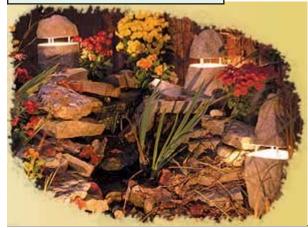
Natural pond. Though not too attractive in the landscape, this is ideal for toads-lots of algae to eat, shelter for tadpoles to hide and a nice, low bank to climb out. The same elements can be created in a more attractive way for gardens.

# Toads in Your Garden, continued



Wapato (Sagitaria latifolia) Excellent native water plant

Another idea for a tiny toad pond, this one has lights.



This column includes highlights of some studies obtained from the Internet. The Minnesota Department of Natural Resources has concluded that the disappearance of frogs and toads can indicate serious problems in the environment. Because amphibians exist in the water and on land, they are susceptible to all kinds of pollution. The Minnesota Frog Watch considers them an integral part of the food chain and coordinates a counting program while keeping records of deformities.

Scientists in California agree that pesticides and pollution may be factors in decreasing amphibian numbers and add other reasons: increasing ultra-violet radiation resulting from ozone depletion and global climate change.

No one underestimates the importance of urban sprawl but since the late 1970's herpetologists have noticed changes in populations even in remote natural habitats in South America and

parts of the western United States and Canada.

A number of scientists who argued that studies need to be over longer periods now realize that some species have already become extinct. The trend is unmistakable. Even in relatively unspoiled areas frogs and toads appear to be declining.



Easy toad pond: A couple of pots and some rocks=simple and attractive.



American Toad (Bufo americanus)
Photo by Rob J at The City Birder

Toads in Your Garden, continued



Last year the Gettysburg Times (July 4, 2000) carried a story from the Greensburg Tribune-Review titled "Scientists and Volunteers Count Frogs." In it Robb Frederick states that fear of some frog extinctions had surfaced in a herpology conference in England in 1989.

The North American Amphibian Monitoring Program, coordinated by Linda Weir of Maryland, began their field surveys in 1995 and now has volunteers in 28 states. Weir relies on state directors like Art Hulse, biology professor at Indiana University of Pennsylvania to recruit and train volunteers.

While scientists claim there is no real distinction (both are amphibians), I refer to the toad as invaluable warriors against plant pests in the garden. All are vulnerable to chemical fertilizers, pesticides, ozone depletion, and problems brought about by urban sprawl.

Unfortunately, whatever the cause of the scarcity, I suspect many gardeners are looking for their quiet little helpers.

Many thanks to the Adams County Pennsylvania Master Gardeners and Linda Knox for this excellent article.



My, how tiny! The little bitty toad at top is just climbing out of the pond. One just about that size sits in the palm of the woman's hand in the middle photo. Compare this little one to the quarter to get the proper perspective. Tiny!

A single cattail plant will give even the smallest toad pond just the greenery it needs. Pretty, too.



# How Green are You?

#### Time to check our progress using this special online test.

Back in January of this year, we challenged you to take the Earth Day Ecological Footprint Quiz. Hopefully, you did that and saved your scores. Now it's time to take it again and see how you've grown in the last 4 months.

Go to the <u>Open University</u> site at <u>http://myfootprint.org/.</u> In just a few minutes you'll learn a great deal about how green you are living. And remember, until you know where you are you can't tell how far you need to go. Even if you are living in an ecologically sound way, there is always room for improvement.

#### Earth Day Ecological Footprint Quiz

Ever wondered how much "nature" your lifestyle requires? You're about to find out.

This Ecological Footprint Quiz estimates how much productive land and water you need to support what you use and what you discard. After answering 15 easy questions you'll be able to compare your Ecological Footprint to what other people use and to what is available on this planet. The caution below is from the website:

CAUTION: THIS QUIZ MAY SURPRISE YOU, SHOCK YOU, OR MAKE YOU THINK. PLEASE REMAIN CALM...BUT NOT TOO CALM!!

The system of nature, of which man is a part, tends to be self-balancing, self-adjusting, self-cleansing. Not so with technology. ~ E.F. Schumacher, Small is Beautiful, 1973 GREEN NOTE: Use the right plant in the right place.



Big-Leaf Maple (Acer macrophyllum) provides shade in the summer but its bare branches allow early spring sun to reach the ground below. Underplant with Salal (Gaultheria shallon) or other NW Natives. Photo by JoAnn Onstott

# How Green are You?, continued



Red-Osier Dogwood (Cornus sericea ssp. stolonifera) Photo by JoAnn Onstott

The results of this quiz are available online. They have comments and tips for improvement in these areas:

Broad general observations Recycling Composting Food Holidays Finances

Remember, this is not a one-day event and the actions you take do not have to happen in just one day. By gradually changing our buying habits, looking for ways to reduce the waste we generate, taking care to dispose of that waste in an environmentally friendly method, teaching our children the good lessons we learn, we will make this planet a better

place. Every step towards that goal will make a big difference. We may not see it in our lifetimes but we are investing in the future of our children and their children and for all generations to come.

On the next page is a questionnaire you can print and share with family and friends. Challenge them to answer the questions and to think of ways they can make those answers better every day.

Replace invasive plants such as English ivy, Scotch broom and Himalayan blackberry with native plants.



English ivy--dangerously invasive will eventually kill this Doug Fir if not removed.



Recycling Questionnaire
1. How do you recycle garden waste?
2. How can recycling like this benefit the environment?
<b>◇</b>
3. What kind of household items are you able to recycle?
¢
4. Where in your local area are you able to recycle goods?
¢
5. What are the benefits of recycling for the environment?
¢
6. On average how much waste is produced in the home each year?
¢
7. How much of this could be recycled?
¢
8. What is the alternative to throwing old clothes in the bin?
¢
9. Who is responsible for refuse disposal?
¢г
10. How can your community aid recycling in the area?
<b>分</b>
Print this page and ask your neighbors, friends and family to answer the questions!
In an underdeveloped country, don't drink the water; in a developed country, don't breathe the air. ~Changing Times magazine

We begin our Earth Day special section with a poem by one of the men who started this annual observance we call "Earth Day."

#### **HOIST THE SAILS!** By John McConnell



Children of the world hoist the Earth Day Flag

The sails are down, the ship becalmed. Its fragil life at stake. No longer do we ride the gentle swells of Silent seas and breathe The fragrant air.

Broken are the rhythms Of our cyclic plants And other living things.

But now the Captain speaks again Our quiet thoughts at last reveal his voice.

"Hoist the sails. Earth Man. Set them for celestial winds. Hold the tiler firm, The course ahead is clear."

Be He nature, God or chance His voice is heard And we shall heed The Captain's quiet command. Four billion years ago Our lonely Earth Set sail on cosmic seas Guided by an unseen hand Of nature, God or chance.

As life evolved Through endless eco-cycles Man was born, destined To destroy or enrich the Precious Ship.

And now his hand Has seized the tiller But his ear has not Yet caught the Captain's Quiet command.



# Earth Day?

At right and below: Lady Fern (Athyrium filix-femina var. cyclosorum)

#### What is it?

Earth Day is a name used by two different observances held annually in the (northern) spring, both intended to inspire awareness of and appreciation for the Earth's environment. Every part of our lives has an ecological aspect, from our food, clothing and shelter to our hobbies and activities. How we condust our everyday goings and comings has an impact on the earth.

#### How did it start?

The Earth's environment began to show obvious signs of distress and by the late 1960's it was apparent we were heading for trouble unless some definitive action was taken. Two great men stepped to the fore to lead the world population in salvaging what we could and taking preventive measures to put our spaceship Earth back on track. These two leaders were John McConnell and Gaylord Nelson. Each in their own way began a movement to save our planet.

#### When is it?

- --One Earth Day is held at the spring equinox.
- --One Earth Day is held on April 22.

Some grassroots Earth Day organizers seek to move the date of the observance to the summer solstice, to take advantage of the warm temperatures in the Northern Hemisphere (where most people live) to create greater participation. But for now, we have two official dates to observe this unique and very important day. Think of it as two opportunities to enhance our lives and enrich our planet.

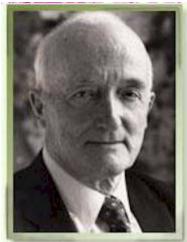
So, when is Earth Day? Today and every day. Earth Day (the official observance) is in the public domain and open to all persons to shape as the

see fit. If you prefer to celebrate at the equinox, please do so. If you prefer an April Earth Day, blessings upon you. The goal of both is the same: to remind us all of our stewardship of our planet. Celebrate Earth Day and Earth Year and Earth Decade and Earth Century--just do it.

Let us be good stewards of the Earth we inherited. All of us have to share the Earth's fragile ecosystems and precious resources, and each of us has a role to play in preserving them. If we are to go on living together on this earth, we must all be responsible for it. ∼ Kofi Annan → More→

GREEN NOTE: Celebrate Earth Day in your garden! Plant a tree, touch a leaf, smell a flower!

#### Earth Day--How did it start? Here are the two stories.



#### John McConnell

#### The Equinoctial Earth Day

International Earth Day, March 20, 2007 at 7:07 PM EST (Eastern Standard Time) or 12:07 UTC March 21 (Greenwich, England) http:// www.earthsite.org/

"May there only be peaceful and cheerful Earth Days to come for our beautiful Spaceship Earth as it continues to spin and circle in frigid space with its warm and fragile cargo of animate life."

> —United Nations Secretary-Genera U Thant, March 21, 1971.

The equinoctial Earth Day (or International Earth Day) is celebrated on the vernal equinox to mark the precise moment that spring begins in the Northern Hemisphere and autumn in the Southern Hemisphere. Night and day are in equal length anywhere on Earth. A perfectly vertical pole standing on the equator at noon during equinox will not cast a shadow. At the South Pole, the sun sets and ends a six-month-long day while at the North Pole, the sun rises and hence ending six months of continuous darkness.

United Nations celebrates *Earth Day* each year on the vernal equinox (around March 21). On February 26, 1971, UN Secretary-General U Thant signed a proclamation to that effect. At the moment of the equinox, it is traditional to observe the day by ringing the Japanese Peace Bell, a bell donated by Japan to the United Nations.

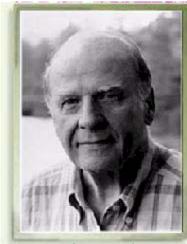
🖿 California Black Oak (Quercus kelloggii) 🌑 Garry Oak (Quercus garryana var. garryana) 🗖

**⇒**Continued on next page⇒

#### The April 22 Earth Day

Earth Day for Everybody, April 22, 2007, http:// www.earthday.net/ or http:// www.earthday.gov/ Portal for U.S. Government Events & Information

In January 1970, the Environmental Teach-in decided to call their oneoff event held on April 22, Earth Day. The day's success led to it becoming a regular event.



Gaylord Nelson

Senator Gaylord Nelson, an environmental activist in the U.S. Senate, took a leading role in organizing the celebration, to demonstrate popular political support for an environmental agenda. He modeled it on the highly effective Vietnam War protests of the time. Senator Nelson staffed the office with college students and selected Denis Hayes (a Harvard student and Stanford graduate) as the National Coordinator of activities.

It was the era of student political activism and outdoor protests that attracted news cameras. The nationwide event included opposition to the Vietnam War on the agenda. Pete Seeger was a keynote speaker and performer at the event held in Washington DC. Paul Newman and Ali McGraw attended the event held in New York City.

⇒Continued on page 31⇒

#### The Equinoctial Earth Day .....

John McConnell first introduced the idea of a global holiday called *Earth Day* at a UNESCO Conference on the Environment in 1969, the same year that he designed the Earth flag. The first *Earth Day* proclamation was issued by San Francisco Mayor Joseph Alioto on March 21, 1970. U Thant supported John McConnell's global initiative to celebrate this annual spring equinox event. Secretary General Waldheim observed Earth Day with similar ceremonies in 1972. The United Nations Earth Day ceremony continued each year on the day of the March equinox (20th or 21st), with the ringing of the U.N. Peace Bell at the very moment of the equinox. In 1975 the U.S. Congress and President Gerald Ford proclaimed and urged observance of Earth Day on the March equinox.

"The earth will continue to regenerate its life sources only as long as we and all the peoples of the world do our part to conserve its natural resources. It is a responsibility which every human being shares. Through voluntary action, each of us can join in building a productive land in harmony with nature." *President Gerald Ford Proclaiming March 21 as Earth Day* 

#### **PROCLAMATION**

As inhabitants of this Earth - Earthians, we need a day to celebrate our global unity and destiny.

The observance of EARTH DAY will alert concern and interest for our planet — with its precious treasure of living things.

EARTH DAY is to remind each person of his right and the equal right of each person to the use of this global home and at the same time the equal responsibility of each person to preserve and improve the Earth and the quality of life thereon.

NOW, THEREFORE, I, Joseph L. Alioto, Mayor of the City and County of San Francisco, do hereby proclaim March 21st (Vernal Equinox) to be designated EARTH DAY — a special day to remember Earth's tender seedlings of life and people; a day for planting trees and flowers; a day for cleaning streams and wooded glens: that on EARTH DAY the EARTH FLAG which portrays in its center our "Beautiful Blue Planet", be flown to encourage mutual respect for Earth and all its people.

On this day 1900 to 2000 Universal Time (11:00 a.m. to 12:00 noon PST) be designated EARTH HOUR - a Silent Hour For Peace; and do invite all citizens throughout the community to join in observing EARTH DAY and EARTH HOUR in every way they may deem appropriate.

San Francisco Mayor Alioto's proclamation

⇒More⇒

Sword Fern

(Polystichum

munitum)

#### The Equinoctial Earth Day.....



spicant)

IN WITNESS WHEREOF I have hereunto set my hand and caused the seal of the City and County of San Francisco to be affixed this eleventh day of February, nineteen hundred and seventy.

Joseph L. Alioto, Mayor

EARTH DAY / EARTH TRUSTEES

MAKE YOUR NEIGHBORHOOD AN EARTH CARE CENTRE

For Earth Care

Move thoughtfully and protect the web of life that surrounds our globe and is our Life-Support system.

Know that the air and water that circulates around the planet circulates through us.

Check your job out and see if it aids life more than it destroys.

Study advertisements and reject products that waste or pollute.

Share cars, newspapers, whatever you can.

Recycle paper, metals, glass, plastics.

Repair and give away what you no longer need.

Love a little.

Conserve, insulate your home, build for good ventilation.

Use your hands.

Learn how a person treats the Earth before you vote for him or her.

Rejoice in human energy.

Use your legs.

Grow some of your own food.

Inherit the Earth, it belongs to each of us. Its health, wealth, beauty is our health, wealth, beauty.

San Francisco Mayor Alioto's proclamation

#### The Equinoctial Earth Day.....



Carmen Colombo and John McConnell in New York on Earth Day 1999, March 20

John McConnell, founder of International Earth Day (www.earthsite.org) and Carmen Colombo, founder of WOW Zone (Wish Only Well) www.wowzone.com have agreed to combine their efforts. The combination of WOW (Wish Only Well) thinking and Earth Trustee action can defeat the hate, fear and violence that threatens civilization.

Every year the Peace Bell is rung at the United Nations New York Headquarters and around the world at the precise moment of the spring equinox - March 20 or 21.

Earth Day is considered the most significant day of the year, when people of

all cultures, ages, and creeds unite for a common cause: the care of our planet.

Coastal Shield Fern (Dryopteris arguta)



This is The Peace Bell. It was presented to the United Nations in June 1954 by the United Nations Association of Japan. It was cast from coins collected by people from 60 different countries including children, and is housed in a typically Japanese structure, resembling a Shinto shrine, made of cypress wood. Besides being run at the spring equinox, it is run on 21 September to coincide with the opening of the General Assembly. In 2002, the General Assembly set 21 September as the permanent date for the International Day of Peace.

When some high-sounding institute states that a compound is harmless or a process free of risk, it is wise to know whence the institute or the scientists who work there obtain their financial support. ~Lancet, editorial on the "medical-industrial complex," 1973

#### The Equinoctial Earth Day.....

# Deer Fern

(Blechnum

spicant)

#### **Earth Day Proclamation**

Written by John McConnell, Founder of International Earth Day, it is at the United Nations Headquarters in New York, N.Y., USA.

June 21, 1970

by the people of Earth for the people of Earth

## EARTH DAY PROCLAMATION

Whereas: A new world view is emerging: through the eyes of our Astronauts and Cosmonauts we now see our beautiful blue planet as a home for all people, and

Whereas: Planet Earth is facing a grave crisis which only the people of Earth can resolve, and the delicate balances of nature, essential for our survival, can only be saved through a global effort, involving all of us, and

Whereas: In our short sightedness we have failed to make provisions for the poor, as well as the rich to inherit the Earth, and our new enlightenment requires that the disinherited be given a just stake in the Earth and its future -- their enthusiastic cooperation is essential if we are to succeed in the great task of Earth renewal, and

Whereas; World equality in economics as well as politics would remove a basic cause of war and neither Socialism. Communism nor Capitalism in their present forms have realized the potentials of Man for a just society; nor educated Man in the ways of peace and creative love, and

Whereas: Through voluntary action individuals can join with one another in building the Earth in harmony with nature, and promote support thereof by private and government agencies, and

Whereas: Individuals and groups may follow different methods and programs in Earthkeeping and Earthbuilding, nevertheless by constant friendly communication with other groups and daily meditation on the meaning of peace and good will they will tend more and more to be creative, sensitive, experimental, and flexible in resolving differences with others, and

Whereas: An international EARTH DAY each year can provide a special time to draw people to gether in appreciation of their mutual home. Planet Earth, and bring a global feeling of community through realization of our deepening desire for life, freedom and love, and our mutual dependence on each other.



Ringing the Peace Bell

President Ford's proclamation

#### The Equinoctial Earth Day.....

Be it Therefore Resolved: That each signer of this People Proclamation will seek to help change Man's terrible course toward catastrophe by searching for activities and projects which in the best judgement of the individual signer will:

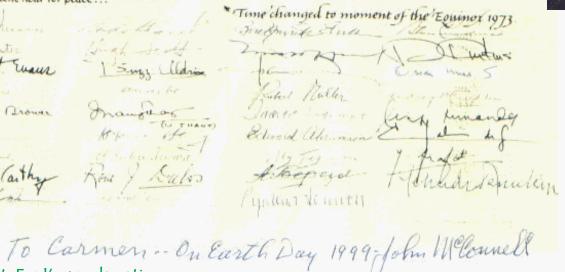
peacefully end the scourge of war

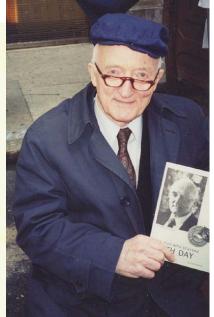
provide an opportunity for the children of the disinherited poor to obtain their rightful inheritance in the Earth

redirect the energies of industry and society from progress through products...
to progress through harmony with Earth's natural systems for improving thequality of life

that each signer will (his own conscience being his judge) measure his commitment by how much time and money he gives to these purposes, and realizing the great urgency of the task, he will give freely of his time and money to activities and programs he believes will best further these Earth renewal purposes. (At least nine percent of the world's present income is going to activities that support war and spread pollution. Ten percent can tip the balance for healthy peaceful progress.)

Purthermore, each signer will support and observe EARTH DAY on March 21st, 1971 (Vernal Equinox -- when night and day are equal throughout the Earth) with reflection and actions that will encourage a new respect for Earth with its great potentials for fulfilling Man's highest dreams; and on this day will join at 1900 Universal Time in a global EARTH HOUR-a silent hour for peace...





John McConnell



**⇒**More**⇒** 

President Ford's proclamation

#### The Equinoctial Earth Day.....

#### Original Signers of President Ford's Proclamation, 1970 - 71, and some signers 1990 - 2000

1. Alexander B. Grannis	
New York Assembly	

The Temple of Understanding

3. Luther Evans

2. Judith Hollister

**Former Director General of UNESCO** 

4. Estelle Feldman (Ireland) 1970 World Youth Assembly

5. David R. Brower Friends of the Earth

6. Arvid Pardo Ambassador, UN Mission to Malta

7. Margaret Mead Anthropologist

8. Eugene McCarthy
US Senator from Minnesota

9. John Gardner Common Cause

10. Mike Gravel

**US Senator from Alaska** 

11. Hugh Scott

**US Senator from Pennsylvania** 

12. Buzz Aldrin American Astronaut 13. S. O. Adebo (Nigeria)
President of UN Assembly

14. U Thant (Ceylon)

**United Nations Secretary General** 

15. Maurice Strong (Canada)
UN Environmental Programme

16. Y. Fukushima (Japan) Environmental Scientist

17. Rene J. Dubois
Environmental Scientist

18. Lubos Kohoutek (Czechoslovakia)

**Astronomer** 

19. Buckminster Fuller Inventor, Scientist, Scholar

20. Mark Hatfield

U.S. Senator from Oregon

21. John Denver

Singer

22. Robert Muller (France)

**Assistant Secretary General, United Nations** 

23. Edward Abramson Chairman, Earth Day 1990

24. Isaac Asimov Writer

25. Aly Teymour (Egypt)

**Chief of Protocol, United Nations** 

26. Anatoly N. Berezovoi (Russia)

Cosmonaut

27. Cynthia Lennon (United Kingdom)

**Artist** 

28. Stan Lundine

Lieutenant Governor, New York

29. David Dinkins Mayor of New York City

30. Oscar Arias

President of Costa Rico

31. Audrey McLaughlin Leader, NDP, Canada

32. George Fernandes

Minister of Transportation, India

33. Carlos Salinas
President of Mexico

34. Yasir Arafat

**President of Palestine** 

35. Yehudi Menuhin Musician, Violinist

36. Mikhail Gorbachev President, Russia

Lady Fern (Athyrium filix-femina var. cyclosorum) In the background



The April 22 Earth Day.....



About Earth Day

Earth Day, Everyday

By Senator Gaylord Nelson, **Founder of Earth Day** 

http://earthday.wilderness.org/history/





Note: Earth Day Founder Gaylord Nelson passed away July 2005 at the age of 89. He believed strongly that education is the key to changing people's attitudes about the environment and he devoted much of his energy to that challenge. In the section below, which he prepared not long before his death, he answered some of the questions he was most often asked about the how he conceived the first Earth Day, why and what his hopes for the observance were.

What was the purpose of Earth Day? How did it start? These are the questions I am most frequently asked.



Actually, the idea for Earth Day evolved over a period of seven years starting in 1962. For several years, it had been troubling me that the state of our environment was simply a non-issue in the politics of the country. Finally, in November 1962, an idea occurred to me that was, I thought, a virtual cinch to put the environment into the political "limelight" once and for all. The idea was to persuade President Kennedy to give visibility to this issue by going on a national conservation tour. I flew to Washington to discuss the proposal with Attorney General Robert Kennedy, who liked the idea. So did the President. The President began his five-day, eleven-state conservation tour in September 1963. For many reasons the tour did not succeed in putting the issue onto the national political agenda. However, it was the germ of the idea that ultimately flowered into Earth Day.

I continued to speak on environmental issues to a variety of audiences in some twenty-five states. All across the country, evidence of environmental degradation was appearing everywhere, and everyone noticed except the political establishment. The environmental issue simply was not to be found on the nation's political

agenda. The people were concerned, but the politicians were not.

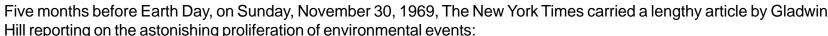
After President Kennedy's tour, I still hoped for some idea that would thrust the environment into the political mainstream. Six years would pass before the idea that became Earth Day occurred to me while on a conservation speaking tour out West in the summer of 1969. At the time, anti-Vietnam War demonstrations, called "teach-ins," had spread to college campuses all across the nation. Suddenly, the idea occurred to me - why not organize a huge grassroots protest over what was happening to our environment?

I was satisfied that if we could tap into the environmental concerns of the general public and infuse the student anti-war energy into the environmental cause, we could generate a demonstration that would force this issue onto the political agenda. It was a big gamble, but worth a try.



#### The April 22 Earth Day.....

At a conference in Seattle in September 1969, I announced that in the spring of 1970 there would be a nationwide grassroots demonstration on behalf of the environment and invited everyone to participate. The wire services carried the story from coast to coast. The response was electric. It took off like gangbusters. Telegrams, letters, and telephone inquiries poured in from all across the country. The American people finally had a forum to express its concern about what was happening to the land, rivers, lakes, and air - and they did so with spectacular exuberance. For the next four months, two members of my Senate staff, Linda Billings and John Heritage, managed Earth Day affairs out of my Senate office.







Big Leaf Maple (Acer macrophyllum)

"Rising concern about the environmental crisis is sweeping the nation's campuses with an intensity that may be on its way to eclipsing student discontent over the war in Vietnam...a national day of observance of environmental problems...is being planned for next spring...when a nationwide environmental 'teach-in'...coordinated from the office of Senator Gaylord Nelson is planned...."

It was obvious that we were headed for a spectacular success on Earth Day. It was also obvious that grassroots activities had ballooned beyond the capacity of my U.S. Senate office staff to keep up with the telephone calls, paper work, inquiries, etc. In mid-January, three months before Earth Day, John Gardner, Founder of Common Cause, provided temporary space for a Washington, D.C. headquarters. I staffed the office with college students and selected Denis Hayes as coordinator of activities.

Earth Day worked because of the spontaneous response at the grassroots level. We had neither the time nor resources to organize 20 million demonstrators and the thousands of schools and local communities that participated. That was the remarkable thing about Earth Day. It organized itself.

#### The April 22 Earth Day.....

Oregon Myrtle (Umbellularia californica)

According to Santa Barbara Community Environmental Council:

"The story goes that Earth Day was conceived by Senator Gaylord Nelson after a trip he took to Santa Barbara right after that horrific oil spill off our coast in 1969. He was so outraged by what he saw that he went back to Washington and passed a bill designating April 22 as a national day to celebrate the earth."

Senator Nelson stated that Earth Day "worked" because of the spontaneous response at the grassroots level. Though he felt his committee had neither the time nor resources to organize the 20 million demonstrators and the thousands of schools and local communities that participated, these things did happen. According to the Senator, "It organized itself."

The "holiday" proved extremely popular in the United States. The first Earth Day, in 1970, had participants and celebrants in two thousand colleges and universities, roughly ten thousand primary and secondary schools, and hundreds of communities across the United States. More importantly, it "brought 20 million Americans out into the spring sunshine for peaceful demonstrations in favor of environmental reform."

Senator Nelson directly credited the first Earth Day with persuading U.S. politicians that environmental legislation had a substantial, lasting constituency. Many important laws were passed by the Congress in the wake of the 1970 Earth Day, including the Clean Air Act, laws to protect drinking water, wild lands and the ocean. The EPA was created within three years of the first Earth Day. In 1971 Senator Gaylord Nelson announced an 'Earth Week' — for the third week of April — as a yearly event.

Earth Day is a time to celebrate gains we have made and create new visions to accelerate environmental progress. Earth Day is a time to unite around new actions. Earth Day and every day is a time to act to protect our planet.

On April 22, 1970, 20 million people across America celebrated the first Earth Day. It was a time when cities were buried under their own smog and polluted rivers caught fire. Now Earth Day is celebrated annually around the globe. We've made remarkable progress since then in protecting human health and safeguarding the natural environment. Through the combined efforts of the U.S. government, grassroots organizations, and citizens like you, what started as a day of national environmental recognition has evolved into a world-wide campaign to protect our global environment.



#### The April 22 Earth Day.....



Hemlock

(Tsuga

heterophylla)

Proclamation 6085 - Earth Day, 1990

January 3rd, 1990.

By the President of the United States of America A Proclamation

The world's natural resources sustain not only the economic and social development of nations, but the entire spectrum of life on Earth. In our natural surroundings, we find breathtaking beauty and order — reflections of the magnificent designs of our Creator. Environmental problems, on the other hand, reveal the tragic consequences of our failure to cherish and protect these wonderful gifts.

Twenty years ago, on January 1, 1970, then-President Nixon signed the National Environmental Policy Act of 1969 into law. This legislation signalled our Nation's growing concern about the state of the environment and set forth important Federal policy goals. Today, another decade is unfolding before us — the third since America's strengthened commitment to protecting our natural resources. As we enter the 1990s, it is fitting that we pause once again to assess the state of our environment.

Tremendous progress has been made during the past 20 years in addressing environmental problems, yet great challenges remain. Many scientists are concerned that a buildup of certain gases in the atmosphere may cause significant climate changes with serious, widespread consequences, and there is growing evidence that the stratospheric ozone layer is gradually being depleted. Problems such as acid rain, deforestation, ocean pollution, and the improper disposal of toxic wastes also pose threats to the health of our planet. That is why, as we welcome the promise of a new decade, we must strengthen and renew our commitment to environmental protection.

While some of the challenges before us have changed, our responsibilities are the same today as those recognized 20 years ago. As a nation, we must acknowledge that our environment and economy are interdependent. We must also go beyond the traditional regulatory role of government and continue to seek solutions that embrace all sectors of society in preventing pollution and ecological damage before they occur.

President Bush's proclamation

#### The April 22 Earth Day.....

The first Earth Day helped increase dramatically public awareness of ecological issues. Across the country, millions of people rallied to express their concerns about pollution and to learn how they could help clean up and protect the environment. Thanks to the educational programs and volunteer programs established since then, many Americans now are more faithful stewards of our precious natural resources.

Today the United States is a leader in environmental protection. We have made important progress toward improving air quality through enforcement of the Clean Air Act, the phasing out of leaded gasoline, and more stringent fuel efficiency standards for automobiles. We have expanded our parks, wildlife refuges, and wilderness areas. We have made major advances in protecting our lakes, rivers, and streams; and we have begun to clean up once-neglected toxic waste sites. The United States has also been a leader in the worldwide effort to study and address global climate change. Through our participation in the Intergovernmental Panel on Climate Change, we are working to promote environmental safeguards not only at home but also abroad.

Today we vow to press on with this vital work. On the day he signed the National Environmental Policy Act, President Nixon said the 1970s "must be the years when America pays its debt to the past by reclaiming the purity of its air, its waters, and our living environment." Today I say the 1990s must be the years when we not only pay our debt to the past, but also fulfill our obligation to protect this earthly home for generations yet unborn.

To heighten public awareness of the need for active participation in the protection of the environment and to promote the formation of an international alliance that responds to global environmental concerns, the Congress, by Senate Joint Resolution 159, has authorized and requested the President to issue a proclamation in observance of this day.

NOW, THEREFORE, I, GEORGE BUSH, President of the United States of America, do hereby proclaim Sunday, April 22, 1990, as Earth Day. I call upon the people of the United States to observe this day with appropriate programs, ceremonies, and activities designed to promote greater understanding of ecological issues. I also ask the American people to rededicate themselves — in their practices as consumers and citizens — to protecting the environment.

IN WITNESS WHEREOF, I have hereunto set my hand this third day of January, in the year of our Lord nineteen hundred and ninety, and of the Independence of the United States of America the two hundred and fourteenth.

**GEORGE BUSH** 

President Bush's proclamation

⇒More⇒

Cedar

#### The April 22 Earth Day.....

The Spirit of the First Earth Day by Jack Lewis

[EPA Journal - January/February 1990]

In the waning months of the 1960s, environmental problems were proliferating like a many-headed hydra, a monster no one could understand let alone tame or slay. Rampant air pollution was linked to disease and death in New York, Los Angeles, and elsewhere as noxious fumes, spewed out by cars and factories, made city life less and less bearable. In the wake of Rachel Carson's 1962 best-seller. Silent Spring, there was widespread concern over large-scale use of pesticides, often near densely populated communities. In addition, huge fish kills were reported on the Great Lakes, and the media carried the news that Lake Erie, one of America's largest bodies of carried the news that Lake Erie, one of America's largest bodies of Gaylord Nelson fresh water, was in its death throes. Ohio had another jolt when Cleveland's Cuyahoga River, an artery inundated with oil

and toxic chemicals, burst into flames by spontaneous combustion.

In a response commensurate with the problem, an estimated 20 million Americans gathered together on April 22, 1970, to participate in a spectacularly well-publicized environmental demonstration known as "Earth Day." The rallies, teachins, speeches, and publicity gambits almost all went smoothly, amid a heady and triumphant atmosphere that was further enhanced by perfect spring weather. But the months leading up to Earth Day had been frantic, and the success of the event had been unpredictable up to the very last moment.

See the rest of this article at http://www.epa.gov/history/topics/earthday/01.htm

You go into a community and they will vote 80 percent to 20 percent in favor of a tougher Clean Air Act, but if you ask them to devote 20 minutes a year to having their car emissions inspected, they will vote 80 to 20 against it. We are a long way in this country from taking individual responsibility for the environmental problem. ~William D. Ruckelshaus, former EPA administrator, New York Times, 30 November 1988

Coast Redwood (Sequoia sempervirens)



### The April 22 Earth Day.....

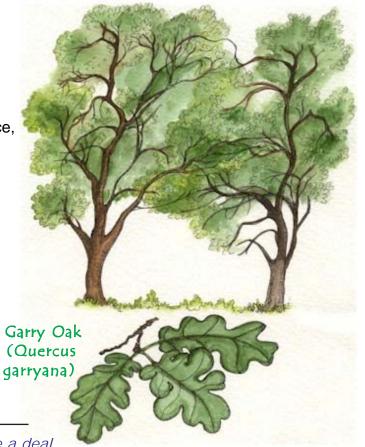
Though Senator Nelson is now gone, before he died he was awarded the Presidential Medal of Honor. Established by Executive Order 11085 in 1963, the Medal may be awarded by the President "to any person who has made an especially meritorious contribution to (1) the security or national interests of the United States, or (2) world peace. or (3) cultural or other significant public or private endeavors."

A few of the other recipients of this prestigious award are:



**Buckminister Fuller** T.S. Eliot Louis L'Amour Carl Sandberg Jonas Salk Jacques-Yves Cousteau Rachel Carson Normal Rockwell Georgia OKeefe Gene Kelly

Helen Hayes Van Cliburn Ansel Adams Walter Cronkite Bill Cosby Helen Keller Martin Luther King, Jr. Ronald Reagan Mother Teresa Joe DiMaggio



Loyd: "It has to do with keeping things in balance. It's like the spirits have made a deal with us. We're on our own. The spirits have been good enough to let us live here and use the utilities, and we're saying: We know how nice you're being. We appreciate the rain, we appreciate the sun, we appreciate the deer we took. Sorry if we messed up anything. You've gone to a lot of trouble, and we'll try to be good guests."

Codi: "Like a note you'd send somebody after you'd stayed in their house?"

Loyd: "Exactly like that. 'Thanks for letting me sleep on your couch. I took some beer out of the refrigerator, and I broke a coffee cup. Sorry, I hope it wasn't your favorite one.'"

~Barbara Kingsolver, Animal Dreams

### The April 22 Earth Day.....



The Presidential Medal of Freedom

THE PRESIDENTIAL MEDAL OF FREEDOM "The Presidential Medal of Freedom is the highest honor given to civilians in the United States...Twenty-five years ago this year, Americans came together for the very first Earth Day...They came together...because of one American - Gaylord Nelson. As the father of Earth Day...He inspired us to remember that the stewardship of our natural resources is the stewardship of the American Dream. He is the worthy heir of the tradition of Theodore Roosevelt...And I hope that Gaylord Nelson's shining example will illuminate all the debates in this city for years to come."President Bill Clinton, 9/29/95

Senator Nelson's many achievements include legislation to:

- Preserve the 2,000-mile Appalachian Trail
- · Mandate fuel efficiency standards in automobiles
- Control strip mining
- · Ban the use of DDT
- · Ban the use of 245T (agent orange)
- · Create the St. Croix Wild and Scenic Riverway and the Apostle Islands National Lakeshore

Senator Nelson also co-sponsored the National Environmental Education Act and wrote legislation to create the the Upper Great Lakes Regional Commission and Operation Mainstream/Green Thumb, which employed the elderly in conservation projects. He is the recipient of numerous awards, including two from the United Nations Environment Programme.

Gaylord Nelson became Counselor of The Wilderness Society in January, 1981. In his 14 years at The Wilderness Society, Nelson focused his efforts on protecting America's national forests, national parks, and other public lands. Until his death he concentrated on U.S. population issues and sustainability. He remained actively involved in Earth Day affairs and served as Chairman of Earth Day XXV, which was celebrated April 22, 1995. He was the Founder of Earth Day Network's Earth Day 2000 Clean Energy Now! campaign.

Giant Sequoia

(Sequoiadendron

giganteum)

### What you can do

Garry Oak (Quercus garryana

var. garryana)



#### What and where can I recycle?

Reducing consumption, reusing items, and recycling products and materials help to protect the environment. EPA offers you information on which products you can recycle, which help prevent waste and reduce consumption; and ways to reuse dozens of items.



- EPA's Reduce, Reuse, and Recycle Web site www.epa.gov/epaoswer/non-hw/muncpl/reduce.htm
- Recycle City Web Site www.epa.gov/recyclecity/ helps you learn about and explore how residents in this make-believe city are protecting their environment.

#### How can I care for my lawn and yard?

Mowing the lawn and taking care of your yard often produce large amounts of waste. By reducing waste, recycling your grass clippings, mulching, and composting, you can

**GREEN NOTE:** Another choice-instead of a lawn, just get rid of it and plant natives!

improve your lawn and garden, and protect your corner of the planet.

For more information:

"Greenscaping Your Lawn and Garden" www.epa.gov/epaoswer/non-hw/green/ pubs/home-gs.pdf

⇒More⇒

### EPA's progress report.

### Earth Day--how's it working?

In the 70's

1970 Twenty million people celebrate the first Earth Day.

1970 President Richard Nixon creates EPA with a mission to protect the environment and public health.

1970 Congress amends the Clean Air Act to set national air quality, auto emission, and anti-pollution standards.

**1971** Congress restricts use of lead-based paint in residences and on cribs and toys.

1972 EPA bans DDT, a cancer-causing pesticide, and requires extensive review of all pesticides.



In 1996, the bald eagle was removed from the endangered species list, reflecting its recovery since the 1972 DDT ban.

1972 The United States and Canada agree to clean up the Great Lakes, which contain 95 percent of America's fresh water and supply drinking water for 25 million people.

1972 Congress passes the Clean Water Act, limiting raw sewage and other pollutants flowing into rivers, lakes, and streams.

### How do I use pesticides safely?



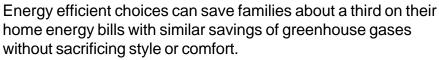
ENERGY STAR

Here's how you can find out about pest control in a variety of settings (household, garden, school) using integrated pest management techniques.
For more information:

GREEN NOTE: Another choice-try good bugs and toads and birds, nature's pest patrol!

Pest Control www.epa.gov/pesticides/controlling/index.htm

#### How can I make my home more energy efficient?



For more information:

ENERGY STAR www.energystar.gov/

#### How clean is the electricity I use?

Electricity is generated in many different ways. Now you have a choice in choosing the source of your power and how it is generated by using

EPA's Power Profiler.

For more information:

· EPA's Power Profiler: See how clean your power can be www.epa.gov/ cleanenergy/powerprofiler.htm



⇒More⇒

### EPA's progress report, cont'd.

In 1972, only 36 percent of the nation's assessed stream miles were safe for uses such as fishing and swimming: today, about 60 percent are safe for such uses.

1973 EPA begins phasing out leaded gasoline.

**1973** OPEC oil embargo triggers energy crisis, stimulating conservation and research on alternative energy sources.

**1973** EPA issues its first permit limiting a factory's polluted discharges into waterways.

**1974** Congress passes the Safe Drinking Water Act, allowing EPA to regulate the quality of public drinking water.

**1975** Congress establishes fuel economy standards and sets tail-pipe emission standards for cars, resulting in the introduction of catalytic converters.

**1976** Congress passes the Resource Conservation and Recovery Act, regulating hazardous waste from its production to its disposal.

**1976** President Gerald Ford signs the Toxic Substances Control Act to reduce environmental and human health risks.

1976 EPA begins phaseout of cancer-causing PCB production and use.

1977 President Jimmy Carter signs the Clean Air Act Amendments to strengthen air quality standards and protect human health.



#### How can I support cleaner electricity generation?

Green power offers users an option to support newer technologies that capture renewable energy sources to create electricity.

For more information:

 Visit EPA's Green Power Locator to find out about green power options in your area www.epa.gov/ greenpower/locator/index.htm

#### How do I reduce and dispose of household hazardous wastes?

Americans generate 1.6 million tons of household hazardous waste per year, including paints, cleaners, stains and varnishes, car batteries, motor oil, and pesticides. When they are not properly handled, household hazardous waste can

pose health risk to people and the environment.

For more information:

Steps to Safe Management of Household Hazardous Waste. Learn how you can reduce the amount of household hazardous waste you generate and ensure that those wastes are safely stored and handled. www.epa.gov/epaoswer/non-hw/househld/hhw.htm

GREEN NOTE: Good management of hazardous wastes protects us all. Hummingbirds disappear when poisons run free.



### EPA's progress report, cont'd.

**1978** Residents discover that Love Canal, New York, is contaminated by buried leaking chemical containers.

**1978** The federal government bans chlorofluorocarbons (CFCs) as propellants in aerosol cans because CFCs destroy the ozone layer, which protects the earth from harmful ultraviolet radiation.

**1979** EPA demonstrates scrubber technology for removing air pollution from coal-fired power plants. This technology is widely adopted in the 1980s.



1979 Three Mile Island nuclear power plant accident near Harrisburg, Pennsylvania, increases awareness and discussion about nuclear power safety. EPA and other agencies monitor radioactive fallout.

#### In the 80's

1980 Congress creates Superfund to clean up hazardous waste sites. Polluters are made responsible for cleaning up the most hazardous sites.



1981 National Research
Council report finds acid rain intensifying in the Northeastern
United States and Canada.

#### How can I reduce the amount of garbage I generate?



Individual consumers can help alleviate America's mounting trash problem by making environmentally aware decisions about everyday things like shopping and caring for the lawn. Like the story that says that cats have nine lives, so do many

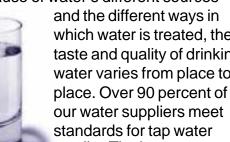
of the items that we use every day.

Reusing products is just one way to cut down on what we throw away. For more information:

> The Consumer's Handbook for Reducing Solid Waste. Learn about practical steps you can take to reduce the amount and toxicity of your garbage. www.epa.gov/epaoswer/non-hw/ reduce/catbook/index.htm

#### Is my tap water safe?

Because of water's different sources

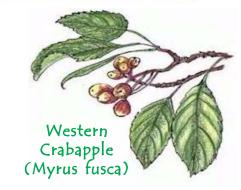


which water is treated, the taste and quality of drinking water varies from place to

quality. The best source of specific information about your drinking water is your water supplier: For more information:

EPA's Ground Water and Drinking Water Web site www.epa.gov/safewater/ faq/faq.html#safe **⇒** More**⇒** 





### EPA's progress report, cont'd.

1982 Congress enacts laws for safe disposal of nuclear waste.

**1982** Dioxin contamination forces the government to purchase homes in Times Beach, Missouri. The federal government and the responsible polluters share the cleanup costs.

1982 A PCB landfill protest in North Carolina begins the environmental justice movement.

**1983** Cleanup actions begin to rid the Chesapeake Bay of pollution stemming from sewage treatment plants, urban runoff, and farm waste.

1983 EPA encourages homeowners to test for radon gas, which causes lung cancer.

To date, more than 18 million homes have been tested for radon. Approximately 575 lives are saved annually due to radon mitigation and radonresistant new construction.

**1985** Scientists report that a giant hole in the earth's ozone layer opens each spring over Antarctica.

**1986** Congress declares the public has a right to know when toxic chemicals are released into air, land, and water.

1987 The United States signs the Montreal Protocol,



pledging to phase-out production of CFCs.

1987 Medical and other waste washes up on shores, closing beaches in New York and New Jersev.

#### How can I prevent stormwater pollution?



Keep litter, pet wastes, leaves, and debris out of the street gutters and storm drains that drain directly to

lake, streams, rivers, and wetlands. Apply lawn and garden chemicals sparingly and

**GREEN NOTE:** 

There is an ecologically sound alternative to ALL garden chemicals including those for lawns.

according to directions. For more information:

What You Can Do www.epa.gov/ weatherchannel/whatyoucando.html

#### How can I protect my family from mercury in fish?

Fish are a lean, low-calorie source of protein. However, some fish may contain chemicals that can pose health risks. When contaminant levels are unsafe,



consumption advisories may recommend that people limit or avoid eating certain species of fish caught in certain places. For more information:

EPA's Fish Advisories
Web site offers a brochure to

help women of child-bearing age and children select fish to avoid exposures to harmful effects of mercury. www.epa.gov/waterscience/fish/

Fawn Lily (Erythronium oreganum)

⇒ More ⇒

### EPA's progress report, cont'd.

1988 Congress bans ocean dumping of sewage sludge and ndustrial waste.

1989 Exxon Valdez spills 11 million gallons of crude oil in Alaska's Prince William Sound.

#### In the 90's



Gaylord Nelson (Earth Day founder), right, with William K. Reilly, Earth Day 1990

**1990** Congress passes the Clean Air Act Amendments, requiring states to demonstrate progress in improving air quality.

**1990** EPA's Toxic Release Inventory tells the public which pollutants are being released from specific facilities in their communities.

The number of chemicals listed in EPA's Toxic Release Inventory nearly doubled, from 328 in 1990 to 644 in 1999.

#### Should I care if my vehicle's "check engine" light turns on?

All cars and light trucks since 1996 have a computer-based system called "on-



board diagnostics" (OBD) that monitors the performance of some of the engine's major components, including emission controls. When the "check engine" or "service engine" light comes on and stays on, your OBD system is telling you that it has detected a problem with your vehicle. Getting your vehicle repaired when the OBD light appears can protect the environment, save you time and money before minor problems

become major repairs. For more information:

Find out about on-board diagnostics www.epa.gov/obd/veh\_own.htm

#### How can I protect my children from lead poisoning?

Lead-based paint is a hazard if it is peeling, chipping, chalking or cracking. Even



undisturbed lead-based paint can be a problem if it is in surfaces that children chew or that get lots of

wear and tear. For

more



information:

· How to protect your children from lead poisoning www.epa.gov/oppt/lead/pubs/leadinfo.htm#protect

Blue Blossom (Ceanothus thrysiflorus) Easy care evergreen shrub

⇒More⇒

### EPA's progress report, cont'd.

**1990** President George Bush signs the Pollution Prevention Act, emphasizing the importance of preventing—not just correcting—environmental damage.

**1990** President George Bush signs the National Environmental Education Act, signifying the importance of educating the public to ensure scientifically sound, balanced, and responsible decisions about the environment.

**1991** Federal agencies begin using recycled content products.

1991 EPA launches voluntary industry partnership programs for energy-efficient lighting and for reducing toxic chemical emissions.

**1992** EPA launches the Energy Star® Program to help consumers identify energy-efficient products.

1993 EPA reports secondhand smoke contaminates indoor air, posing serious health risks to posmokers

Today, more than 80 percent of Americans protect their children from secondhand smoke exposure at home.

**1993** A cryptosporidium outbreak in Milwaukee, Wisconsin's drinking water sickens 400,000 people and kills more than 100.

The human race will be the cancer of the planet. ~Julian Huxley, attributed

## How can I protect my children from second-hand smoke?

Secondhand smoke can cause bronchitis, pneumonia, ear infections and more severe

asthma attacks. For more information:



Take the Smokefree Home Pledge to help protect your children's health www.epa.gov/smokefree/ GREEN NOTE: Children

must not
be exposed to secondhand smoke.

It is not
an option.

### How can I find out if my home has a radon problem?



You can't see, smell, or taste radon, but it may be a problem in your home. Radon exposures can result in lung cancer. Nearly one in 15 homes in the U.S. has a high level of indoor radon. For more information:

Learn how to avoid radon risks www.epa.gov/radon/pubs/citguide.html

Chocolate Lily (Fritillaria affinis)

### In Your Community

How do I learn about environmental conditions in my community? Window To My Environment helps you make a map of your community with



links to data and information about air quality, water quality, drinking water safety, and toxic releases in your area. It combines interactive maps with links to federal, state and local environmental resources to answer questions about what is being done to protect the environment in your

community. For more information:

Window to My Environment www.epa.gov/enviro/wme/

⇒More⇒

### EPA's progress report, cont'd.



1993 President Bill Clinton directs the federal government to use its \$200 billion annual purchasing power to buy recycled and environmentally preferable products.

1994 EPA launches its

Brownfields Program to clean up abandoned, contaminated sites to return them to productive community use

1994 EPA issues new standards for chemical plants that will reduce toxic air pollution by more than half a million tons each year—the equivalent of taking 38 million vehicles off the road annually.

1995 EPA launches an incentive-based acid rain program to reduce sulfur dioxide emissions.

1995 EPA requires municipal incinerators to reduce toxic emissions by 90 percent from 1990 levels.

1996 Public drinking water suppliers are required to inform customers about chemicals and microbes in their water, and funding is made available to upgrade water treatment plants.



Today, the vast majority of American households have safe drinking water, and receive annual reports on the quality of their drinking water.

#### How can I help to prevent pollution?



Now you can prevent pollution in lots of environmentally and economically beneficial ways. Extracting and using raw materials creates pollution and uses energy. By changing the way

you use products and resources you can prevent pollution and save money. Preventing pollution provides cleaner air and water, less waste in landfills, conservation of natural resources, reduced soil erosion, lower electricity and water bills, and increased property values.

For more information:



Bear Grass (Xerophyllum tenax)

 Reduce your "environmental footprint" at home and in your community through these pollution prevention activities www.epa.gov/opptintr/p2home/ aboutp2/general.htm

#### How can I help manage waste?

Citizens in every community - including schools, businesses, and local governments - must work together to reduce and better manage our waste. For more information:

The What You Can Do Web site provides resources that explain solid



and hazardous waste issues at the local level, and help you improve your community environment.

www.epa.gov/ epaoswer/osw/community.htm GREEN NOTE: Earth Day is the perfect opportunity to evaluate the 'green' in your life. Try native plant gardening!

⇒More⇒

### EPA's progress report, cont'd.

**1996** EPA requires that home buyers and renters be informed about lead-based paint hazards.

1996 President Bill Clinton signs the Food Quality Protection Act to tighten standards for pesticides used to grow food, with special protections to ensure that foods are safe for children to eat.

**1997** An Executive Order is issued to protect children from environmental health risks, including childhood asthma and lead poisoning.

1997 EPA issues tough new air quality standards for smog and soot, an action that would improve air quality for 125 million Americans.

1998 President Bill Clinton
announces the Clean Water Action Plan to continue making
America's waterways safe for fishing and swimming.

**1999** President Bill Clinton announces new emissions standards for cars, sport utility vehicles, minivans and trucks, requiring them to be 77 percent to 95 percent cleaner than in 1999.

**1999** EPA announces new requirements to improve air quality in national parks and wilderness areas.

#### In the 2000's

**2000** EPA establishes regulations requiring more than 90 percent cleaner heavy duty highway diesel engines and fuel.

### EPA's progress report, cont'd.

#### Is the air outside healthy?



EPA's Air Quality Index (AQI) provides daily air quality reports. The AQI tells you how clean or polluted your outdoor air is, and what associated health effects

might be a concern for you. The AQI focuses on health effects you may experience within a few hours or days after breathing polluted air. For more information:

Learn more about your air quality at the AIRNow Web site. airnow.gov/

#### How can I learn about toxic releases?

EPA's Toxics Release Inventory contains information



on releases of nearly 650 chemicals and chemical substances from facilities including manufacturing, metal and coal mining, electric utilities, and commercial hazardous waste treatment, among others. For more information:

Use the TRI Explorer to make your

own report on the sources of toxics releases in your community, county or state. www.epa.gov/triexplorer/

> Slide from EPA website. Green Landscaping



Inside-Out Flower (Vancouveria hexandra)

⇒ More ⇒

PROMOTING NATURAL LANDSCAPING: WHAT IS THE ROLE OF LOCAL GOVERNMENT?

MOTE DEMONSTRATIONS OF NATURAL

ROVIDE EDUCATIONAL MATERIALS AND INFORMATION ON NATURAL LANDSCAPING



2002 President George W. Bush signs the Small Business Liability Relief and Brownfields Revitalization Act to reclaim and restore thousands of abandoned properties.

**2003** President George W. Bush signs the Healthy Forests Restoration Act, helping to prevent forest fires and safeguard and preserve the nation's forests.

**2003** More than 4.000 school buses will be retrofitted through the Clean School Bus USA program, removing 200,000 pounds of particulate matter from the air over the next 10 years.



2003 Clear Skies legislation and alternative regulations are proposed to create a cap and trade system to reduce SO2 emissions by 70 percent and NOx emissions by 65 percent below current levels.

2004 New, more protective, 8-hour ozone and fine particulate standards go into effect across the country.

President George W. Bush proposes the Clean Air Rules of 2004 that will make people healthier now and in the future. The result is more protection—faster—which ensures that clean air will be this generation's contribution to the next.



# How can I protect my drinking water?

There are lots of ways that you can help keep your local water supply safe. You can help to protect the watershed that surrounds it. For more information:

 How you can protect your drinking water www.epa.gov/safewater/dwh/getin.html



# Is it safe to swim at my favorite beach?

Find out whether your favorite beach water quality is being monitored, who is responsible for the monitoring, the pollutants that are being monitored, and whether

advisories or closures have been issued. For more information:

GREEN NOTE: Participate in SOLV's Great Oregon Beach Cleanups, Adopt-A-River, or Down By the Riverside project. Get a free cleanup kit and get involved! See www.solv.org for info.

- EPA's Beachgoer's Guide www.epa.gov/waterscience/ beaches/goer2.html
- Earth 911's Beach Water Quality Site www.earth911.org/ WaterQuality/ index.asp?newpostal=

⇒More⇒

Red-Osier

Dogwood

sericea ssp.

stoloinfera)

(Cornus

### EPA's progress report, cont'd.

**2004** EPA requires cleaner fuels and engines for off-road diesel machinery such as farm or construction equipment.

**2005** EPA issues the Clean Air Interstate Rule and the Clean Air Mercury Rule.

More recent information will be posted on the EPA website as data is collected and events transpire. See www.epa.gov.



#### From the Editor:

While it is true, the EPA and various groups of people who have made living green a goal have made great immense changes, there is still much more to do.

Make no mistake, it's not a job to leave for politicians or judges or somebody else.

It's our job, yours and mine, to do something about the health of our planet.

Do just one thing every single day and you will be amazed at the difference this small action can make.

So get busy and

### get green!



Racial injustice, war, urban blight, and environmental rape have a common denominator in our exploitative economic system. ~ Channing E. Phillips, speech, Washington, D.C., 22 April 1970

#### How can I prevent marine engine pollution?



If you're one of 12 million boat owners in the United States, you can find ways to reduce hydrocarbon and nitrogen oxides emissions fron your engine.

For more information:

· Boating Pollution Prevention Tips www.epa.gov/otaq/boat-fs.htm

#### How can I protect my watershed?

You can join the Watershed Information Network, discover what you can do to make a difference in your watershed, and learn more about nearby estuaries, lakes, streams, and rivers.

For more information:



- Watershed Information Network www.epa.gov/win/
- Fifteen Things You Can Do to Make a Difference in Your Watershed www.epa.gov/owow/watershed/earthday/earthday.html

#### At School



#### How can I learn more about our environment?

Whether you are a teacher or a student in kindergarten, or doing postdoctoral research, EPA has many educational resources to offer you when you visit our educational resources web pages.

For more information:

Educational resources www.epa.gov/epahome/educational.htm



Salal (Gaultheria shallon)
One of the finest Northwest Native groundcovers,
this evergreen is prized by florists for it's beautiful
foliage. Gardeners value it's hardy dependability.

#### How can I learn about national environmental conditions and trends?

EPA's "Environmental Indicators Initiative" seeks to improve the Agency's ability to report on the status of and trends in environmental conditions and their impacts on human health and the nation's natural resources.

For more information:

Environmental Indicators Initiative www.epa.gov/indicators/

#### How can I learn more about toxic releases in the environment?

EPA's report, "How are the Toxics Release Inventory data used?" contains case studies of how government, business, academic and citizens are using EPA's Toxics Release Inventory.

For more information:

How are the Toxics Release Inventory data used?
 www.epa.gov/tri/quide docs/2003 datausepaper.pdf

# How can I protect my kids from the harmful effects of the sun?

Overexposure to UV radiation can lead to serious health



effects, such as skin cancer, cataracts, and immune suppression. EPA's SunWise Program can help you protect yourself and your students from

overexposure to the sun through the use of classroombased, school-based, and community-based advisories. For more information:

SunWise www.epa.gov/sunwise/



Give a man a fish, and he can eat for a day. But teach a man how to fish, and he'll be dead of mercury poisoning inside of three years. ~Charles Haas





Where can I find proposed environmental regulations?

Regulations.gov enables you to search, view, and comment on regulations, topic-by-topic, that are being proposed from all federal agencies. For more information:

Regulations.gov www.regulations.gov

#### What about pollution from school buses?

The goal of Clean School Bus USA is to reduce both children's exposure to diesel exhaust, and the amount of air pollution created by

diesel school buses. Consider honoring Earth Day by

planning a clean school bus event in your community. For more information:

Clean School Buses Earth Day Event Planning Materials

Earth Day Ideas www.epa.gov/otaq/schoolbus/ e day ideas.htm

Earth Day Resources www.epa.gov/otaq/schoolbus/e\_day\_resources.htm



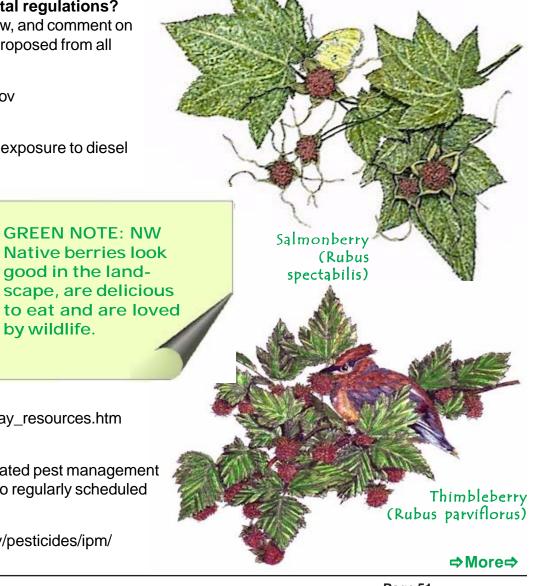
#### What about pesticides in schools?

Ask your school administrator to use integrated pest management as a safer and often less costly alternative to regularly scheduled spraying. For more information:

good in the land-

by wildlife.

Pesticides in schools www.epa.gov/pesticides/ipm/



#### Is my classroom environment safe?



The Healthy School Environments Web pages are intended to serve as a gateway to on-line resources to help facility managers, school administrators, architects, design engineers, school nurses, parents, teachers and staff address environmental health issues in schools.

#### For more information:

 Healthy School Environments cfpub.epa.gov/schools/ index.cfm

#### How can I improve the indoor air quality at my school?



EPA's Indoor Air Quality (IAQ) Tools for Schools Kit shows schools how to carry out a practical plan of action to improve indoor air problems at little or no cost using straightforward activities and in-house staff.

For more information:

EPA's Tools for Schools Kit www.epa.gov/iaq/schools/tools4s2.html

This illustration of NW Native plants was done by my daughter, Heidi D. Hansen, from sketches she made while at Ellsworth Springs a few years ago. This is little park in Vancouver, Washington. A daytrip to such a park provides a wealth of information for school children as well as adults.



#### At Work

#### How is EPA a good environmental steward?



EPA lives Earth Day every day by operating sustainable facilities and using environmentally preferable practices. Learn more about how the Agency is reducing energy and water use, purchasing green power, constructing green buildings, and preventing pollution.

For more information:

Greening EPA www.epa.gov/greeningepa/

In the background
Red Columbine (Aquilegia
formosa)

#### How can my employer be more energy efficient?



One easy way is by choosing office products (computers, faxes, etc.) that have earned an ENERGY STAR label. You can also help your organization become more aware of opportunities for increased efficiency.

For more information:

ENERGY STAR www.energystar.gov/

Increase Awareness at Work www.energystar.gov/index.cfm?c=energy\_awareness.bus\_energy\_work

### How can my company promote environmental stewardship?



EPA has voluntary programs that can help companies large and small reduce their environmental impacts while also saving energy and resources.

For more information:

- Find out what you can do at work www.epa.gov/epahome/atwork.htm
- Find out how companies in every industrial sector –including agriculture can "green" their facilities and processes, by exploring EPA's many voluntary partnership programs. www.epa.gov/partners/programs/
- Lean manufacturing is a business model and collection of methods that help eliminate waste while delivering quality products on time and at least cost. www.epa.gov/lean

⇒More⇒

**GREEN NOTE: Save energy** 

with good computer habits.

Turn off your monitor

when not in use. Shut

down your computer or hibernate at the

end of the day.

#### How can I reduce the environmental impacts of commuting?



Encourage your employer to be a "Best Workplaces for Commuters." Offering recognition for innovative solutions to commuting challenges faced by employers and employees, Best Workplaces for Commuters is a new public-private sector voluntary program advocating employer-provided commuter benefits. For more information:

· Best Workplaces for Commuters www.bwc.gov/

#### How do I manage electronic equipment replacement?



The Federal Electronics Challenge (FEC) is a voluntary partnership program that encourages federal facilities and agencies to produce greener electronic products, reduce impacts of electronic products during use, and to manage obsolete electronics in an environmentally safe way.

For more information:

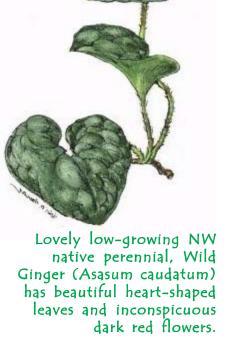
Federal Electronics Challenge www.federalelectronicschallenge.net/

#### How can my company adopt an Environmental Management System?



EPA makes sure that we are "walking the talk" when we encourage citizens to protect the environment and their health. EPA has put a new Environmental Management System (EMS) in place at our offices to reduce our environmental footprint by acknowledging the environmental aspects of our day-to-day activities and management. At EPA Headquarters, we are reducing the impact of our energy and water use, waste generation, natural resource depletion, and pollution associated with commuting to and operating our facilities and tracking our progress with our new EMS. For more information:

Environmental Management Systems (EMSs) resources for businesses, associations, the public, and state and federal agencies www.epa.gov/ems/



### While Shopping

#### How does my shopping affect the environment?

Everything you buy affects the Earth, but some choices have a



lesser impact. Educating yourself about the products you buy can empower you to make a difference in protecting the planet. It's called "green purchasing," and it's easy to do. For more information:

Green Purchasing www.epa.gov/epaoswer/osw/specials/funfacts/shopping.htm

GREEN NOTE: Take shopping bags with you instead of using the store's bags. Make bags from old jeans or other heavy fabrics or buy at tag sales or second-hand stores.

Bleeding Heart (Dicentra formosa) has been loved for centuries for it's sprays of pendulous pink blooms and fern-like leaves. How can such a delicate plant grow so prolifically? It is naturally perfect for NW gardens. Photo by JoAnn Onstott

#### How can I buy energy-efficient products?

The next time you need to replace a product for your home or office, consider



choosing one that has earned the government's ENERGY STAR. Energy-efficient choices can save families about a third on their energy bill with similar savings of greenhouse gas emissions, without sacrificing style or comfort. ENERGY STAR is a government-backed program helping businesses and individuals protect the environment by making the energy-efficient choice. For more information:

ENERGY STAR www.energystar.gov/

#### How do I find the most fuel-efficient vehicle?

EPA's Green Vehicle Guide gives information about the environmental performance



of vehicles. This guide provides the emissions scores and fuel economy of any model year 2000 or later car or truck. For more information:

EPA's Green Vehicle Guide www.epa.gov/greenvehicles/



### Earth Day Take Home Kit

These web resources provide tips that you and your family can use to protect the environment and your health, while celebrating Earth Day.

#### **EPA Explorers: Environmental Kids Club**



You can choose a range of activities from the "Game Room" to the "Science Room." Also learn about "You and Your Environment," and, if you need to, "Ask EPA." For more information:

Environmental Kids Club www.epa.gov/kids/

#### Live, Learn, Play— Tune Into Your Health and Environment



Did you know that the air you breathe, the water you drink, and the food you eat can affect the way your body grows and works? Learn how with fun activities and music! For more information:

· Live, Learn, Play yosemite.epa.gov/ochp/ochpweb.nsf/

content/youthbook.htm

# **Tips To Protect Children From Environmental Risks** Safeguard the home to avoid harmful effects of smoke, lead, pesticides, radon, carbon monoxide and mercury.

For more information:



 What you can do to protect children from Environmental Risks yosemite.epa.gov/ochp/ochpweb.nsf/ content/tips.htm GREEN NOTE: Children may not be too interested in gardening but they'll love these NW Native strawberries just as much as children did 100 years ago.







#### **Breathing Clean Air**

How clean is the air in your city today? You can find out the answer in several ways. The Air Quality Index (AQI) tells you how clean or polluted your outdoor air is, and what associated health effects might be of concern to you. Daily AQI forecasts, as well as real-time AQI conditions, are reported for over 300 cities across the US.

For more information:

· AirNow www.airnow.gov/



#### **Avoiding Too Much Sun**

Learn how to be "sun-safe" and protect yourself from harmful exposures to ultraviolet rays.

For more information:

SunWise Kids www.epa.gov/sunwise/kids.html



#### **Planet Protectors Club For Kids**

As a Planet Protector, your mission is to improve the world around you by making less trash. Planet Protectors also help other people learn to reduce, reuse, and recycle.

For more information:

 Planet Protectors www.epa.gov/epaoswer/ education/kids\_ppc.htm



#### **Drinking Water**

Learn about how drinking water gets to your home and what keeps it safe.

For more information:



Drinking Water and Ground Water Kids' Web site www.epa.gov/OGWDW/kids/

#### **Healthy Lawn Healthy Environment**

Care for Your Lawn in Environmentally-Friendly Ways. For more information:

Healthly Lawn Healthy Environment www.epa.gov/oppfead1/Publications/lawncare.pdf



Another kid pleaser: NW Native Huckleberries! Wally's favorite--you'll love them too. Photo by JoAnn Onstott

# **Earth Day Events & Volunteer Opportunities**



Make a Day of It.

Hours: May-September: 10 a.m. - 6 p.m. October-April: 10 a.m. - 4 p.m.

The biggest Earth Day celeration planned in our area will be held at the Oregon Garden. It will be hosted by Marion County Public Works - Environmental Services and Moonstone Properties. Workshops, screening of a new movie "The Real Dirt on Farmer John," good food and great music are all on the agenda. This is a family affair, free to the public with free bus from downtown Salem.



879 W. Main Street Silverton, OR 97381 503-874-8100 Toll Free 877-674-2733

Red Huckleberry (Vaccinium parvifolium) is nice in the landscape and very nice in the tummy, either fresh or dried! Mostly deciduous, a few of the small, oval shaped leaves may persist through the winter.

MARION COUNTY PUBLIC WORKS - ENVIRONMENTAL SERVICES PRESENTS: Marion County Public Works - Environmental Services and Moonstone Properties are hosting Earth Day at the beautiful Oregon Garden in Silverton. Thanks to the generous support of the sponsors below, the event will once again be free to the public. There will also be a free bus leaving from downtown Salem. On-site parking will be \$2.00. This year's theme is "Sustainable Agriculture" and there will be a variety of workshops on this important topic. For a complete list of activities visits www.oregongarden.org/SPROUT/SPROUT Events **ENJOY WORKSHOPS ABOUT:** · Film director, Taggart Siegel will screen his new movie "The Real Dirt on Farmer John" which is about Community Supported Agriculture. · Workshops on organic gardening Solar Energy Composting COME ENJOY GOOD Public Works-Environmental Services http://publicworks.co.marion.or.us/es

(503) 588-5169 | Se habla español

Earth Celebration Series 2007 begins in April!



Butterfly Princess from a previous year



A perennial favorite, the Earth Celebration Series consists of the 18th annual Earth Day Fair, the 8th annual Procession of the Species parade, and the SolAire Salmon Run. These three events are a fun way to celebrate the earth, allow yourself to be educated and entertained, and to give something back to the community. Be involved by hosting a costume making workshop for the parade, purchasing a booth for your business or organization at the Earth Day Fair, or by running or walking for river restoration in the SolAire Salmon Run. Booth spaces at the Fair are going fast, so download your application and send it in today! www.envirocenter.org



#### **Tryon Earth Day!**

Apr 22, 2007 at <u>Tryon Creek State Natural Area</u>. 2-4 p.m. Bring the whole family to learn about skunks through arts and crafts, games, stories and more. Come dressed as your favorite animal and make a musical instrument for an afternoon parade. www.oregonstateparks.org/park\_144.php



#### Tryon Creek's famous Trillium Trail



Woodlawn Park, Corner of NE 13th and NE Dekum, Portland, Oregon 97211 Saturday, April 21, 2007, 8:00 AM - 11:00 PM

Earth Day celebrates the planet through a variety of individual and community events that observe the beauty and vitality of nature. Earth Day projects are also about renewing your commitment to saving our living planet

### Earth Day Hoo Haa

good music, good food, good people Sunday, April 22, 2007 2:00 PM - 8:00 PM



Celebrate Earth Day at the organic growers student farm! Plant a potato, sow a seed, grab a pitchfork and lend a hand! Good food, music, and people. Farm tours, bubbles, face painting, Earth Info. Students, faculty and community members welcome! Bring the kids, please leave the pooch at home. FREE shuttle from campus, downtown. Come out and see the labors of the OSU organic growers club! More info at <a href="http://cropandsoil.oregonstate.edu/organic\_grower/">http://cropandsoil.oregonstate.edu/organic\_grower/</a>

**O**rgs student farm, off hwy 34 across the willammette, Corvallis, OR This is a free event! Contact John Henry Herring 760-9812, keoghh@onid.orst.edu



#### PARTY FOR THE PLANET!

Sunday, April 22 | Time: 12-4 p.m.

Celebrate Earth Day at the Oregon Zoo with all of your favorite party animals. Fun for everyone includes animal masks to make and wear, crafts, and fun things you can do to help keep our planet healthy. Free with zoo admission!

Rogue Valley Earth Day Celebration "Be the Change!"

at ScienceWorks in Ashland Saturday, April 21, 11 am - 4 pm

See website for details www.parks.ashland.or.us/earthday/index.html

Tentative entertainment:

Dancing Spirit Drum
Rogue Valley Peace Choir
Brazilian Capoeira Performance
Rutendo Marimba
Recycled Art "Trashion" Show
Taarka





Cascades Raptor Center Earth Day Open House April 22, 2007, 12 p.m - 5 p.m.

32275 Fox Hollow Road; Eugene Phone: (541) 485-1320

**Admission:** Free

Cascades Raptor Center



Join us for refreshments, music and activities - and get an up-close experience with dozens of magnificent birds! You get a behind the scenes glimpse of raptor rehabilitation at this nature center and wildlife hospital. This is a great family event. www.eRaptors.org

⇒ More⇒

Photo of EPA's Pandy Pollution handing out Earth Day information outside of EPA headquarters in Washington, DC.



#### **EPA** websites for U.S.

Find your region on the map at right and go to the site listed below. The EPA will be posting events as they are scheduled and the agency receives notifications.

- Region 1: www.epa.gov/region1/earthday/
- Region 2: www.epa.gov/region2/earthday/
- Region 3: www.epa.gov/region03/earthday/
- Region 5: www.epa.gov/region5/earthday/
- Region 6: www.epa.gov/region7/earthday/
- Region 7: www.epa.gov/region7/earthday/
- Region 8: www.epa.gov/region8/earthday/
- Region 9: www.epa.gov/region9/earthday/
- Region 10: yosemite.epa.gov/r10/extaff.nsf/ 208cfa50afd196da8825650f0070e8d9/

Find out more about how you can help protect the environment and save energy at home www.epa.gov/earthday/home.htm, at school www.epa.gov/earthday/classroom.htm, and at work www.epa.gov/earthday/work.htm. EPA's Earth Day "Take Home Kit" www.epa.gov/earthday/takehomekit.htmwill help you to talk to your family, your co-workers and neighbors about ways they can join you in celebrating Earth Day. Other federal activities <a href="https://www.earthday.gov/">www.earthday.gov/</a>





#### Miscellaneous websites with Earth Day event ideas.

Some of these are especially for teachers but you'll find lots of ideas to make this day special.

Organic Trade Association, www.ota.com/news/ohmcalendar.html

The Teacher's Guide, www.edhelper.com/caring\_for\_earth.htm

Earth Day Teacher's Lounge, earthday.wilderness.org/teachers/

Education World, search for 'earth day,' many articles on this site, www.education-world.com/

Teacher Planet, http://www.teacherplanet.com/resource/earthday.php

www.earthday.net/involved/teachers/join-Network.aspx

Pearly Everlasting (Anaphalis margaritacea)
Dry some for a year-round bouquet. Photo by JoAnn Onstott



# Useful Plant Databases on the Web

Here is a good collection of web data bases that will be useful to professional growers and all native plant gardeners. This list is from a larger list compiled by Lawyer Nursery in 2002 and published in one of their flyers. I wish to thank them for this public service.

### Wally

#### **American Bonsai Society**

http://www.absbonsai.org/abs\_home.html

#### Bonsai web

http://www.bonsaiweb.com

Portal of links to educate about the art of bonsai.

#### **CalPhotos**

http://elib.cs.berkeley.edu/photos/

Over 33,000 plant images from the University of California, Berkley

#### **Cornell University online grafting course**

http://instruct1.cit.cornell.edu/courses/hort494/graftage/hort494.index.html

#### Fire effects on plant species

http://www.fs.fed.us/database/feis/ USDA, Forest Service site.

#### Flora of North America Web Site

http://hua.huh.harvard.edu/FNA/

Taxonomic relationships, distributions, and morphological characteristics of all plants native and naturalized found in North America.



Harvest Lily (Dichelostemma [Brodiaea] contestum) Photo by JoAnn Onstott

# Useful Plant Databases on the Web, Continued

#### **Forest Types of the United States**

http://forestry.about.com/library/tree/bltypdex.htm Maps of the most common forest types.

#### Forestry index

http://forestryindex.net/ Links to news & info on the forestry industry.

#### **Growit.com Rooting Database**

http://www.growit.com/Know/Rooting.htm "Extensive information on rooting cuttings of woody plants, organized by botanical name. Developed for commercial growers."

#### The Native Plant Network

http://nativeplants.for.uidaho.edu/network/ Information on how to propagate native plants of North America.

#### Portland Bureau of Environmental Services

http://www.portlandonline.com/bes/ index.cfm?c=29323

Oregon's Clean River Agency website full of wonderful information about caring for our earth. Download their Native Plant Poster, plant list and brochure on removing invasive plants at http://www.portlandonline.com/bes/index.cfm?c=32142



The struggle to save the global environment is in one way much more difficult than the struggle to vanguish Hitler, for this time the war is with ourselves. We are the enemy, just as we have only ourselves as allies. ~Al Gore ⇒More⇒ Useful Plant Databases on the Web, Continued

#### **River Corridor and Wetland Restoration**

http://www.epa.gov/owow/wetlands/restore/ Environmental Protection Agency (EPA) site

#### Soils

http://homepages.which.net/~fred.moor/soil/links/10102.htm

A website about soil fertility, chemistry, and pH with many interesting links.

#### **Soil Science Society of America**

http://www.soils.org/

Website for soil science professionals. Offers information and links.

#### **Woody Plant Seed Manual**

http://www.wpsm.net/

Manual by the US Forest Service covering seed biology, genetic

Improvement of forest trees,

GREEN NOTE: Plant native bulbs beneath deciduous trees and add a native groundcover. After the bulbs are done the groundcover will hide the leaves and provide living mulch.

seed
testing,
certification of
tree seeds and
other woody plant
materials, and
nursery
practices.



Taper Tip Onion (Allium acuminatum) Photo by JoAnn Onstott



# Personal notes from Wally

# This article first appeared in our very first Journal!

I have a beautiful Native Plant Garden here in Oregon. But the words "beautiful Garden" are rather trite, inappropriate, sterile, lifeless. I look out my office window and see life – movement – vitality - A handsome Incense Cedar is crowding against my window, gently caressed by a soft September breeze. Splashes of golden sunlight play everchanging patterns against the tall Garry Oaks and Douglas Fir trees. Understory native shrubs fill the lower areas with intricate patterns which continually change as the day progresses. As the panorama fades into the evening, I leave by desk, take my Mt Fuji stick and walk the garden paths – the air is cool, invigorating, stimulating - there is a bonding, a connection that is inexplicit. However, an explanation is emerging - an article in the Wall St Journal, Aug 26, 2003, "Flower Power: How Gardens Improve Your Health." This fine article describes an emerging new practice of horticulture therapy. Studies have found that simply viewing a garden . . . can quickly reduce blood pressure and pulse rate and even increase brain activity that controls mood lifting feelings." That is a start but there is plenty more – All gardens help but native plant gardens are especially good – I know!

Rudyard Kipling, one of my heroes, identified this same this kinship in his poem "The Glory Of The Garden" about 100 years ago -. note

the following excerpts.



Our England is a garden that is full of stately views, Of borders, beds and shrubberies and lawns and avenues, With statues on the terraces and peacocks strutting by; But the Glory of the Garden lies in more than meets the eye.

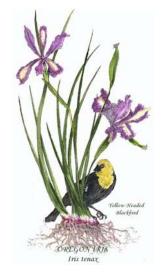
- - - - -

There's not a pair of legs so thin, there's not a head so thick, There's not a hand so weak and white, nor yet a heart so sick, But it can find some needful job that's crying to be done, For the Glory of the Garden glorifieth every one.

----

Oh, Adam was a gardener, and God who made him sees
That half a proper gardener's work is done upon his knees,
So when your work is finished, you can wash your hands and pray
For the Glory of the Garden that it may not pass away!
And the Glory of the Garden it shall never pass away!

Good luck! Wally



Two watercolors of NW native iris and birds by my daughter, Heidi D. Hansen



#### **NOTICE: NURSERY IS CLOSED**

### In November 2010, Wallace W Hansen Northwest Native Plants Native Plant Nursery and Gardens closed permanently.

Many thanks to all our gardening friends for your interest in the native plants of the Pacific northwest. It has been our pleasure to serve you.

# www.nwplants.com

Our website, www.nwplants.com, is no longer commercial. Our goal is to continue Wally's legacy of generating interest, even passion, in the magnificent native plants of the Pacific Northwest through information and illustration.

Good luck! Good gardening!

