



The EarthWISE Bulletin

The Sustainable Business Bulletin

Marion County

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Important dates:

- June 21 Summer Solstice
- June 21 Father's Day
- June 27 - 28 World Beat
- July 4 Independence Day
- July 9-12 Marion County Fair 
- July 17 - 19 Salem Art Fair
- Aug. 7 - 9 Fiesta Mexicana in Woodburn
- Aug. 28 - Sept. 7 Oregon State Fair
- Sept. 1 Labor Day
- Sept. 10 Marion County Master Recycler Program

Green lawns, green businesses

EarthWise landscapers provide environmental, money saving options to clients

Those emerald green, manicured lawns—the ones that look like golf courses—aren't truly green.

The three EarthWISE-certified landscaping companies in Marion County will tell you. In order to get that weed-free perfect, polished look, you have to spend a lot of another kind of green—money—on fertilizers, pesticides, water and even new sod every few years. So not only is it bad for the environment, it is bad for your budget.



Dry creeks can help capture runoff while providing a striking landscape feature.

DeSantis Landscapes, Green Acres Landscape and The Garden

Angels are the three landscape companies in Marion County to earn EarthWISE certification. For landscapers, EarthWISE certification shows clients that these companies not only run their business in an environmentally friendly way, but they also take an eco-approach to their clients' landscape projects.



Porous surfaces allow better water infusion and hardy perennials with low water needs add lots of color.

For example, all three of these companies' landscapers are well-versed in native plant horticulture, and can design beautiful landscapes around the use of native Oregon plants.

"Native plantings don't have to look like roadside ditches," said Elizabeth Frances-Powers, landscape designer for The Garden Angels, which provides landscape design to homeowners and landscape companies. "You can make native plants look really attractive and ornamental in how you layer them with other hardy plants."

The natives are good for several reasons: they have natural defenses against the bugs so there is less

need for pesticides; they have adapted to western Oregon's wet winters and dry hot summers so there is little need to water; and, they need fewer fertilizers since they like Oregon's soil profiles.

All of these reasons add up to another reason why DeSantis, The Garden Angels and Green Acres turn to natives: to save money. Clients learn from these EarthWISE businesses that many eco-friendly landscape practices save money through the lifespan of the landscape.

Frances-Powers of The Garden Angels often talks to clients about rain water collection and harvesting systems.

"It can be an expensive endeavor upfront but it pays for itself, usually in just a few years," she said. "Depending on how big the system is, the rain water collected from a rooftop can usually get the plant beds watered for most of a summer season."

Bonique Hollinrake, project manager of Green Acres, said that their landscapers also focus on water. Their landscapers will work very carefully to find the best irrigation system for the property. Green Acres staff also will maintain the system to ensure that it is providing the right amount of water at the right time and not leaking.



"We are also interested in using dry creek beds installed at a home or bioswales that help with runoff," Hollinrake said. "This helps keeps the water table clean."

In response to the demand for environmentally friendly alternatives, DeSantis Landscapes introduced a new service in 2005. Called Plant Health Care, the program focuses on the health of a landscape by improving plant and soil conditions.

In addition to the focus on a client's green landscape, these landscape companies employ several eco-friendly practices that save the companies money.

As DeSantis, for example, replaces old or broken equipment, new equipment is purchased that is more efficient and more environmentally friendly. The company replaces old trucks with diesel trucks, which run on a cleaner fuel: 20 percent biodiesel.



Landscaping equipment that used inefficient two-stroke engines has been replaced with four-stroke alternatives. The result: a quieter and more efficient machine that costs the same. DeSantis also switched to buying fuel for this equipment in bulk, which saves the company 50 percent in fuel costs.

DeSantis composts all leaves on site and then uses that compost in landscaping projects. The company saves about \$5,000 each year on its garbage service to not haul those leaves away.

These internal changes within a landscaping company make a difference to the clients—whether or not the landscape they choose is sustainable.

"It's always a big deal to make sure we are working as efficiently as possible and providing the best value," said Hollinrake of Green Acres. "We minimize our own energy and water use in office. If we cut costs there, we can push that value back to clients. That's why I like the EarthWISE certification for landscapers—it's not just out in the field or in the office; it is the complete business."

Does your business have a Master Recycler on staff?



**Marion County
Master Recyclers**

Is your organization ready to go beyond basic recycling? Marion County has just the course for you.

The Marion County Master Recycler Program provides expert instruction to people who live and work in Marion County. The class covers all aspects of solid waste management and ways to reduce, reuse, and recycle as much as possible.

“Many folks wonder why we have an entire class on recycling,” says Bailey Payne, Waste Reduction Coordinator for the County. “But once they get into the class, they discover that we cover a lot more information than simply what can be recycled.”

For the first time ever, the classes will take place during a weekday, instead of the traditional evening classes.

“We’ve heard from a lot of people over the years who told us that it would be easier for their schedule if they could avoid evening classes,” Payne said.

The course, which runs for five weeks, will be on Thursdays from September 10 through October 8, 2015. The all-day classes include fieldtrips to sites that the public seldom gets to see, such as the Covanta Waste-to-Energy Facility, a paper mill and a material recovery facility.

For more information about the class, people should visit www.MCRecycles.net, call 503-365-3191, or email environmentalservices@co.marion.or.us. The course is limited to 30 students and space is limited. Registration closes on Sunday, August 9, 2015.

What does a Master Recycler class cover?

- An overview of the entire solid waste system in Marion County
- Collection, transfer & disposal
- The recycling process
- Waste reduction and reuse
- What can be recycled
- Commercial and home composting systems
- Composting with worms
- Sources for recycled & reused goods
- Household hazardous waste
- The EarthWISE program...and more!

How does the Master Recycler Program benefit your organization?

Master Recyclers learn to connect the dots—how the waste stream works, how to reduce it, and how to find another home for it, if possible. They can help teach your staff as well. And perhaps more importantly, MR’s make important networking connections with other like-minded folks and professionals in the field.



Join the Movement

 Register today!
masterrecycler.net

Over 670 people have taken the Marion County Master Recycler class to learn about waste reduction, recycling, composting, and consumption. Become part of the team, and join the movement today!



**Marion County
Master Recyclers**

Marion County Public Works | Environmental Services, masterrecycler.net, 503.588.5169



Time to go electric?



Are electric vehicles in your future?

The number of purely electric vehicles (EV) are slowly making their way into mainstream Mid-Valley life and many businesses are beginning to wonder if such a vehicle might be a good choice for their fleet. Below are a few pros and cons to consider:

- Electricity miles are much cheaper than gasoline, usually 2 to 3 times cheaper.
- Electricity prices are less volatile than petroleum.
- Electric cars require less maintenance (they're pretty much tires and brakes, battery, and motor.)
- EV motors convert about 60% of the electrical energy from the grid to power the wheels—conventional gasoline vehicles only convert about 19% of the energy stored in gasoline to power the wheels.
- Tax credits and incentives increase your return-on-investment.
- Tailpipe emissions are zero (no tailpipe!)
- Green *cache* is bestowed upon you.

The downside to EV?

- Driving range: Right now, it's pretty much below 90 miles, except for Tesla vehicles.
- Recharge time can take up 4 to 8 hours; even a "quick charge" can be 30 minutes.
- While public recharging stations are relatively abundant in our area—compared to the rest of the U.S.—there are still gaps in service.
- EV batteries are large, bulky, and expensive to replace.



So, given those pros and cons, what will you decide? Here's what the US Department of Energy says:

Nearly all credible researchers believe that electric cars, even in coal-dependent regions, have a smaller environmental impact than conventional vehicles. In regions with a strong grid mix of renewables—such as hydro, wind and solar—or for electric car drivers with home solar, the emissions benefits are dramatic. You can expect some analysts to argue the opposite. But it's incontrovertible that EVs don't have a tailpipe, and therefore provide a real benefit to improving air quality for you, your family, and your community.



Tune into the latest stories about the 3R's

Waste Matters: On the Air



Tune in on the second and fourth Thursday at 1:00 pm as hosts Jessica Ramey and Alan Pennington chat with guests about their interesting and innovative waste reduction programs! The show broadcasts on **88.5 FM** in the S. Salem/ Turner area and **100.7 FM** in the rest of the Salem area. The show streams live online at www.kmuz.org and podcasts of all our shows are available. Check out our stories about various EarthWISE businesses. Yours could be next!

Time to recertify already?
These EarthWISE businesses did



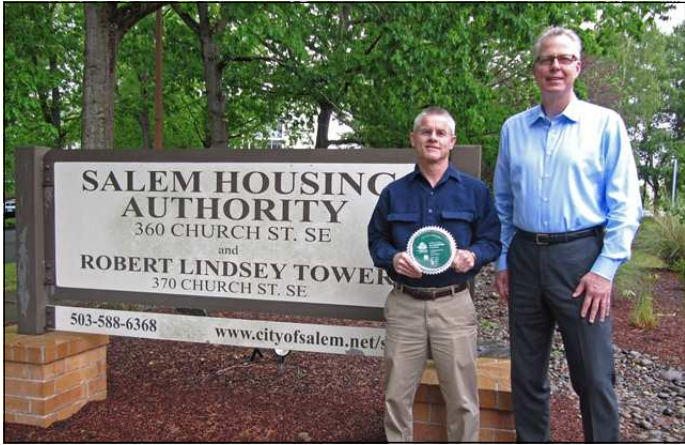
Marion County Dog Shelter
2010 - 2015



DAS Property Distribution Center
2010 - 2015



Marion-Polk Food Share
2010 - 2015



City of Salem Housing Authority
2010 - 2015

Time to recertify already?

These EarthWISE businesses did



Chiropractic Physicians, P.C.
2008 - 2015



Willamette Valley Fruit Company
2008 - 2015



Oregon Department of Energy
2008 - 2015

Ask Mister Sustainability

I've always thought that flying was the worst way to travel environmentally. However, I heard something the other day about a new study that said air travel is actually greener than driving a car. Can that be right?

Great question. And you are so right to ask, "Can that be right?"

Don't your spidey senses just tingle when you hear or read something like that? They should, because there's always more to the story than meets the eye. Here's the gist of most of what Samantha Page posted on **Think Progress**, April 29; *No, Flying is Not Greener than Driving*. www.thinkprogress.org She writes:

The new study, from Michael Sivak of the University of Michigan Transportation Research Institute (www.umich.edu/~umtriswt/PDF/UMTRI-2015-14_Abstract_English.pdf), says that if you average out the data, flying has become more efficient while driving has become less efficient. The crux of his argument rests on the fact that we are now packed like sardines into planes, which reduces carbon emissions per passenger mile.

Specifically, Sivak found that "the average energy intensity of driving a light duty vehicle, such as a car or SUV, in the United States was 4,211 BTUs (British thermal units) per person mile, while the energy intensity of flying domestically was 2,033 BTUs per person mile."

Of course, 4,211 is greater than 2,033, so driving must be twice as inefficient as flying, right?

Wrong. These numbers aren't considering the different kinds of trips we make, according to ICCT program director Dan Rutherford. For short trips — like most people's daily commute — flying isn't even sensible, much less environmental. For longer trips, where flying might be an option, packing just a few people into a car is going to offer significantly less carbon per person mile than flying will.

The real issue is what question you are trying to answer, Rutherford told ThinkProgress. "All that data is just averaged. He hasn't really made an attempt to compare competing trips." So for those of us interested in keeping a low carbon footprint, what questions really matter? Is it whether you drive to work every day, or whether you fly? How about whether your family will drive to Puerto Rico for vacation, or will they take the train?

Nope, those obviously aren't the questions. The only sensible comparison between air and car transportation is for trips where both means are viable options.

The Washington Post takes the research to its furthest conclusion, saying, "If you carpool with a large group of people over a moderate distance — say, driving from D.C. to Detroit for Thanksgiving — you *may* still beat flying on an energy intensity basis." (Emphasis added). That's wrong. By driving, you *will* beat flying on an energy intensity basis.

"The average occupancy for vehicle travel is 2.2," Rutherford said. "Anything above 2.2, you will get even better numbers for cars."

Using the averaged data, two people in a car emit roughly the same amount of carbon as they would by flying. If you have three people, driving is about 15 percent more efficient. A family of four in a car cuts their carbon footprint in half over air travel.

In other words, it is true that air travel is less carbon-intense now that more people are fitting on planes. But if you are choosing between flying and driving with more than one person — or, even better, in a hybrid car — it's still more environmentally friendly to pile into the car.

Of course, for people who truly want to cut their emissions, there is another directive here: Take the bus.

'Nuff said!

Factoid Department

Here's a stunner: If the internet were a country, it would be the 6th largest consumer of electricity in the world.

Speaking of electricity, the American Chemical Society tells us that two researchers have found a way to upcycle used packing peanuts into carbon electrodes. So? Seems peanuts can decrease battery charging time while increasing lithium-ion battery storage by 13%.

No small peanuts there.

Seattle Mariners fans are probably pretty disappointed that the team has the 2nd worst batting average in baseball. They are, however, the first in baseball to completely switch all of their metal halide lighting to LED.

Cheerful news is always welcome.

2014 was a banner year for collecting electronic waste in Marion County—nearly 1.7 million pounds worth. #1 electronic item collected? TV's (58%).

It was also a record year for collecting fluorescent lights for recycling; nearly 39,000 were collected. Just stretching out the straight ones, one could carefully form a line 38½ miles long. Why carefully? Because there's mercury in them there tubes! Hence, the need to recycle.

EarthWISE Member Directory

Automotive

AJ's Auto Repair, Inc.
Brooks Automotive
Capitol Auto Group
Sanford Automotive

Construction

Advantage Precast, Inc.
Arbuckle Costic Architects, Inc.
Barnwood Naturals, LLC
Carlson Veit Architects, P.C.
CB | Two Architects
Cherry City Heating
dalke Construction
Day Heating & Cooling
Fluent Engineering, Inc.
Jet Industries
LCG Pence Construction, LLC
Modern Building Systems, Inc.
Pence Northwest Construction, LLC
Studio 3 Architecture, Inc.
White Oak Construction

Education

Chemeketa Community College
Chemeketa Center for Business & Industry
Straub Environmental Center

Financial

Country Financial
FPS, Inc.
SELCO Community Credit Union

Food

Bentley's Grill
BrucePac - Silverton & Woodburn Plants
Cascade Baking
Kerr Concentrates, Inc.
LifeSource Natural Foods
NORPAC Foods - Stayton, Brooks, & Salem Plants
Spring Valley Dairy
Truitt Brothers, Inc.
Willamette Valley Fruit Company

Government

Champoeg State Heritage Area
Marion County Dog Shelter
Marion County Public Works—Silverton Road Campus
OR Department of Administrative Services- 20 Buildings
OR DAS - Salem Motor Pool
OR DAS - Property Distribution Center
OR Dept. of Corrections (DOC) CDC/Warehouse
OR DOC Gath Road Range
OR DOC Mill Creek Correctional Facility
OR Santiam Correctional Facility
OR State Corrections Institution
OR DOC State Penitentiary
OR Department of Energy
OR Exposition Center
OR Dept. of Public Safety Standards & Training
OR Lottery
OR State Capitol
Salem Center 50+
Salem Civic Center
Salem Fire Department
Salem Housing Authority
Salem - Information Technology
Salem - Public Works Willow Lake WPCF
Salem Shops
Salem - Urban Development's Airport Division
Salem - Urban Development's Director's Office
Salem Public Library

Landscaping

DeSantis Landscapes, Inc.
The Garden Angels
Green Acres Landscape, Inc.

Medical

Holly Chamberlain D.D.S., L.L.C.
Chiropractic Physicians, P.C.
Rural Metro Ambulance
Willamette E.N.T. & Facial Plastic Surgery, LLP

Not For Profit

Assistance League of Salem - Daue House
Assistance League of Salem - Encore Furniture
Family Building Blocks
Garten Services, Inc.
Habitat for Humanity of the Mid-Willamette Valley

Not For Profit (Continued)

Marion-Polk Food Share
SAIF Corporation
Temple Beth Sholom
Unitarian Universalist Congregation of Salem
United Way of the Mid-Willamette Valley
Willamette Lutheran Retirement Home

Personal Services

Designer Cut
Phiz Spa

Professional/Services

AAA Cleaning Service - Metro, Inc.
ABC Window Cleaners & Building Maintenance
Allied Video Productions
Cascade Employer's Association
Collier Law
Compex Two Computers
Lancaster Mall Operations
Law Office of Eden Rose Brown
VanNatta Public Relations/Spire Management

Real Estate & Commercial Properties

The Epping Group/Creekside Corporate Center
Pringle Creek Community
Wildwood | Mahonia

Recycling/Solid Waste

Agri-Plas, Inc.
Covanta Energy, Marion Facility
D & O Garbage Service Inc.
Loren's Sanitation & Recycling Services
Marion Recycling Center
North Marion Recycling & Disposal
Pacific Sanitation

Retail/Wholesale

Cooke Stationery Co.
Habitat for Humanity ReStore
One Fair World

Tourism

Grand Hotel in Salem
Salem Convention Center
Travel Salem

Transportation

South Salem Cycleworks
Salem Keizer Transit

Supreme Court allows local government to pass industry "take-back" laws

When Alameda County, California, passed a 2012 ordinance that required drug manufacturers to manage and fund the safe disposal of unwanted medicines, three pharmaceutical trade groups tested the legality of the law in court.



This spring, the U.S. Supreme Court decided to not hear the challenge, thus allowing the Alameda law to go into effect. Similar laws in San Francisco and King County, Washington will also stand.

The Massachusetts based Product Stewardship Institute (PSI) asserts that the decision to not hear the case will open the doors for more extended producer responsibility (EPR) laws.

EPR basically holds manufacturers responsible for recycling or safely disposing of their products once consumers are done with them. The idea is that when manufacturers are responsible for managing their products at end-of-life, they are often motivated to make environmentally beneficial design changes that render the products more sustainable throughout their lifecycle.

Oregon has two such EPR state-wide laws on the books for electronics and paint. Connecticut just passed the first mandatory state-wide recycling program for mattresses to deal with the estimated 175,000 discarded mattresses each year. All told, 34 states have one or more EPR laws on the books.

PSI Chief Executive Officer Scott Cassel applauded the decision. Cassel stated, "... this decision paves the way for other municipalities and states around the nation to pursue similar legislation."

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