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USCGA SUSTAINABILITY TODAY

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What Does Sustainability & Green Really Mean?

According to the Environmental Protection Agency (EPA), the traditional definition of “sustainability” calls for policies and strategies that meet society’s present needs without compromising the ability of future generations to meet their own needs. Sustainability typically takes social and economic issues in consideration.

“Sustainable activities” means doing something in the same or similar way for an indefinite period of time. These activities should include impacts to the environment while striving for a “no impact” goal. Examples of sustainable activities include:

- Reducing, Reusing, & Recycling
- Pollution Prevention
- Energy Efficiency

“Green” involves taking steps to have less impact, generally from an environmental standpoint. It usually focuses on a specific challenge and/or solution: i.e., global warming and wind energy. “Green” initiatives are a vital part of sustainability.

While “Green” and “Sustainable” are often used interchangeably, their scopes, methods of implementation, and definition of success are very different:

Green

Scope: Environment

Focus: Exclusive, detailed

Implementation: Tactical, implement by strategy

Definition of Success: Subjective, no common definition

Sustainable

Scope: Environment, Economy, Society

Focus: Inclusive, visionary

Implementation: Strategic, articulation of vision

Definition of Success: Objective, clearly defined



Defining sustainable goals, applying green practices, and implementing sustainable activities are just a few of the steps the Academy is taking to ensure a clean and healthy environment for us now and for generations yet to come.



CADETS ARE RECYCLEMANIACS

...Thanks to the Sustainability Club, the Corps of Cadets has the trophy to prove it!

Since 2008, the Cadet Sustainability Club has represented the Academy’s participated in RecycleMania, a 10-week “friendly competition and benchmarking tool for colleges and universities to promote waste reduction activities to their campus communities.” The USCGA is the only Service Academy to participate in this program.

600 colleges and universities participated in RecycleMania 2010. Despite the tough competition, the USCGA ranked #1 of 346 in the “Per Capita Classic”, the category that shows which school could collect the largest amount of recyclables per person.

USCGA also ranked in #13 of 267 in the “Grand Champion” category, the competition that demonstrates the greatest achievement in source reduction and recycling.



2/C Brett Huntley & Greg Bernstein measuring the amount of recyclables as part of RecycleMania 2010 .



“Sustainability” & “Green” Are Not New Concepts at the Academy



**Mac Hall Power Lab
scrap metal recycling**

The Academy has incorporated many green and sustainable activities and practices for about 20 years. For example, the Academy has actively recycled bottles, cans, paper, and cardboard since the 1990's.

To increase recycling opportunities and decrease the amount of trash generated at the Academy, “Single Stream Recycling” was instituted in FY2010. With single stream recycling, all recyclable items are placed in the same container and collected without having to sort or separate.

them. Trash still goes into its own separate bin.

The Academy has a Pollution Prevention (P2) program with goals for Academy departments and shops:

- To reduce waste; &
- To use less hazardous/toxic products.

P2 works! Since 1999, the amount of hazardous waste generated by academic departments and shops has decreased by nearly 70%. This also saves the Academy money in hazardous waste disposal fees.

In FY2007, the Academy adopted the “Qualified Recycling Program” (QRP) where scrap metal from Academy sources may be collected and sold. In the first 6 months, the Academy received about \$6000. from the sale of scrap metal. Funds from the QRP directly benefit the Academy's MWR.

Do you know that over the past year—the Academy recycled over 111,000-lbs of scrap metal through QRP?



Want to be Green? Try This!

Stop waste before it starts! Eliminating waste before it starts is called “source reduction.” Some source reduction tips:

- Purchase only what you need!
- Purchase items in bulk or economy sizes.
- Purchase items in reusable containers.
- Purchase items with the least amount of packaging.

There are other easy green things to do:

- Use your desk side recycling bin for all recyclable paper, plastic #1 through #7, and glass.*
- Conserve paper – make two-sided prints
- Use sustainable paper
- Use Energy Star energy saving functions
- Replace standalone office equipment with multi-

- function systems
- Return print/copy cartridges and supplies for recycling
 - Seek office equipment designed for remanufacturing or recycling
 - Scan and send to share documents electronically

*(*Please empty drink, cup and food containers before recycling.)*



Got Junk?

The Academy has a strong recycling program that works with a number of eligible organizations that will be very happy to receive our unwanted materials as a donation. Whether an item was on the personal property inventory or not, it is never okay to dispose of items without talking to the Academy Property Officer

first. Please call (860)444-8303 before arranging for dumpsters or the removal of materials like furniture, wall coverings, chairs, electronics, shelves, or anything in useable condition.



Indoor trash and recycling stations



Electronics Stewardship

An information society pushes institutions to purchase information related hardware at an unprecedented rate. Lifecycles of computer equipment are shortening causing more electronic waste to show up at the end of the product lifecycle faster than before. The Academy is working to provide a proactive approach to collecting, tracking, remanufacturing, reusing, redistributing and recycling of its surplus computers and other electronic equipment.

In all aspects of its acquisitions, operations and maintenance, and disposal, the Academy aspires to be a good steward of the earth's resources.

sources and a wise manager of the taxpayers' dollar. The electronics stewardship will help advance both roles.

The Academy generated over 40,000-lbs of e-waste last year. E-waste is waste electrical and electronic equipment. This includes discarded, surplus, obsolete, or broken electronic devices. The Academy strives to manage "e-waste" by donating serviceable equipment to through the "Computers for Learning" (CFL) program, and disposing broken or unserviceable equipment through an environmentally responsible recycler.



Unused Academy monitors slated for donation to area schools.

Do you have something to dispose that is not on your properties list or you're not sure about? Don't toss it until you call x8303!

Green Purchasing

"Green Purchasing" or "Affirmative Procurement" is a strategy for maximizing purchase of recycled content products in accordance with Section 6002 of the Resource Conservation and Recovery Act (RCRA).

Affirmative Procurement also encompasses a policy to purchase environmentally friendly products including those with reduced packaging. The "buy recycled" require-

ment applies to Federal agencies, state and local entities using federal monies, and their contractors. According to the Office of the Federal Environmental Executive (OFE), "Green Purchasing" includes the acquisition of recycled content products, environmentally preferable products and services, bio-based products, energy- and water-efficient products, alternative fuel vehicles, products using renewable energy, and alternatives to hazardous or toxic chemicals.

Green purchasing requires the reduction of the quantity of toxic and hazardous chemicals and materials acquired, used, and then disposed. For example, there is a direct correlation between the use of hazardous or toxic chemicals and fuels and environmental liability. Comparable alternative products have demonstrated to lessen environmental damage and diminish solid waste byproducts and associated disposition costs.



Which Waste is What?

Solid waste essentially refers to any type of unwanted and discarded material in a solid, liquid, or contained gaseous form.

Municipal solid waste (MSW) is a subset of solid waste that is defined in statute as solid waste from residential, commercial, and industrial sources, excluding hazardous wastes and special wastes. Non-regulated solid waste generated at the Academy is classified as MSW.

Regulated waste is hazardous and special wastes, such as chemicals, chemical products, scrap metal, biomedical waste, sewage sludge, and bulky wastes (e.g., land clearing and demolition debris) that require special handling and disposal. Procedures for hazardous and special waste disposal are addressed in the Academy's Regulated Waste Management Plan.

Be careful of what you toss! The State of Connecticut views the Academy as a business. This means that even simple things like old Elmer's Glue ® may be regulated, and must not be tossed in the trash.

When in doubt - don't throw out! Call the Environmental Branch!



Cadets cleaning up the waterfront area.



ECO-SMART



Eco-Labels Everywhere! Energy Star & EPEAT: What's the Difference?

The Academy is a leader in the community with regard to environmental stewardship. It is our responsibility to give preference to environmentally superior products, where quality, function and cost are equal or superior, and to choose products based on efficient use of energy, natural resources, and potential for safe, non-hazardous disposal.

New rules, regulations, and Executive Orders mandate us to purchase energy efficient products. Electronics and appliances now come with labels to help us choose products based on its energy efficiency,

The most visible and popular program is the Department of Energy (DOE) and Environmental Protection Agency's (EPA) "ENERGY STAR." The goal of the program is to help everyone save money and protect the environment through energy efficient products and practices.

In 1992 the EPA introduced ENERGY STAR as a voluntary labeling program designed to identify and promote energy-efficient products to reduce greenhouse gas emissions. Computers and monitors were the first labeled products.

Through 1995, EPA expanded the label to additional office equipment products and residential heating and cooling equipment. In 1996, EPA partnered with the DOE for particular product categories. The ENERGY STAR label is now on office equipment, lighting, home electronics, and more. EPA has also extended the label to cover new homes and commercial and industrial buildings.

Electronic Product Environmental Assessment Tool (EPEAT) is a system to help purchasers in the public and private sectors evaluate, compare and select desktop computers, notebooks and monitors based on their environmental attributes. EPEAT is based on Institute of Electrical and Electronics Engineers (IEEE) P1680 standards., and provides a clear and consistent set of performance criteria for the design of products, and provides an opportunity for manufacturers to secure market recognition for efforts to reduce the environmental impact of its products.

EPEAT evaluates electronic products according to three tiers of environmental performance - Bronze, Silver and Gold. The complete set of performance criteria includes 23 required criteria and 28 optional criteria in 8 categories.

To qualify for acceptance as an EPEAT product, it must conform to all the required criteria. Manufacturers may pick and choose among the optional criteria to boost their EPEAT baseline "score" to achieve a higher-ranking level.

Specific information on ENERGY STAR EPEAT ratings, and the list of products and their ratings for comparison, please visit:

www.energystar.gov

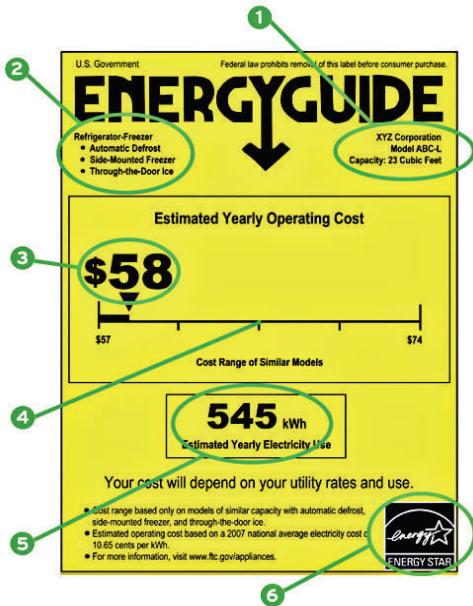
www.epeat.net

Through our green purchasing efforts, we will encourage manufacturing and service sectors to be more environmentally and socially responsible.



Interpreting Energy Guide Eco-Labels

Energy Star appliances should use at least 10 to 25 percent less energy than nonqualified models. Many appliances are required to carry the Federal Trade Commission's EnergyGuide label. This label lets you compare the energy consumption of appliances and determine approximately how much it will cost you to run them.



(from: consumerreports.org)

10 Weeds That Aren't Safe for Your Salad



Poison Hemlock



Water Hemlock



Oleander



Bittersweet Nightshade



Pokeberry



Pennyroyal

Earlier this year a woman in Washington State died from suspected hemlock poisoning after gathering the leafy green weed and using it on a salad. Unfortunately her death wasn't an isolated occurrence. Each year dozens of people die or are sickened by weeds they didn't know would cause them harm.

"It's an easy mistake to make," says Joseph DiTomaso, cooperative extension specialist in the Department of Plant Sciences at the University of California at Davis, a member of the Weed Science Society of America (WSSA) and author of *Weeds of California and Other Western States*. "Hemlock and other poisonous weeds are often cousins of edible foods and share similar flowers, leaves, fruit and seeds. Backyard gardeners and wild food enthusiasts need to be well-informed in order to stay safe."

WSSA has assembled a "rogue's gallery" of 10 that are especially problematic:

1. Poison hemlock (*Conium maculatum*) is a biennial weed with fern-like leaves that can be easily mistaken for parsley. Like parsley, it is in the carrot family. The plant produces a number of toxic substances, but the most deadly is the alkaloid coniine – a neurotoxin that disrupts the central nervous system. Ingesting even the smallest amount can result in rapid respiratory collapse and death. One way to identify poison hemlock is by the purple-red blotches on its stems.

2. Water hemlocks (*Cicuta douglasii* and *Cicuta maculata*) are also native perennials in the carrot family. They grow in wetlands and marshes and are easily mistaken for a variety of edible plants, including young carrots, wild celery, watercress, wild ginseng and particularly parsnips. Like poison hemlock, water hemlock is highly toxic. It produces a substance called cicutoxin that stimulates the central nervous system and can trigger violent seizures.

3. Oleander (*Nerium oleander*) is a woody shrub often planted in suburban landscapes and along roadsides. It is extremely toxic and produces a poisonous substance that can cause heart arrhythmia and cardiac arrest. DiTomaso cautions that you should never burn oleander branches – the fumes can be hazardous. He has even heard reports of severe illness when an oleander stick was used to roast a hotdog over an open fire.

4. Bittersweet nightshade (*Solanum dulcamara*) is an invasive weed related to both tomato and potato plants. It can be extremely toxic, and in fact, the juice from wilted leaves is deadly. The most common type of nightshade poisoning comes from eating its green berries, which turn red to

purple in color as they mature.

5. Common pokeweed or pokeberry (*Phytolacca americana*). All parts of this weed are poisonous – especially the roots. "Pokeweed greens are sometimes gathered and eaten, but they need to be thoroughly cooked first to break down the toxins," DiTomaso says. "If they are prepared improperly, they can be really harmful."

6. Pennyroyal (*Mentha pulegium*) is an invasive species in meadows or wet areas. It is known as an insect-repelling herb and is sometimes used as a tea. It is even found in some health food stores as an herbal medicine. But DiTomaso cautions that the weedy version of this plant is trouble if too strong a tea is made from the leaves. It can cause liver damage, lung damage and death.

7. Meadow deathcamas (*Zygadenus venenosus*) and other deathcamas species are native perennials in the lily family. They tend to grow in forests or meadows. All parts of the plant are toxic. That includes its bulb, which is easily confused with edible wild onions. One differentiator between the two is that deathcamas lacks the distinctive odor typical of an onion.

8. Foxglove (*Digitalis purpurea*) is an escaped ornamental plant that produces tall stems ringed with colorful bell-shaped flowers. The soft leaves at its base are easily mistaken for comfrey or sage but lack the distinctive smell of the safer species. This invasive weed is very poisonous. DiTomaso says it produces a chemical that can speed up and strengthen heart contractions. The leaves on the upper stem are particularly potent.

9. Groundcherry (*Physalis spp.*) is in the tomato and potato family. Its leaves and unripe fruit are poisonous if ingested and can be fatal. But the ripened fruit loses its toxicity and is sometimes made into jellies, jams and sauces. The ripened fruit of one species, tomatillo, is a very common ingredient of Mexican salsas. DiTomaso says it is not unusual for the toxins in a weed's fruit to break down with ripening.

10. Jimsonweed (*Datura stramonium*) is in the tomato and potato family. It produces a dangerous poison that can be fatal to humans and animals, including livestock and pets. Jimsonweed produces seeds that are highly hallucinogenic and can trigger bizarre and violent behavior.

"Lots of weeds are edible, but there are many dangerous exceptions," DiTomaso said. "If you have any doubt, avoid any contact with the plant until you can consult an extension agent or a trusted resource so you don't make a dangerous or even deadly mistake."

(Article from: <http://eponline.com/articles>)



Meadow Deathcamas



Foxglove



Groundcherry



Jimsonweed

With the exception of "Pennyroyal" (*Mentha pulegium*), all of these weeds are found in the northeast.

Do you need help with identifying plants and weeds from anywhere in the U.S. or throughout the world? Try the USDA's Natural Resource Conservation Service!

<http://nrcs.usda.gov/>

The Connecticut Department of Agriculture is also a great resource:

<http://www.ct.gov/doag/site/>



HAPPENINGS

Announcements!



We're Too Toxic to Trash!!

Area Household Hazardous Waste (HHW) is collected on Saturdays from 0900 - 1300 on the following dates & locations:

August 21—Ty Middle School, Montville. Information: 860-848-4083

September 11—Public Works Highway Garage, North Stonington. Information: 860-535-0793

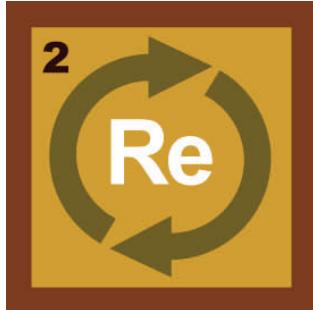
October 16—Griswold Highway Garage, Griswold. Information: 860-376-7080

November 6—Dow Chemical Parking Lot, Ledyard. Information: 860-464-8740.

It is NEVER okay to bring waste of any kind from off base locations to the Academy for disposal.

If you do not live near these collection sites, other Connecticut HHW dates can be found on the Department of Environmental Protection website:

<http://www.ct.gov/dep>



**To Reduce, Recycle, Rethink, Restore, Renew, Recover,
Remake, Reinvent, Relate, Respect...**

Accomplishments!

*This is our “Inaugural Issue!”
We’re planning to produce this quarterly.*

Would you like to include an article? What about submitting one of your photos? Do you have an idea or suggestion? Your help is always appreciated!

*Please contact Ashley Cordi
860.444.8233 or email
ashley.j.cordi@uscg.mil*

In October, the Academy will be receiving the Federal Environmental Challenge “Bronze Award” at the GovGreen conference in Washington, DC. The award is for the Academy’s efforts in:

- Purchasing greener electronic products;
- Reducing the impacts of electronic products during use;
- Managing obsolete electronics in an environmentally safe way.

For more information about the Federal Electronics Challenge, please visit:

www.federalelectronicschallenge.net/

The 2010 RecycleMania “Per Capita Classic” Trophy will be displayed in the Cadet Wardroom after it is received. This is a roving trophy that is passed to winning colleges/universities each year. A permanent commemorative award is located in the 1st floor Hamilton Hall display case.

