## **GREEN ENERGY TIMES (G.E.T.)**

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Our mission is to create Energy Awareness, Understanding and Independence – Socially Responsible Living. works

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## **LETTER FROM THE EDITOR-PUBLISHER** Happy Spring and Earth Day to You All?

This issue of Green Energy Times (G.E.T.) comes out about the time that Earth Day is celebrated, but we could all make every day Earth Day. And why not?

It is quite fitting that our center feature is about waste. Waste is a problem! It can generate a lot of methane and increases CO2 levels in the atmosphere. It is not just about plastic bottles being replaced by cans — this isn't solving the ocean debris problem at all. Cans now replace the bottle issue in the oceans and waterways and on our land.

Food waste is a huge issue that creates methane as it decomposes in

landfills. Food waste is supposedly banned in Vermont. Composting is encouraged. It is likely that a lot of food waste still goes into one's trash can and off to the landfill, unfortunately, often without a second thought. Simple little everyday chores surrounding food waste can make a bigger difference than we realize.

Beyond composting, what about containers that go into the recycle bins that may have food stuck to them? Should they be put into the recycle bin or the trash?



This "Fluffy Polar Bear" represents one of the many reasons to make Earth Day every day -- to save the polar bears. (Ellery, age 6)

> What happens to those items at the waste facility if these containers are put in the recycling stream?

A local facility said that while they do send out a tip sheet to new customers, that is all they do for education about how best to handle recycling versus trash for weekly pickups. While cleaning all containers is encouraged, the dirty ones make things difficult at the facility for the "wishful" items. (Wishful items are those that we hope will be recycled, but we don't Cont'd on p.20

## Kudos to the Green Energy Times Team Helping G.E.T. Save the Planet G.E.T. staff

Nancy Rae Mallery founded Green Energy Times and is its editor-publisher. G.E.T.'s mission is based on her experience and convic-

tions Mallery developed a love of nature when she was very young. Her interest in the environment led to a simple lifestyle with a dream to go solar

one day. At one point, she lived in a situation that was not just off-grid, it used no power at all. That was a time when the hippie culture was rather

#### widespread, and her lack of

electricity was by no means unique. She also used a bicycle for much of her transportation. She returned to a more mainstream lifestyle with the increased responsibilities of a growing family.

She returned to college when her children entered school after a number of years of home-schooling. It was at that time that she picked up skills such as journalism and business that were just what was needed for the production of Green Energy Times.

In 2001, the time was right to move to Vermont. Having had some experience with off-grid living, including brief use of a very small solar system, she was able to create a self-sufficient lifestyle that was efficient, non-polluting, and largely a waste-free way of life. At the beginning, she priced two different sources of electricity. One was gridtied, and the other was solar powered. The price of the grid connection turned out to be nearly as high as the cost of a solar system, even at that time, since the driveway was a half mile long. The 3.8kW photovoltaic system was only

half or less of the size most people would use today. To meet energy needs with the smaller solar system, the home was designed and built with many efficiency considerations, but sufficient for conven-

tional living. The off-grid backup battery system was sufficient to provide for a week of low-impact life. A propane generator was still needed but was

> barely used. Because solar was so expensive at the time, it was important to be completely aware of energy usage every day. ot 'e ed and 47 s. Cont'd on p.35

The homestead of G.E.T.'s founder, showing solar PV, solar thermal on the roof and a lush garden photo. (N.R.Mallery)



# **TABLE OF CONTENTS**

KEGIUNAL ENEKGY NEWS
VT PROTECTS HEALTH & ENVIRONMENT 3
TRANSPORTATION SOLUTIONS
CONVERSION OF ICE CARS TO EVS
EV CUSTOMER SATISFACTION REPORT 4
PSU EVS CHARGE BUILDING
CHOOSING A HOME EV CHARGER
EV'S TO GRID WHY AND HOW7
ENERGY NEWS7
VT SOLUTION FOR CLIMATE CHANGE
SOLAR PV 8-13
SOLAR INSTALLER: NECSS
SOLAR INSTALLER: ME SOLAR SOLUTIONS 9
SOLAR EXCEEDS EXPECTATIONS
AFFORDABLE LITHIUM IRON BATTERY 11
NEW SOLAR GENERATION
RENEWABLE ENERGY SOLUTIONS 14-15
YOUR FAVORITE CLIMATE SOLUTION
CARBON-FREE IS A REBRAND
END FOR MERRIMACK COAL PLANT
WEANING VT OFF OF FOSSIL FUELS
INCENTIVES & REBATES
BUSINESS & FINANCIAL
CARBON OFFSETS
COMMUNITY POWER IN NH 19
WAYSIDE JOINS SOLAR ALLIANCE
FEATURE: TOO MUCH WASTE
ZERO WASTE LIFE BOOK REVIEW
COAL WASTE INTO ENERGY STORAGE
MATTRESS WASTE SOLUTION
FOOD WASTE STREAM CONTAMINATION 21
CLIMATE NEWS
FEAR OF CHANGE
ENERGY CRISIS '70 & CARTER'S VISION 22
WINTER CLIMATE EXTREMES
RENEWABLE HEATING & COOLING 24-28
HEAT PUMPS MAINTENANCE
HEAT PUMPS FOR COLD WEATHER
BIOMASS BOILER: NET-ZERO IN KEENE 26
FOSSIL-FUEL FREE HEATING FOR NY
BUILDING & ENERGY EFFICIENCY 29-34
NHSAVES EXCELLENCE AWARD 29
DIY WEATHERIZATION
HOME REBATES LOWER UTILITY COSTS 32
EEN: BEST OF BEST AWARDS
SUSTAINABLE AGRICULTURE
FERTILIZER GHG EMITTERS
LOCAL POLLINATORS
RESOURCES & ADVERTISER GUIDE
IT'S A GREEN LIFE AFTER ALL
WELLNESS & BALANCE 37
WOODCHUCK GARDEN SEASON REVIEW 37
TICK SEASON IS HERE
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AND	roof and R-38 wall

# ELMORE ROOTS' PERMACULTURE KNOW-HOW Keeping Local Pollinators Around

David Fried

A flower's main job is to attract pollinators. There are millions of flowers on native American plum trees and wildlife apple seedlings each spring. This gets the bees and wasps and moths and butterflies and so many others out each spring and early summer and keeps them busy and wellnourished. They come back to their nests with the nectar from the blossoms, and the trees get cross-pollinated so they will make a lot of fruit and feed the wildlife and the people fortunate enough to know a good thing.

Even though the black walnut is mostly wind-pollinated, it is a host plant for over 100 species of butterflies and moths including the Luna moth, regal moth, imperial moth, walnut

sphinx moth, walnut caloptilia, pecan leafminer moth, monkey slug moth, and more! The walnut it produces is edible and very tasty. Wildlife like flying squirrels will enjoy the delicious nut. Red squirrels may appear to become flying squirrels when the nuts are ready to harvest. The high concentration of fatty acids in the walnut makes it an excellent fall food to gear up for winter.

The reason a flower is so attractive is so that it will be beautiful and tasty to the flying creatures who fly from flower to flower. The male peacock and the male cardinal are two birds that are so stunningly beautiful they attract the female





Courtesy photo of this beautiful peacock: Joyce Dutka

who will "pollinate" with it and keep their local bird population strong and energized. If you were a female grayish bluebird, wouldn't you want to hang out around a male buffed- up- blue eastern blue bird?

Fruit has a range of colors that call attention to them, so they will be eaten and their seeds will be spread far and wide. A persimmon is bright orange, a quince bright yellow, grapes light green or dark purple, and we all know the spectrum of colors in apples. Before a fruit is ripe and ready to make more of itself through its seeds, it is usually a dull green or tan. Only when mature does it have the ability to pass on its splendor to the next generation- it finally turn its full color!

There is a line in a Grateful Dead song

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that says, "Don't shake the tree if the fruit ain't ripe.' One of the pleasures of living in Vermont and having a backyard fruit grove is that we get to taste our fruit when it is actually ready to be eaten. It has developed its full color, its full fragrance and its best flavor. If we had to ship it across the country or had to store it for months on end, we would have to harvest the fruit before it was ripe. But it would be removing the essence of why fruit ripens and colors up- so it can live on for many generations through its seedlings. Each seedling will have new characteristics

never before seen in its parents. Some will be hardier, tastier, more disease resistant. Some will be yellow, red, striped, russet. Some will be small and hard. A few may be spectacular new examples of how the world keeps working to get better, behind the scenes and up in the treetops.

Keep planting. Keep the vision of a beautiful world in harmony alive in everything you do. The pollinators will thank you. The wildlife will be grateful. And your grandchildren or the kid next door may even think of you as a local hero and be inspired to plant more native flowering trees and shrubs like you did.

David Fried is a writer and propagator of hardy native trees and shrubs at Elmore Roots Nursery in northern Vermont.

## Team G.E.T. Saves the Planet Cont'd from p. 2

Everything had built in switches which were kept off when not in use. The soft-start well pump went to an over-sized pressure tank so it would come on less often. Rain water collection fed the gardens.

Being frugal with energy does not mean giving all that much up. She used a typical Energy Star Amana refrigerator with icemaker and up to two Energy Star freezers were needed because she grew about 90% of her own food, which she froze and canned or stored in a root cellar. The permaculture landscaping included fruit and nut trees, including blueberries, to hazel nuts, apples, pears, cherries, raspberries, peaches, currents, hardy kiwis and more.

After finding that people were amazed to see how off-grid living could work, in 2009 it was time to share the successful lifestyle experiences with more interested people to give everyone access to the information needed to do it themselves. Green Energy Times was born and has grown way faster and further than ever anticipated.

While Mallery currently drives a Prius Hybrid, her next vehicle will be an all-electric small pickup truck which she hopes will be in the near future.

Recently, she sold her homestead in Vermont to be near her family in New York state. Interestingly, the solar system that had served her so well was still operating pretty much the way they did when it was installed. Her new property will go beyond her Vermont low-carbon lifestyle. The new place has a pond-loop geothermal system in place for heating and cooling and swimming, along with solar, organic gardens, apple orchards and is a cross country skier's paradise of trails that will also accommodate hiking, foraging, sugaring and more. Mallery plans to re-create another sustainable lifestyle to meet the future with no fossil fuels.



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