

Volume 4 Issue 1
January 2022



Climate Smart
Communities
Certified Bronze

New Paltz Climate Smart Newsletter

New Paltz Climate Change Solutions *Meetup:* Designing Climate Smart Municipal Buildings



We are taking a break in January but will be back on Tuesday February 1st at 6:00 with a very informative Meetup on creating energy efficient municipal buildings. The presentation by Rick Alfandre from Alfandre Architecture will focus on sustainable design and green building. We will learn more about the design details of our new New Paltz Fire Station and Police Station through our normal format of a 30-45 minutes presentation and then 30-45 minutes of Q&A. This presentation on creating energy efficient Municipal buildings should be of interest to all New Paltz residents but also municipalities anywhere who desire to lower the greenhouse gas footprint of their municipal buildings while also saving taxpayers money through long term energy savings.

The 16,000 square foot fire station replaces the fire department's current facility located at 25 Plattekill Avenue and will have an emphasis on safety and energy efficiency. High-efficiency heating and cooling are provided using a VRF (Variable Refrigerant Flow) Heat pump system. The Apparatus Bay has radiant flooring heat and the remainder of the building has multiple zones of space conditioning. Ventilation is provided by the use of an ERV (Energy Recovery Ventilation) system to provide fresh air throughout the building. The roof structure is oriented to allow for a large array of solar panels if the Village wants to install a solar system in the future.

The building obtains its power supply through renewable electric resources, so does not require the use of fossil fuels for daily operations.

While the Fire Station was a clean slate effort, the Police Station was a deep retrofit of an existing building and that presents a different set of design challenges that Rick will outline for during this compelling Meetup. With a focus on air quality and energy efficiency, Alfandre Architecture has designed a new 2-story municipal facility within an existing pre-engineered metal building at 59 N. Putt Corners Road in New Paltz. The 16,800 SF building will house the Town of New Paltz Police Station, Courthouse, Court Offices and provide public meeting space. The facility achieves its ultra-low energy use through the thoughtful coordination of multiple building systems, including increased insulation and air tightness, energy efficient utilities and state-of-the-art HVAC systems. Increasing the overall insulation and airtightness of the former warehouse building was a priority to guarantee overall energy efficiency.

Water use is decreased by the installation of low-flow fixtures throughout the building. Low-flow fixtures are designed to save water and energy over conventional fixtures by using fewer gallons of water per minute. Electrical use is reduced by the installation of LED lighting fixtures throughout the facility. LED lights consume 80-90% less energy than incandescent bulbs, emit less heat, produce more light, have a longer life, and are more durable. Additionally, occupancy sensors have been installed on each light switch to reduce the amount of energy that is used.

Using two separate fans and duct systems, the [Energy Recovery Ventilator \(ERV\)](#) draws fresh, clean air into the building and removes stale indoor air. A heat exchanger pre-heats (or pre-cools – dependent on the season) the incoming fresh air by transferring the energy between the air streams. In addition to retaining the temperature of the indoor environment, the ERV captures contaminants, pollutants, allergens and pollen; providing energy-efficient, healthy indoor air.

A [Variable Air Volume \(VAV\) system](#) is used throughout the building as well, modulating the temperature for each room. This system enables energy-efficient HVAC system distribution by optimizing the amount and temperature of distributed air. Occupancy sensors for HVAC functions have been installed so that heating and cooling occur when needed. Unlike other air distribution systems, VAV systems use flow control to efficiently condition each building zone.

To learn more, attend this Meetup on Tuesday, February 1st at 6:00 pm.

The Zoom link is here:

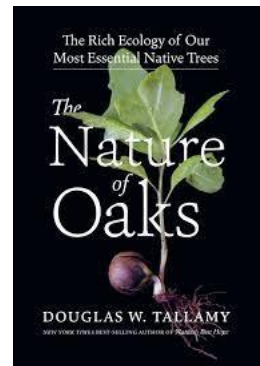
<https://us06web.zoom.us/j/84363953197?pwd=SWJ2S1BDcnJmdjhRdTdXb1RDVFcU909>

January Climate Smart Book Club

The Nature of Oaks: The Rich Ecology of Our Most Essential Native Trees by Douglas Tallamy

As trees grow, they help mitigate climate change by removing carbon dioxide from the air, storing carbon in the trees and soil, and releasing oxygen into the atmosphere. Trees of course provide many benefits to us, every day. This month's book club read is about a very important tree: the oak tree.

Back in June of 2020, our Climate Smart Book Club read *Nature's Best Hope* by Tallamy and we were all very inspired by the book. In this month's read of *The Nature of Oaks*, Tallamy may inspire your appreciation of the diversity in the web of life by focusing on a single tree that began as an acorn that he planted in a pot, transplanted into his yard, and watched for 18 years – a short amount of time, given that oak trees can live hundreds of years. This tree became the subject of Tallamy's "oak-watching," and he uses it to shine a light on just a few of the myriad ecological connections in an oak community. By training his attention as an ecologist on one relatively small tree, he reveals the wealth of life an oak tree sustains – not just the larger mammals and birds that we easily recognize and see feasting on acorns – but the huge variety of life that relies on *Quercus* species throughout the year.



Each chapter of the book focuses on one month. Tallamy begins his account in October when acorns are plentiful, and there's lots of activity as squirrels and blue jays collect and store nuts for the winter. A chapter begins with a photo of the tree and includes interesting observations and facts about oak trees. We learn about just a few species observed on or around an oak tree in a given month. From galls in November to polyphemus moth cocoons in April to walking sticks in September, we learn details about some of the creatures hosted by oak trees. Photos give us an up-close view so that we can take a turn at oak-watching.

Following 12 months of his observations, Tallamy provides a guide to planting trees and a list of the oak options best suited for different parts of the continental U.S. The overarching goal of the book is to encourage everyone to plant an oak tree.

The view of oak trees and ecology through Tallamy's eyes is fascinating as we learn about a tiny slice of the life found in, around, and under a single tree. With Tallamy's book as a guide, you will be rewarded with a glimpse of some of the tree's smaller but equally important and interesting visitors.

Join us on Zoom on January 18th at 7:00 pm to discuss this book and share your takeaways!

<https://us06web.zoom.us/j/91066225574?pwd=TIVKMU9vNWkxMGE5ZzdTM2VabWMxQT09>

For your planning and book borrowing/buying purposes, we also have books picked out for the next several months:

February 15th *Pastoral Song: A Farmers Journey* by James Rebanks

March 15th *After Cooling: On Freon, Global Warming, the Terrible Cost of Comfort* by Eric Dean Wilson

Speaking of Trees - Order Your Seedlings Now!

DEC operates the Colonel William F. Fox Memorial Saratoga Tree Nursery, which produces tree and shrub seedlings for conservation plantings on public and private lands. Native New York seed sources are used when available. The nursery's annual spring seedling sale is open to all interested customers in New York and bordering states and began on Monday January 3rd. Order as soon as possible for the best selection. There is free delivery right to the New Paltz DEC in the spring. You need to buy in sets of 25. If that seems like a lot of trees, share with a friend or neighbor. The trees come bareroot and are of good value and quality. For more information about what tree species are available and how to order, click on this link:

<https://www.dec.ny.gov/animals/9395.html>

Have You Been Using Your Tiffin?

Tiffins are made of stainless steel, reusable 1000's of times, and easily washed in a dishwasher. They are the perfect way to reduce your use of single use! Our Tiffin Project is a direct outgrowth of trying to reduce waste through the reuse of a container for take-out from restaurants.

To make arrangements to buy a tiffin at our cost of \$15, contact Jim O'Dowd via his

email: jimmyodowd@yahoo.com The New Paltz Tiffin Project is planned to be a three phased program. In this first phase we are encouraging individuals to buy a tiffin and bring it to restaurants both for take-out and for to-go containers used at the end of a meal you can't finish. In this way, we are introducing the tiffin to both fellow restaurant goers, restaurant staff and owners. In the next phase we would like to feature New Paltz restaurants that are willing to promote the use of tiffins.



Will you help us further promote the New Paltz Tiffin Project? Please contact Janelle if you would like to help with this project by emailing newpaltzclimatesmart@gmail.com.

New Paltz Climate Smart Task Force

Annual Report of Activities

2021

Climate Smart Task Force (CSTF) Members: Janelle Peotter, Amanda Gotto, Mark Varian, Jim O'Dowd, Wendy Rudder, Orelle Feher, Lynn Cherry, Liz Elkin Added members: Alexandria Wojcik (Liaison to Village Board), Julie Seyfert Lillis (Liaison to Town Board), Megan Wolff and Joe Londa

New Actions Towards Certification as a Climate Smart Community:

- Renewal of Community Choice Aggregation contracts by both Town and Village of New Paltz
- The Natural Resource Inventory for the Town and Village of New Paltz was completed, presented, and approved by the Town and Village Boards. The comprehensive report and interactive online story maps compiled information from 17 Town and Village plans and data from over 75 local, county, state, and national published reference documents and reports. In addition an online tutorial was created and a 1-hour training session was provided. This was accomplished through the efforts of a paid consultant (357 hours) and a dedicated group of 20 community volunteers (339 hours). The project was funded by a grant from the NYS DEC and Environmental Protection Fund Hudson River Estuary Program and wonderfully supported by local DEC staff.
- Update and response to reviewers comments on Community Greenhouse Gas Inventory underway led by CSTF member Joe Londa.

Task Force Meetings: Meetings were held every third Monday of the month from 7:00 to 9:00. Agendas and minutes archived on the Village and Town of New Paltz websites.

Education and Awareness:

- 4th Annual Zero Emissions Electric Vehicle Event – CSTF planned and participated in this event on October 2nd
- Warm Up to Winter: An Energy Showcase – January 14th, CSTF sponsored in collaboration with the New Paltz Climate Action Coalition & Interfaith Earth Action
- Eleven New Paltz Climate Change Solutions Meetups (335 Meet-Up members) held on first Tuesday of each month on Zoom The following were topics in 2021:
 - January 5th: Energy Navigators
 - February 2nd: Regenerative Agriculture and Carbon Farming Offset
 - March 2nd: Converting a 1790s Farmhouse to Zero/Low Energy
 - April 6th: Green Burials
 - May 4th: Film Discussion & Panel: The Story of Plastic
 - July 6th: The Future has Arrived: Why Your Next Car Should be Electric!
 - August 3rd: Energy Efficient Solutions For Your Home
 - September 7th: New Paltz Climate Solutions Meetup: Synthetic Turf Carpeting is a Hot Mess

- October 5th: Theatrical Solutions to Fast Fashion: Impacts of Clothing Waste and Alternatives
- November 2nd: Creating a Net Zero Energy and Fossil Fuel Free Residence
- December 7th: Bitcoin, Cryptocurrency, Blockchain: The Promise and the Peril
- 12 Climate Smart Book Club meetings featuring 11 different climate related books (117 Book Club Members on Meetup)
- 12 New Paltz Climate Smart Newsletters created monthly and widely distributed to more than 350 people
- Social Media Presence on Facebook, Instagram and Meetup
- Mentored 1 high school intern – updating the Town of New Paltz Local Government Operations Greenhouse Gas Inventory
- Launched New Paltz Tiffin Project: Three phase program to reduce solid waste through the promotion of reusable stainless steel containers for restaurant take out.

Task Force Training

Beyond Plastic Course with Judith Enck at Bennington College (3 members, 6 weeks)

ICLEI Community Greenhouse Gas Inventory Course (1 member, 5 months)

Cornell Climate Steward (2 members, 12 week course)

Additional Related Activities on Other Boards & Committees

CSTF members participated on the Bicycle Pedestrian Committee, Environmental Conservation Board, Town Planning Board, Solar at the Landfill Working Group, Climate Action Coalition, Ulster County Climate Smart, Climate Smart Gardiner, Cornell Climate Steward Program, Interfaith Earth Action, Climate Reality Project, Climate Mediation Group, Reformed Church of New Paltz - Caring for Creation Committee, Jewish Congregation of New Paltz – Green Committee

New Paltz Climate Smart January Calendar

All of January Monday - Friday 8:00 am – 4:00 pm Order your tree seedlings from the DEC Saratoga Tree Nursery <https://www.dec.ny.gov/animals/9395.html>

Monday January 17th at 7:00 pm monthly Climate Smart Task Force meeting
[Link to Zoom Meeting of Task Force](#)

Tuesday January 18th at 7:00 pm Climate Smart Book Club: The Nature of Oaks [Link to Climate Smart Book Club](#)

Tuesday, February 1st at 6:00 pm. Climate Solutions Meetup – Designing Climate Smart Municipal Buildings [Link to Zoom Meetup](#)

*If you have any questions about anything in this newsletter, please contact
Janelle Peotter, Climate Smart Coordinator at newpaltzclimatesmart@gmail.com*



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