



Save the Pine Bush

May/June Newsletter

May/June 15 No. 125 • 33 Central Ave., Albany, NY 12210 • email pinebush@mac.com • phone 518-462-0891 • web http://www.savethepinebush.org • Circ. 1000

Vegetarian/Vegan Lasagna Dinner

Wednesday May 20, 6:00 p.m.

Gary Feinland

Environmental Program Specialist at the New York State Department of Environmental Conservation in Albany will speak about

Anaerobic Digestion and Composting of Organics

New York State's organics, including food scraps and yard trimmings are often disposed in landfills. This discussion is aimed at medium-to-large scale composting volumes and will cover some basics of composting and anaerobic digestion. Join the discussion on the importance of composting! For more information, see article on this page, lower right-hand corner.

At the Westminster Presbyterian Church, 85 Chestnut Street, Albany, NY (people with cars can park in the lot near the door). All-the-vegetarian-and-vegan-lasagna-you-can-eat, garden salad, garlic bread and homemade pies. Only \$12 for adults, \$6 for students, and \$2 for children. People who make reservations are served first. For reservations, please leave a message for Rezsina Adams at 462-0891 or email pinebush@mac.com. **Get It While It's Hot! From now on, we will start serving dinner promptly at 6:00.** Of course, we will be delighted to serve you whenever you get here as we always have. We greatly appreciate your attendance whenever you arrive.

People are welcomed to attend the party beginning at 7:00 for which there is no charge.

May Bird Watch Walk Saturday, May 23, 2015 at 8 AM

Meet at: Pine Bush Discovery Center Parking Lot, East side of New Karner Rd. (Route 155) opposite "T" with Old State Rd., Albany, NY;

Leader: Neal Reilly • For More Information: 518-465-8930

Join Neal Reilly as he takes us on a walk through the Pine Bush in the late spring, looking for the many varieties of birds — some call the Pine Bush home, some may just be passing through.

Note: Please wear appropriate protective clothing for the danger of ticks, Bring deet or insect repellent to spray on you before beginning the walk. Check carefully for ticks right after the walk and again as soon as you get home. We have discovered that these ticks are subject to transmit a lesser known disease called erlichiosis. We want everyone to be safe as you enjoy the outdoors!

www.savethepinebush.org

City of Albany Office of Energy and Sustainability Visits Save the Pine Bush

by Tom Ellis

ALBANY, NY: Kate Lawrence of the Mayor's Office of Energy and Sustainability was the speaker at the March 18 SPB dinner.

She said former Mayor Gerald Jennings launched the sustainability office in 2011; he signed a national green jobs pledge in 2008, the bicycle master plan was completed in 2009, and the 2030 plan was completed in 2010 and approved by the Common Council in 2012.

An Albany Common Council sustainability advisory committee was approved in 2013, she said; it has 15 members, it will issue a report in June, and has energy and sustainability subcommittees.

The two priorities for 2015 are the Tivoli Lake Preserve Community and Engagement and Visioning Project and development of an energy plan to improve energy efficiency in city

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May 20 SPB Program to Feature Anaerobic Digestion and Composting of Organics

by Tim Truscott

ALBANY, NY: Save the Pine Bush will host a program at 7:00 PM on Wednesday evening, May 20 on composting and anaerobic digestion of organics, including food scraps. The guest speaker will be Gary Feinland, Environmental Program Specialist at the New York State Department of Environmental Conservation in Albany.

New York State's organics, including food scraps and yard trimmings are often disposed in landfills. NYSDEDC views these materials as resources and encourages managing them according to a hierarchy featuring reduction, donation and animal feeding (in the case of food) followed by recycling (including composting and anaerobic digestion), and finally disposal.

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Kate Lawrence, continued from page 1

operations. Regarding the former, Ms. Lawrence said the day-lighting of the Patroon Creek remains controversial among many community. Day-lighting refers to putting above ground a portion of the Patroon Creek that now runs in an underground pipe. She said goals have been established for the preserve, the preserve has some challenging topography including being a bowl-shape, limited access, only two main entrances, no off-site lake views, invasive species, debris in the lake, considerable overgrowth, dense and overgrown trails, frequent flooding and wash-outs, and low levels of lake oxygen.

Community members offered many suggestions including removing the invasive species, installing a comfort station, adequate maintenance and staffing, restoring the lake to its original size, environmental education opportunities, and making the trails wheel-chair accessible. The preserve is 72 acres. A vision plan has been developed and is still being revised. One major impediment to improving the preserve is an adequate, sustained funding stream. She said DEC has pledged a year of funding to improve soil and water quality.

The energy plan in conjunction with the New York Power Authority (NYPA) is an initiative of the governor that includes Albany, Buffalo, Syracuse, Rochester, and Yonkers. Assessments of energy efficiency are being conducted in the largest municipal buildings. Of the five cities, Albany is the least population dense and has the highest energy and highest transportation energy use per capita. Among the identified Albany energy plan goals are to develop a long term energy supply system and reduce city operations' energy use by 20 percent by 2020. She said NYPA is serious about each city being successful and NYPA will create an energy manager for each city. Considerable information is available on line about the five cities energy plans.

Although Ms. Lawrence said her job touches on many issues, the Q&A was disappointing to many attendees. Chet Burch said many vehicles in the city of Albany are driven by non-residents. Ms. Lawrence said we should improve mass transit. Sylvia Bernard said many people flat-out refuse to use public transit. Tim Truscott responded that increasing numbers of young people choose not to drive and ridership on CDTA continues to rise each year.

Jim Travers asked about the Rapp Road landfill. Ms. Lawrence said she had no information about the landfill but added the city is looking into diverting textiles from the landfill. She said the city is going to sell the 363-acre parcel in owns in Coeymans to DEC. (Twenty

years ago, city officials purchased the Coeymans parcel as a successor landfill site for the Rapp Road dump).

The 15 member sustainability committee is composed of five city commissioners, and five members each were appointed by the mayor and Common Council.

I asked about how the city views the relationship between sustainability and jobs, and in particular, public sector jobs. Ms. Lawrence said those are policy issues that she had no information about.

Lynne Jackson spoke about pedestrian safety saying some intersections in Albany are literally terrifying for pedestrians to cross because some drivers are hell-bent of passing through no matter what. Ms. Lawrence said she is a pedestrian and does not drive.

Mark Schaeffer said new buildings should be mandated to meet high energy efficiency standards, such installations will pay for themselves quickly, and the more we can do to quickly get off of fossil fuels the less future generations will curse us.

Reprinted from the Times Union, Published Sunday, April 26, 2015

New York state going dark to save birds

Lower nighttime glare at Capitol, Empire State Plaza expected to reduce migratory disruptions

By Matthew Hamilton

Albany: There is an unmistakable glow that illuminates the Albany skyline each night.

For tourists, the lights are an attraction to the largest city on the Hudson River north of Yonkers. For nocturnal migrating birds, it's also an attraction — and that's the problem.

The state is set to announce Monday that non-essential outdoor lighting at some state-run buildings across New York will be shut off in an effort to keep warblers, thrushes and other nighttime migrants from losing their way or, in extreme cases, ending their journeys with a thud. But remaining illuminated here will be state landmarks, including the state Capitol and the glass and concrete monolith Corning Tower, the state's tallest building outside New York City, leaving hazards for avian travelers susceptible to fatal light attraction.

As the name suggests, birds that rely on constellations to navigate can become disoriented by outdoor lighting, leading to crashes before they reach their seasonal nesting place or forcing them to land after burning off energy trying to regain their bearings. "In a lot of artificial light,

it causes problems," State Museum Curator of Ornithology Jeremy Kirchman said. "They fly around in circles around skyscrapers or radio towers and television towers. As a result, a lot of them will crash."

The state blackout will affect some buildings regionally and is scheduled to occur each day between 11 p.m. and dawn from April 15 through May 31 and Aug. 15 through Nov. 15, the periods in which the birds migrate.

Lights deemed essential for health or safety (walkways, work sites, etc.) will stay on. The initiative is in keeping with the Audubon Society's Lights Out program.

While attraction to light would seem more common among winged insects, the U.S. Department of Agriculture estimates that 500 million to 1 billion birds are killed in the U.S. each year when they slam into windows, walls, floodlights or the ground.

"Bird migration is one of the incalculable wonders of nature," Audubon New York Executive Director Erin Crotty said in a statement. "With spring migration under way, the state's commitment to 'Lights Out' is an important step to increase their protection."

Gov. Andrew Cuomo called the state's lights-out initiative, which coincides with the launch of the iloveny.com/birding webpage, a simple step to protect migratory birds.

It's not as if the "simple step" is one of a kind, though. The Audubon Society's New York City chapter has worked with the owners of iconic buildings such as Rockefeller Center and the Chrysler Building in Manhattan to cut down on lighting during migration season.

New York City is the state's prime example of a trap for nocturnal migrating birds. The Albany area isn't nearly as dangerous.

Kirchman makes daily rounds at Empire State Plaza in search of birds that fell victim to the Corning Tower and four agency buildings overnight, though their numbers have decreased lately. Whether that's because of a change in illumination or another factor isn't clear.

"Last fall, I only found a half-dozen birds over the course of many, many weeks of making my morning walks," he said. "I don't think it's a very big problem."

But urban glow from shorter buildings, which the Capital Region has a far more abundant supply of, can also disorient birds,

"The light is the first line of defense that we can tackle," New York City Audubon Society Director of Conservation and Science Susan Elbin said. "It really should be a no-brainer because you do save money, you save energy and you also save birds."

Composting of Organics continued from page 1

Now let's talk about some basics of composting and anaerobic digestion. This discussion is aimed at medium-to-large scale composting volumes.

With regard to recycling and disposal of organic wastes, the first thing to understand is that there is a hierarchy of sustainable solutions to discarded materials, whether it is food, paper, plastics, metals or any other materials:

1) The first or most desirable is to reduce consumption or reduce creation of the excess which results in "waste".

2) The second level of the hierarchy is to re-use objects or materials without needing to remanufacture them.

3) The third level is to recycle the materials and manufacture them into new objects.

Recycling requires the most energy consumption of the three options, while reduction requires the least.

There seem to be basically two types of technologies for processing waste food (food that cannot be redistributed for use by other people or animals) and other organics (manure, leaves, soiled cardboard and paper, etc.):

1) Composting

2) Anaerobic digestion or biodigestion

Both composting and anaerobic digestion occur because of the activity of many different kinds of microorganisms (bacteria, fungi and other kinds of microorganisms) working to decompose the organic material.

Composting is by definition aerobic (meaning that it requires oxygen in order for the microbial processes to break down the materials) and produces carbon dioxide as a gaseous byproduct from the breakdown of the organic materials. Organic materials are usually arranged in long windrows (like a windrow in a hayfield) for composting. The organic materials can be aerated by periodically turning the windrow and thereby introducing oxygen into the material. Or the windrow can have perforated pipe in its base and have air forced through the windrow.

In the composting process, microorganisms break down organic matter and produce carbon dioxide, water, heat, and humus, the relatively stable organic end product. Under optimal conditions, composting proceeds through three phases: 1) the mesophilic, or moderate-temperature phase, which lasts for a couple of days and has temperatures somewhat over 100 degrees Fahrenheit, 2) the thermophilic, or high-temperature phase, which can last from a few days to several months and has temperatures in the range of 120-150 degrees Fahrenheit, and finally, 3) a

several-month cooling and maturation or "curing" phase.

It is important that the compost stay in the range of 120-150 degrees F. for a period of time so that human pathogens are killed by the heat.

Temperatures much above 150 degrees F. are inhospitable to bacteria and may kill the bacteria. If the temperature of the compost pile gets too high, there is always the possibility of spontaneous combustion occurring and a fire. The temperature of the compost pile can be regulated by manipulating the aeration of the pile, or by adding water.

There are some composting systems which capture the heat generated by the composting process and put that thermal energy to a beneficial use. So far, these systems have been used in agricultural applications. One firm working on this idea, Agrilab Technologies, claims that 1,000 btu's per ton per hour can be captured from cow manure and animal bedding.

Composting requires less infrastructure and equipment than anaerobic digestion, and therefore has lower start-up costs.

Anaerobic digestion or biodigestion is a process which does not use oxygen and produces methane as a gaseous byproduct from the breakdown of the organic materials. Anaerobic digestion is the process which occurs in a landfill where organics do not have the opportunity to receive oxygen, and methane is formed as a consequence.

In an anaerobic digester, this process takes place in the controlled environment of an "enclosed vessel", a tank with a bladder arrangement on top which traps the methane generated by the process. Typically, the methane is used to power an engine which drives a generator and produces electricity, but sometimes the methane gas is compressed for use in vehicles or for other purposes.

Anaerobic digesters can be of various sizes (some quite large and some quite small) and take in a variety of organic wastes (waste food, manure, etc.). In addition to methane gas, the other product of anaerobic digestion is an organic solid which contains many nutrients and can be used as a fertilizer.

There are perhaps a few hundred anaerobic digesters in the United States. In Germany, which is only a fraction of the size of the United States, there are thousands of anaerobic digesters, some large and others relatively small which might serve an individual dairy farm.

The most difficult challenge of developing a waste food program is collecting and transport-

ing the food waste. Food waste is usually mostly water, so collection and transport containers must be water-tight. Food waste also putrefies easily, so it cannot sit around at the curb, in a truck or in any other uncontrolled environment for very long.

Generally, developing composting facilities requires a much lower level of capital than does developing anaerobic digesters. However, the anaerobic digesters may be more profitable in the long run.

Both methods of processing organics usually rely on "tipping fees" (charges to the party wanting to dispose of the organic material) for part of their income. These charges, together with transportation costs, must be somewhat lower than landfill tipping fees in order to attract business. Otherwise, the party disposing of the organics will be inclined to simply send the organic material to a landfill. However, some states (e.g. Massachusetts, Connecticut and Vermont) are implementing regulations which will prohibit organics from being placed in landfills. This change should favor composting and anaerobic digestion.

There are two prime reasons for diverting organics from landfills and treating them by either composting or anaerobic digestion: 1) To conserve space in landfills, which are expensive to construct and maintain; and 2) To minimize the volume of methane (a potent greenhouse gas) which is produced by landfills and released into the atmosphere.

There are a lot of fertile opportunities in organics, and these opportunities are just beginning to open up. Once things start rolling, they're going to roll fast.

Karner Blue, continued from back page

ing the life and times of Sir William Johnson, Britain's last overlord of the Mohawk Valley, a hero of the French and Indian Wars who died on the eve of the American Revolution, which would have found him on the wrong side of history.

Johnson is even a discoverer of Saratoga Springs, since Mohawk Indians brought him to High Rocks Springs — the "great medicine spring" — in 1771.

Elsewhere, the Walkway Over the Hudson at Poughkeepsie and Letchworth State Park in western New York — two of my favorite parks — are also expecting improvements. But so is nearly every major park in the state, as Cuomo's administration tries to make up for years of neglect to the state park system.

The money is part of the \$110 million Cuomo has promised to invest in the park system this year.

Karner blue to get habitat in Saratoga Spa State Park

By Stephen Williams April 25, 2015

Reporters who devote more than a semicolon and three dashes to environmental coverage find their inboxes full on Earth Day.

The delete button and recycling bin are wonderful things, but a few items seem worth passing on.

First, the state Department of Parks, Recreation and Historic Preservation is creating new Karner blue butterfly habitat at Saratoga Spa State Park.

That's nice. The dime-size blue butterflies are pretty, and outside of a handful of places in the Capital Region they are as rare as a grizzly willing to share its salmon.

On Earth Day, which was Wednesday, fifth-graders from Saratoga's Waldorf School helped spread the seeds of Karner-friendly native plants and wildflowers across a 1.5-acre site on the east side of the park that is being turned into Karner blue habitat.

The \$10,000 project started last year when state naturalists cleared away existing shrubs and bushes, so blue lupine and other nectar plants that draw butterflies could be planted.

A split-rail fence will be set up to protect the habitat, and informational/educational signs

will be installed.

Once the work is done, the old field will resemble the kind of pine-scrub oak barrens that the endangered butterfly favors: places like the Albany Pine Bush, the Wilton Wildlife Preserve and Park, and the meadows at the Saratoga County Airport in Milton.

The few thousand butterflies that hatch in those locations every June and July — and live just a few days — are the largest Karner blue populations remaining in the world.

State park aid

There will be \$750,000 in state capital improvement funds coming to the Saratoga park this year, Gov. Andrew Cuomo said.

The planned projects include \$400,000 to purchase new high-efficiency boilers for the park's ornate and historic buildings, and \$300,000 for general upgrades and repairs. Another \$55,000 is earmarked for installing a "green" parking lot at the Roosevelt Baths — a paved surface that is porous to stormwater, allowing that water to drain directly into the ground below and reducing stormwater runoff.

A porous pavement was installed in 2013 on the main

parking lot of the Saratoga Performing Arts Center.

There are long-term plans for a classroom building near the Geyser Creek and for trail improvements, too, though it isn't clear how far they'll progress this year.

At Moreau Lake State Park, meanwhile, the state will spend \$700,000 this year to build five new rental cabins at the campground.

At the Johnson Hall Historic Site in Johnstown, \$200,000 will be spent to convert a vacant blockhouse into an interpretive building, explain-

Karner Blue continued on Page 3

Amy Reilly Returning to Leading Walks in the Pine Bush and Offers Suggestions on Handling Ticks

By John Wolcott

Good news for all of us to hear. Save the Pine Bush is pleased to note that our intrepid flower and bird walk leader is back and looking forward to leading walks again in the Pine Bush. Amy Reilly suffered two tragedies at once; her husband Bob passed away and she was found to have breast cancer. We are happy to report that Amy has finished her treatments and will start leading her famous Pine Bush hikes again. This is the most wonderful news for us personally and for the cause of the Pine Bush and environmental preservation and health awareness.

To enhance public health and safety, Amy Reilly is ever so concerned about others and she wishes to convey some very useful information to us about protection against ticks. (Something that really resonates with myself.) Amy subscribes to a variety of Garden magazines and found ads for "Anti tick gaiters." She described these to me as being knee high, made of white, light, but stout material. Having substances and devices to trap and kill ticks and withal to furnish very effective protection for one's feet and legs.

Googling "anti tick gaiters" produced many sources for purchasing these gaiters all under the price of ten dollars. We will seek more information on this subject and perhaps look into bulk purchasing, but any of you can buy these right now through the internet.

Thank you Amy for providing this very important information and for all that you do, and three cheers from all of us in Save The Pine Bush, and WELCOME BACK!!

Next Dinner Dates

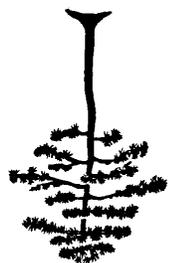
Wednesday, June 17

No dinner in July

Westminster Presbyterian Church,
85 Chestnut Street, Albany, NY

Return Service Requested

Save the Pine Bush
A Project of the Social Justice Center
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