

Green Parks *Live It!*

BUREAU OF STATE PARKS DCNR

Wind Titans

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Special points of interest:

- Wind Titans opens at the State Museum In Harrisburg November 1, 2009
- RB Winter, Frances Slocum, and Keystone had lighting audits done by Schaedler Yesco.
- Codorus is making hot water while catching some rays.
- Gifford Pinchot has a 'Big Belly' full of trash on their beach, and the visitors love it.

Combine a beautiful summer evening, a group of ladies in kayaks, and a paddle down the Susquehanna. What do you end up with? An opportunity for DCNR to team up with the State Museum and the Pennsylvania Heritage Society in the upcoming special exhibit entitled "The Wind Titans".

Brenda Barrett, BRC, struck up a conversation with Erica Kozlovac, PHMC, during their sojourn down the river, in regard to the wind exhibit the State Museum was planning.

A few phone calls later and Paula DeVore -RMPD, Tara Gettig-OPS, Beth Hagar and Erica Kozlovac -PHMC were meeting to discuss adding a highlight of the State Parks' wind turbines and related interpretive efforts to their

display.

Parks made the cut, and we will be included on a panel exhibiting small turbines in Pa. Photos of some of our parks' turbines, and interpretive information on the initiative will be included.

The main exhibit is a 'Photo Essay' of wind in Pennsylvania, and reveals an artistic perspective of large wind turbines that we now find dotting our Pennsylvania landscape.

The exhibit is slated to open November 1, 2009 at the State Museum in Harrisburg, and is expected to run six months.

The photos are truly awesome, so be sure to check it out!

Can you name the park where this wind titan resides?

Answer on Page 2

R. B. Winter State Park

Takes the Lead in Lighting Audits

Bob Deffner, Park Manager of RB Winter State Park complex, contacted Schaedler Yesco (SY), lighting supplier, to perform a lighting audit of the parks. Their representative, Jim Chambers, spent days at the parks - inspecting every

lighting fixtures, every light switch, light bulbs and every electrical ballast. Diagrams were made of the buildings, and the current placement of the fixtures. Buildings were examined in regard to their use, if they were heated or not, and how often they were occupied.

The information from the audit was then taken back to SY headquarters and a schematic, referred to as a Luminaire Schedule, was designed to reflect the lumens needed to successfully meet each lighting objective.

Story continued on Page Two





Spend a little to save a lot.

R. B. Winter Lighting Audit Continued

A report was drawn up which compared the present lighting to the recommended lighting. It included a comparison on the amount of energy that would be saved if the fixtures were replaced with the proposed upgrade referred to as the “Energy and Epaect Estimate”.

The report recommended upgrades to R.B. Winter and Ravensburg parks. Changing the electrical lighting components as proposed would save R. B. Winter 10,428 Kilowatt Hours (KWH) annually. At their current rate of .0825 per KWH, they would reap the savings of \$860 per year. At Ravensburg, where they only needed to replace the bulbs and ballasts, they would save

1,297.92 KWH, or \$107 per year.

The % of energy saved at R.B. Winter would be 41%, and 44% at Ravensburg.

Of course there is always a cost associated with any improvement. The cost of around \$6,500 for the upgrade would pay for itself in energy savings in a little over 6 years. Knowing that the electrical caps will soon be coming off, this break even point will be much sooner. After that it’s all savings that can be used elsewhere in the park, as well as a reduction in their carbon footprint.

The management at both the park and region saw this as a prudent effort toward greening

the parks as well as a sound financial decision. The proposal was accepted, purchased, and the park will be installing the upgrade this winter.

Thanks to Bob Deffners’ efforts, other parks are following his lead and having Lighting Audits Performed by Schaedler Yesco.

Frances Slocum recently received their proposal, and even though the price tag is quite a bit higher than R.B. Winters, it appears their rate of return will only take about 4 years, due to the antiquated energy guzzling fixtures that now currently exist in the park.. Other green parks are slated for audits by Schaedler Yesco in the future.

Caledonia Catches Some Rays

Caledonia recently acquired a Thermal Hot Water Heater (Evacuated Tube Array) to use for their park office. This was the result of a solar demonstration, organized by Jason Adams, FD&C, between DCNR and Eichelberger Energy Company. Even on a cloudy day, the demonstration proved that the tubes can heat up pretty quickly!

The manufacturer of the tubes is located in Chambersburg, convenient to Caledonia, making the park the prime candidate to test the units for state parks.

When Park Manager, Bruce McFate, was asked how he liked it, he responded, “It’s great at making hot water, while supplementing our geothermal heat”.

As the energy savings are tracked for Caledonia, the results should prove that installation of such panels is a prudent Green move for other parks to follow.

Answer to Page One:

This wind turbine
may be found at

Promised Land State Park



A thermal (Evacuated Tube Array) panel was recently installed at Caledonia State Park. It is creating hot water for the Park’s Office.

“Big Belly” found on the Beach at Gifford Pinchot



Bill Rosevear, Park Manager of Gifford Pinchot, prepares to demonstrate the solar trash compactor, “Big Belly” that he purchased to reduce the litter problem and trash volume along the beach.

You may find yourself wanting a “Big Belly” like the one on the beach at Gifford Pinchot State Park. It is their new solar trash receptacle/compactor and recycling bin. The bin has been well received by park visitors, and the issue of strewn trash near the beach and concession stand has decreased substantially.

Bill Rosevear stated that when they went to the larger receptacle dumpsters, which had to be placed in the parking lots for the disposal trucks to

access them, they began to have problems with visitors not properly disposing of their trash. Perhaps the brief walk to the parking lot was more than some visitors were willing to do. This resulted in a Monday morning laborious process by park staff, whom had to comb the beach area and pick up the discarded trash that was left on the ground.

“Big Belly” has transformed that routine. Now, the visitors become inquisitive with this new fangled sun-driven trash receptacle. The tendency is to want to put the discarded item into the trash, and see if they are the ‘lucky winner’ to trigger the compactor to start the compression cycle.

The compactor has a sensor to know when it is full, and that triggers the compactor. Due to the sun charging the battery, its always ready to work on cloudy days, rainy weather, and even when it snows. It has multiple safety features as well.

The compactor is in use in other areas such as Chicago, Philadelphia, Massachusetts State Parks, Michigan State Parks, Drexel University, Fort Meade MD, and Kutztown University just to name a few.

Now on Monday mornings, PM Rosevear can use his staffs’ valuable time to work on other projects to improve the park..



The lid is a solar panel. The solar covering is made from a polymer than can take the force of a baseball bat, in case vandalism is an issue.



The control panel and battery under the solar panel.



The compactor compressor shown in action during a special demonstration.



One bag in the “Big Belly” is equivalent to 10 bags of uncompressed trash. This is a money saver if you pay the waste contracted on a Cubic Yard hauled basis.

GOING.....GOING.....GONE.....



Wanting to become a greener company, Taldec Industries found a way to harness wind energy within their offices.

Thanks to George Facer for this "funnies" contribution.

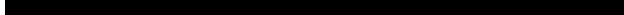


The Future Park Vehicle for State Parks?????



Information in this newsletter is compiled for employees of the Department of Conservation and Natural Resources of Pennsylvania. The purpose is to make them familiar with some of the latest news and trends in the Green Industry, as well as to inform them of the conservation efforts within the Bureau of State Parks.

Paula DeVore, Green Parks Coordinator, in Parks Resource Management and Planning division is the editor and publisher of the newsletter, and welcomes ideas and suggestions for future articles by contacting her at pdevore@state.pa.us



Compact Florescent Light Bulbs—CFL statistics



It takes only 18 seconds to change a light bulb.

- 18seconds.org

According to 18seconds.org, the United States has purchased 9,639,615 CFL light bulbs since 1/1/2007.

The equivalency of that is

- Dollars saved \$284,613,489
- Cars off of the road 68,385
- Pounds of coal saved 1,003,510,948 lbs
- Pounds of CO2 prevented 4,295,026,859 lbs CO2

Apparently Pennsylvania's are doing there part in the change to CFL's. Pennsylvanian's have purchased 336,366 CFL's between 1/1/07 and 9/27/08, saving

\$11,752,561 and 27,924,665 pounds of coal. We've prevented 119,517,567 pounds of CO2 from going into our atmosphere, which is equivalent to taking 1,903 cars off of the road. Nationwide, Pa comes in at 23rd for switching to CFL's..

The Harrisburg—Carlisle area is ranked 10th out of 357 towns across the United States that are switching to CFL's.

Other PA towns included in the count are:

- York-Hanover at 43
- State College at 63
- Allentown-Bethlehem-

Easton at 64

- Lancaster at 135
- Altoona at 152
- Philadelphia at 160
- Reading at 188
- Scranton Wilkes-Barre 194
- Lebanon 199
- Williamsport 229
- Erie 294
- Pittsburgh at 309
- And Johnstown at 355

We need to continue to spread the word of conservation and stewardship, and enlighten the public on using CFL's.