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## Energy savings add up for Rock Springs Nature Center



16 HOURS AGO • [EMILY STEELE H&R STAFF WRITER](#)

DECATUR – When it comes to practicing what you preach, Rock Springs Nature Center has the numbers to prove the staff knows their stuff. And saving 21 percent in energy costs is something worth preaching.

For five years, the nature center has caulked, insulated and automated its way toward a more efficient building after an energy audit in 2008, saving them almost \$7,000. The goal to reduce, reuse and

recycle is built into the conservation district's mission to preserve and restore natural spaces for future generations.

“It's something for us to be proud of,” said Paul Marien, the conservation district operations manager.

Smart Energy Design Assistance Center, SEDAC, which is part of the Illinois Department of Commerce and Economic Opportunity, provides free technical advice to reduce energy use in commercial buildings.

Ben Sliwinski, a SEDAC technical director, did the initial Rock Springs audit and predicted they could save as much as 21 percent. The organization reaches out to clients statewide for the free audit and points out simple and complex changes that can be done to see big savings.

Sliwinski's comprehensive inspection went from top to bottom of the nature center with a focus on the structure's walls, lighting/heating, ventilation/air conditioning and internal energy use.

“The foundation and attic is where the real money is hiding out,” Sliwinski said.

Out of all the assistance center's clients, Sliwinski attributes the nature center's large savings to its staff.

“Paul Marien deserves most of the credit,” Sliwinski said.

Marien tagged along during the inspection and oversaw many quick fixes before the full audit report even came out.

One of the most important recommendations Sliwinski made was to air seal. To Marien, that meant picking up a caulk gun and filling in all the little holes around the 24,000-square-foot building, originally built in 1988.

"It adds up," Marien said.

They also installed occupancy control sensors on light switches in less trafficked rooms, where unneeded lights were prone to being left on for hours. Every light bulb in the conservation district's largest facility was changed to compact florescent, which is more efficient. In many areas, they rely only on natural lighting.

"The audit really laid out good ECMs (energy conservation measures)" Marien said.

Three of their furnaces were upgraded to more efficient models with the help of a grant. The furnaces now have ventilation damper controls that won't bring in cold air from outside if the building is empty.

"You only need to bring in as much air as people need to breath," Sliwinski said.

Marien said the district also negotiates fixed electrical rates every few years to get the lowest kilowatt rate possible. The most recent rate is one of the cheapest they've ever had.

"That's one of the reasons we're seeing the cost savings," Marien said.

With one of the coldest winters in recent memory mostly behind us, Marien said he doesn't expect the decline in kilowatt hours to continue forever.

The conservation district's goal to stay green include includes a policy that all new equipment must be the more efficient Energy Star rated appliances.

"It's collaborative that everyone participates," Marien said. "And we've become more conscious of that."

The Green Team is another initiative at the nature center that looks at ways to be more nature friendly beyond energy use.

Executive Director Kathy Merner said the Green Team came about as part of a conscious effort to monitor how they used all assets, not just energy.

"The goal was really to see what we could do to better conserve resources," Merner said.

The team is made up of a core group of eight staff members who set up recycling bins at every desk. They also worked to get off mailing lists for products they had no intention of buying.

Merner said anything they learn is then passed on to the public through programming. The energy audit was done on several other buildings, including the historic Oglesby Mansion. Its attic was insulated and the fireplaces were sealed to help save energy across the board.

After performing an audit, SEDAC keeps track of its clients. With such a high savings for buildings in its category, they asked if the nature center could be used in their marketing material, a request Marien gladly approved.

Other recommendations the nature center hasn't implemented yet are adding more roof insulation and sealing unused external doors. The suggested wind turbine will most likely remain a suggestion. Sliwinski said most buildings have the potential to save 30 percent, and Rock Springs' 21 percent is good, but there's only so much potential savings in older buildings.

"Over time, since 2004 when this program started, people have gotten smarter and buildings have gotten better," Sliwinski said.

Marien said they made facility upgrades slowly as equipment aged to help save money. SEDAC doesn't provide funding to its clients, but there are organizations that can provide grant money for energy needs.

"There are all places people can get money to do what they need to do in the building," Sliwinski said.

For more information, visit <http://smartenergy.illinois.edu/> or [www.maconcountyconservation.org/green\\_living.php/](http://www.maconcountyconservation.org/green_living.php/).