Penn State researches canola as energy source

By Alyssa Bender **COLLEGIAN STAFF WRITER**

Beyond East Halls, beyond Beaver Stadium and even beyond the Snider Agricultural Arena, Doug Schaufler spends time in the basement level of a barn on Farm 10 pressing canola seed into

The pressing is part of a now year-and-a-half long research effort that allows canola grown on 56 acres of Penn State farmland to be converted into cooking oil and bio-diesel, said Schaufler, Farm Operations and Services senior project associate.

The ultimate goal of the project is to create and produce a form of canola oil that can be used in oncampus dining hall fryers.

Director of Residence Dining Lisa Wandel said it's possible that three-fourths of the university's oil needs could be satisfied with on-campus production by next

grating campus-produced oil in the dining commons. But he said they'll need to collect funds for equipment in order to move for-

"I would love to say that in a year we'd have something like this ready," Wandel said.

That is no small task: Penn State campuses use 26,500 gallons of fryer oil every year, Wandel

Some of the leftover oil used in the dining commons is then collected by the researchers, who add methanol and sodium hydroxide to convert it into bio-diesel fuel, which is used to power two tractors built to run on vegetable oil, Schaufler said.

While Penn State-grown canola oil is not currently used in the dining halls, about 50 gallons of canola oil can be produced each day in the current facility, Schaufler said.

So far the oil has only been test-Schaufler said he hopes that, ed on small fryers, but the dining over the course of the fall, enough halls use much more heavy-duty

oil can be produced to start inte-oil fryers at significantly higher temperatures. Higher temperatures could force the oil to break down or catch fire because of the methanol, Wandel said.

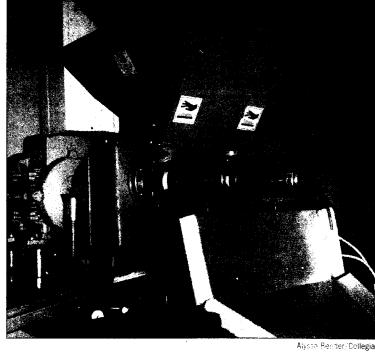
The oil seed press needs to be relocated to a facility approved by state officials before the oil can be used on campus.

They need to find a facility on campus they could do this in. We don't have the money currently to build that facility," Wandel said.

However, after the initial startup costs, the production and recycling of canola oil on campus could actually save the university money in the long run due to a decrease in the overall cost of transportation, she said. Penn State Eco-Action public relations officer Chris Tutolo (sophomorejournalism) said he thinks the project is valuable to pursue as a source of renewable energy.

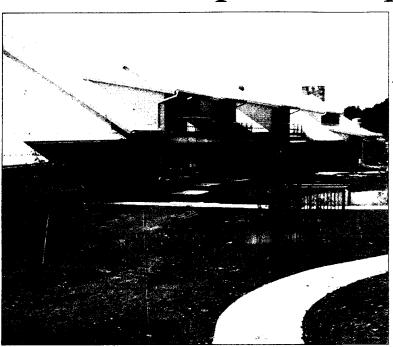
"It's a step forward that will hopefully be an example for other universities," he said.

To e-mail reporter: amb5874@psu.edu be used in on-campus dining hall fryers.



A machine in Farm 10 presses canola seed into oil that might someday

Local state park to open \$7.5 million nature lodge



Bald Eagle State Park's \$7.5 million nature lodge will attract guests with its new technology, satellite television and internet access.

By Nathan Pipenberg COLLEGIAN STAFF WRITER

A nearby state park will celebrate the opening of a \$7.5 million nature lodge complete with satellite television and internet access today, marking the Department of Conservation and Natural Resources' (DCNR) first foray into high-tech accommoda-

But the local chapter of the Sierra Club views the project as economically unfeasible and too extravagant.

DCNŘ Press Secretary help Bald Eagle State Park (BESP) attract guests who wouldn't normally stay over at the campgrounds and cabins because of limited access to technology.

Room reservations start at \$90 for a single bed and max out at \$205 for most weekends, BESP Manager John Ferrera said. Rates increase during holiday

weekends, he said.

In addition to the \$7.5 million construction costs, DCNR is paying for a full-time innkeeper and four additional staff members, Ferrera said.

The two-story, 16-room inn features lakefront views and amenilike refrigerators, microwaves and Blu-Ray DVD players.

The inn is decorated with an avian theme — each room is named after a different species of bird and features prints by John Audubon on the walls.

Novak said the park provides Christine Novak said the inn will ideal bird-watching opportunities, and the inn enhances the experience with feeders and rain gardens.

The inn was constructed using the latest in green building standards, including geothermal heating and cooling, low flush toilets and locally-built recycled furniture, Novak said.

But not all environmental advocates view the technology

upgrade favorably, including Gary Thornbloom, president of the Sierra Club Moshannon

'We're afraid that this is [DCNR's] way of opening the door for this type of development more state Thornbloom said.

Thornbloom conceded that he was sure the inn would be "very nice, since it's built for high-end clientele. But, he said, the state govern-

ment shouldn't be involved in such expensive projects - especially not on state park land.

'Why not let the private sector build something like this in an adjacent community?" he said. But Ferrera said park visitors

requested that a natural lodge like the BESP inn be built. Novak said DCNR has been proposing projects like this for

different locations beforehand. To e-mail reporter: ndp5045@psu.edu

several years, and considered



This contest is open to Penn State students enrolled at University Park. Staff members of Collegian publications and their immediate families are not eligible to enter this contest. No purchase is necessary to enter. Contest entries will be accepted until Nov. 19, 2010, at 5 P.M. Drawing day is Dec. 1, 2010. Only one entry per person is allowed. (Or per person, per day, depending on the contest, Entries must be submitted on the entry forms published in The Daily Collegian. No copies. All entries become the property of The Daily Collegian. Winners will be notified by phone or e-mail information provided on the entry forms. Winners will have until Dec. 5, 2010, to claim the praze. Failure to respond means the winner will forfeit the prize and Collegian may decide to award the prize to another entrant. Acceptance of the prize means the winner will allow Collegian to use the winner's name, likeness and winning entry for publication or for promotional purposes.



