

ELC develops state of the art bioremediation facility

by Robert A. Hibberd
Co-Editor-In-Chief

Jerry Herrmann, director of the Environmental Learning Center (ELC) had a problem. Oil, dust and other debris were running from CCC's parking lot down into his fish rearing basins. He needed a solution.

"The suspended sediments of oil or mud suffocate the fish and the abrasion damages the gills of our young fish," said Herrmann of the gunk seeping from our automobiles into the water.

Herrmann searched for an answer.

"The key to this whole thing was trying to figure out a low cost method to filter out contaminants that would otherwise flow through," said Herrmann of his basin dilemma. "We raise 50,000 salmon and steelhead each year here and release them under the salmon/trout enhancement program. They are totally dependent on the water quality."

After reviewing various design ideas of how to filter the contaminants, Herrmann finally settled on a weir type structure with different grades of gravel and selected types of organic composts. In other words, Herrmann and his staff built a beaver dam.

"This is the first time any-

body has tried to make a simplified filtration system by mimicking what beavers do," said Herrmann.

The 80-foot structure will

site, try to enhance quality, and to support fish and wildlife with it while it's here," said Herrmann. "When the water leaves the entire 15 acre complex called the

ments invading and polluting water is not a problem isolated only to CCC.

"Any place you have got any development activities, com-

Since the development of his modernized beaver dam, Herrmann has received hundreds of telephone calls and hundreds of visitors, all people inquiring about the cost-effective filter system.

Herrmann said that by using the beaver dam instead of installing filtering systems in all 64 drains on campus, the ELC saved the school several thousands of dollars.

"I wish I could bill them for the money we saved them," said Herrmann jokingly.

In addition to the first man-made beaver dam, Herrmann and the ELC experienced another first last week.

"We have just received the first batch of plastic lumber made this side of the Mississippi," said Herrmann proudly. "We made it out of the college's waste. This lumber is as good or better than any plastic lumber that I have seen and we made it right here in Oregon City."

Thanks to Herrmann and his crew, the ELC and CCC now have a fully developed wetland complex and state-of-the-art bioremediation facility for user-friendly group education and specialized classes and workshops in storm water management.



photo by Robert A. Hibberd

Jerry Herrmann, director of the Environmental Learning Center, stands above a man-made beaver dam. The dams were made so filtering systems would not have to be installed.

reduce the amount of land area required to effectively settle sediments and bio-filter the remaining contaminants of an oil based nature.

"Our whole goal is to intercept any water coming into this

ELC, it goes down Beavercreek Road and into Newell Creek Canyon. We want the water to be better than it was before it got to us and it does work."

According to Herrmann, the problem of oil and other sedi-

mercial endeavors, subdivisions where people live and home sites with their storm water runoffs, you have got waterborne things running into nearby watersheds and affecting water quality," said Herrmann.

Leland John's art exhibited

by Tracey Roozenboom
Staff Writer

If a picture paints a thousand words, then Leland John, Clackamas Community College art instructor, eloquently sums up Europe in his paintings: La Rochelle, Honfleur, Notre Dame, Venice, Schiers, Fanas and the Blue Gondola.

For most of us who have never been to Europe, his paintings offer us a glimpse of what Europe is all about. A case in point is the painting, "Honfleur," in which John reveals a building with a shop on the first floor and an apartment complex upstairs. This sort of building seems to be indicative of Europe.

In his painting, "La Rochelle," he draws two pictures, one from a distance, and one up close. Thus enabling the viewer a detailed look at this fortified harbor entrance.

One of the interesting patterns I have noticed in his art work are the little specks of color that don't look like they belong there, yet when you stand back they become an object such as a person or building.

In his grand piece, "Notre Dame," he does just this. The white dots, by the trees, in front of the cathedral seem to repre-



photo by Lynn Sickle

sent people. Also, in "Schiers" John displays a beautiful little village at the heart of a mountain range with white marks on the hillside. Could it be the town of Fanas? In "Fanas" he draws a small village with the same background as that of "Schiers" but from a higher elevation. The town steeple could be the long white speck on the painting of "Schiers."

"Venice" could become one of John's most appreciated pieces of art work. One anonymous student exclaimed, "It's friendly and has nice warm colors to it, it's very inviting." This scenic picture of Venice depicts laundry lines hung across apartment buildings, gondolas going down a canal and people walking along the sides of the canal.

The last painting from John's Europe collection is also of gondolas entitled, "Blue Gondola." The blue gondola rests in the center of the picture accompanied by three other gondolas that have been tucked away in a little cove on a foggy day.

All of these memorable paintings will be exhibited in the Pauling Gallery now through Dec. 16, along with some of his other art work.



photo by Lynn Sickle

Painting by Leland John



photo by Khanh Pham

The staff writers of The Clackamas Print spent class time with the foreign students. They shared stories and experiences with the writers.

Foreign student settles in Gladstone

by Hafidha Acuay
Staff Writer

Moyan "Audrey" Chen is a 19-year-old undecided transfer student from Hong Kong. How did she end up at Clackamas? "My aunt lives in Oregon, and she suggested it (CCC)," Audrey says she didn't plan too much before coming here; she applied to the college in January and was accepted a few months later. She arrived in the U.S. two months ago, and now lives with her host family in Gladstone.

Audrey, who is an only child, had to leave her parents behind in Hong Kong. Was this difficult for her? "Not very much because they can call; but I miss them and my friends."

Though Audrey has been speaking English all of her life, she finds it hard to talk to people. She was disappointed to learn that there were no exchange students from Hong Kong or China here at Clackamas, but she has met some American



photo by Khanh Pham

Moyan "Audrey" Chen left her friends and family in Hong Kong to come to Oregon for school.

ica, there were pennies and nickels. I couldn't believe the 10 cent was smaller than the five cent. But it's okay now."

The United States is much like Audrey expected. She likes the casual dress, and thinks that, in general, the people are nice. She doesn't think people are so discriminating, and was surprised at the number of fast food restaurants. "When I first came to Amer-

When asked whether she liked it at CCC, Audrey replied, "Yes, the environment is good." She had no trouble finding her class locations, and considers her teachers, classes, and schoolwork to be "okay."