

## **Triangle Business Journal:**

### **10 People Who Are Changing the World**

#### **Bill Lovin – Marine Grafics - Bringing Coastal Life to Kids in N.C.**

By Fred Horlbeck – Estuary Live

Jan 8, 2007, 12:00am EST Updated Jan 5, 2007, 5:58pm EST

With help from Bill Lovin, schoolchildren across North Carolina meet hermit crabs and other marine creatures, question naturalists in the field, and see some of the state's most pristine wild places up close.

And they do it without even stirring from their classrooms.

Lovin is the producer of EstuaryLive, a program that has wowed kids and won international accolades. Since 1998, it's brought remote natural venues to life in real time at schools around North Carolina.

The idea is simple. Kids, Lovin says, should get to experience natural wonders they otherwise might never visit.

That realization led Lovin, owner of Marine Grafics in Apex, and Susan Lovelace, then education coordinator at the Rachel Carson Nature Reserve near Beaufort, to do some brainstorming. When they hit on live streaming video as a way to let kids take part in distant wildlife tours, the "first virtual field trip," as Lovin calls it, was born.

"The most important thing about EstuaryLive was that it was the first with the least," Lovin says. "It showed that this kind of thing could be done economically, yet still have a tremendous impact."

Over the years, thousands of schoolchildren have viewed the shows, which are broadcast twice a year via the Internet, Lovin says.

In most shows, a small group including a wildlife expert or two, a cameraman, and children explore the coastal outdoors, usually an island in the Rachel Carson Nature Reserve, lugging one camera, a microphone and a microwave video transmitter and transmitting footage for a link-up to the Internet and out to schools that had signed up for the show. Meanwhile, kids in classrooms hundreds of miles away watch, ask questions and get answers within minutes.

Most shows have a theme, and all have a wildlife expert as a guide. Topics include everything from hermit crabs to types of coastal sand.

And there are the young guests, students who are the "eyes and ears" for the kids back in the classrooms. "Some were extremely engaged," Lovin says. "Others might not be zoning out but would watch quietly."

It's all done as economically as possible, Lovin says. The technology, initially costing less than \$5,000, was imperfect but gradually improved, and grants from sources such as East

Carolina University and the North Carolina Department of Public Instruction helped pay the bills. There were no salaries, since everyone volunteered.

In 2002, the National Oceanic and Atmospheric Administration picked up on the idea and started its own version.

Meanwhile, the program impressed the Tech Museum of Innovation in San Jose, Calif. In 2002, Lovin and Lovelace received a coveted Tech Museum award, one of 25 such international honors that the museum gives out yearly for innovative use of technology to help humanity.

EstuaryLive's use of technology, according to the citation accompanying the award, "virtually allowed children who have never seen the ocean to learn from, witness and experience nature's wonders."