

STUDENTS MAKE WAVES WITH SURFBOT

Students in Dr. Steve Moore's underwater robotics class in the fall of 2010 didn't kick back over the winter break last January.

Instead, they volunteered to continue working on a project that wasn't quite finished

After several surf- and weather-related delays, SurfBot was finally launched on May 8. It successfully completed its (revised) mission - to seek out and find a sunken sailboat and amphibious vehicle in approximately 27 feet of

water off Del Monte Beach in Monterey. that fails, students would use a kayak to rescue the bot. After all, it's worth about \$3,000.

The challenge given to the students was to build a robot that could map the depth and contours of the



ished when the semester ended. The work - some of which took place in Professor Moore's cluttered garage amid tools, electronic and mechanical parts and testing equipment - extended into the spring semester.

The class was working on SurfBot - an 8-foot Styrofoam surfboard to which two boogie boards and a pair of propellers are attached, as well as a metal box containing cameras, batteries, computers and electronics. Riding atop it all is a small stuffed otter, CSU Monterey Bay's mascot.

water off Del Monte Beach in Monterey.


"In spite of its name, it's not designed to surf," Dr. Moore said. "But it's the only surfboard I know that can swim and navigate all by itself!"

Alin Gonzalez works on the computer that drives the robot SurfBot finds its way with the help of a GPS unit and a pair of tiny computers. A video camera mounted on the robot beams live images back to shore. If the robot gets into trouble, the students can override its automatic navigation and use remote control to steer it from shore. If

upper Carmel Submarine Canyon, a side branch of the famous Monterey Canyon.

But, according to Dr. Moore, "that was just an excuse to make learning more fun and effective." Carmel Canyon has already been mapped accurately by CSUMB's Seafloor Mapping Lab, which uses much more sophisticated technology to do the job. Dr. Moore planned to use those maps to check the accuracy of the students' results and assign their grades accordingly.

The 17 students in the class were mostly biology and environmental science, technology and policy stu-



\$10 Cover Charge

Blues In The Schools

CD's \$15.00

The Monterey Bay Blues in the Schools (BITS) Program is solely funded through the Monterey Bay Blues Festival and over 250 students have received special instruction on and about blues music and history.

Your donation will help provide funds for students throughout Monterey County.

BARGAIN!
**Only \$20 includes
BITS CD**

Performance
Thursday, June 23,
2011
At
Sly McFly's
700 Cannery Row
Monterey CA 93940

Monterey Bay Blues Festival
PO Box 1400
Seaside CA 93955-1400
www.montereyblues.com
831-394-2652 (Office)
831-393-8273 (Fax)
admin@montereyblues.com



dents; one was studying computer science.

Dr. Moore said that it's unusual for biology students to take this kind of class. Normally, robotics this advanced would be taught in an engineering program.

Alin Gonzalez, a biology major from San Francisco, was attracted to the class because she thinks it will help her as she continues her education.

"I learned the basics of software," she said. "I think I could do smaller projects on my own now, and that will

SurfBot pn page B4

INTEGRITY PRINTING

(831) 384-3444

Fax (831) 384-3446
Email: gsouza23@aol.com
215-C Reservation Rd.
Marina, California 93933


"Affordable Quality & Reliable Service"
FREE QUOTES, PICKUP & DELIVERY



Johnny B. Eugenio
Agent
Johnny Eugenio Insurance Agency
FARMERS
Auto • Home • Life • Business • Workers Compensation



325 Reservation Rd
Marina, CA 93933-3218
Bus: (831) 883-4444
Fax: (831) 883-9290 Lic # 0729091
Cell: (831) 521-5599
www.johnnyeugenio.com




FORD Financials
TAX, ACCOUNTING, AND INSURANCE

Jim Ford, CIC, EA, MBA
"Fiduciary and ethical tax practitioner"
Enrolled Agent

phone (831) 883-0991 • fax (831) 883-9007
3370 Handglen Place • Marina, California 93933

www.FordFinancials.com



**MONTEREY BAY
URGENT CARE**
MEDICAL CENTER, INC.

2930 2nd Avenue, Suite 120
Marina, CA 93933
831-372-2273

Opening in Marina July 5th, 2011
Across from the
Dunes Shopping Center
that includes REI and Target

Welcome Dr. Forno



Hometown Medical Care Right in Your Own Backyard

