Surrounding the newly installed digital video camera for turtle-watching are (sitting, l to r): Marc Rice, Garry Burns, Katie Harrington, and George Balazs, along with (standing) George Watson (left) and parent volunteer Bill Wiecking.

Hawaiian Green Sea Turtles Are Newest Web Cam Stars

These bathing beauties are covered only by shells while basking on a glorious, secluded Hawaiian beach—and you can see them anytime the mood strikes you, from dawn to dusk, seven days a week.

Beautiful, island models in the latest swimwear? Guess again. Hawaii's newest bathing beauties—and web cam stars—are the Hawaiian green turtles (Chelonia mydas) at a remote location on the Big Island.

Since 1987, Hawaii Preparatory Academy (HPA) and the National Marine Fisheries Services, Honolulu Laboratory (NMFS) have worked together on a project that enables HPA students to assist the federal agency's investigations of turtles in West Hawaii. The work has grown over the years in scope, magnitude, and importance to overall species conservation.

Recently, HPA and NMFS teamed up with SeeMoreWildlife, Inc. (SMW) of San Diego to set up field cameras at Turtle Lagoon on the Big Island's west coast. The cameras "stream" video of the turtles back to the school, allowing students—and others throughout the world—to monitor the turtle population and study the turtles' basking behavior.

"SeeMoreWildlife already has done this with grizzly bears and bald eagles in Alaska, Stellar Sea Lions on the Pacific Northwest Coast, and elephant seals and birds," explains Marc Rice, Director, Cooperative Sea Turtle Research Project. "George Balazs (of NMFS) and I heard about Daniel Zatz at SeeMoreWildlife and George contacted him about doing a set up here."

The joint project started in April, and will continue indefinitely. Two cameras powered by solar energy were installed at the lagoon with the assistance of student volunteers Veronica Morris, Garry Burns, Katie Harrington, and Jill Quaintance. Rice, Zatz, and George Balazs, Leader of Hawaiian Marine Turtle Research for NMFS, Honolulu Laboratory, supervised the installation.

U.S. Cellular generously allowed HPA to mount antennas at the company's microwave relay site in Puuanahulu. Roman Polak, a U.S. Cellular engineer, donated his time and expertise to assist with the antenna installation. The cameras and antennas were installed in one day with Steve Bernstein, the school's director of computer services, working on campus to confirm signals were being received.

The field cameras take a video signal that is sent to an encoder. The encoder converts the video to a microwave signal that is sent to the repeater station at Puuanahulu and back to the school. The cameras can be controlled from a web site and Rice says students at any school will be able to schedule time on the camera. HPA is streaming the video into its local area network so anyone on campus can access the video.

"This set up gives us monitoring, research, and educational capabilities without leaving campus," says Rice, who adds that HPA is responsible for providing the location (site), Internet connection, and manpower for the project. Rice and his team of students currently are working with SMW to develop a web site that incorporates the turtle video. SMW will host the web site with partners such as National Geographic or the Discovery Channel.

According to Rice, the SMW cameras and equipment are valued at $60,000-$80,000, and there are plans to install an underwater camera in November. "As far as we know, this is the only web cam looking at sea turtles in Hawaii," says Rice. "Other cams look at surf and traffic."

To see the bathing beauties basking at Turtle Lagoon, log on to www.seemorewildlife.com. For more information about this project, visit the HPA web site at www.hpa.edu.