Christy Loomis

Research in the Virgin Islands National Park

Biography

Christy Loomis
Originally from upstate NY
Graduated State University of New York Delhi 1977 with an animal science degree
Graduated Cornell University 1993 with a degree in Business management and Marketing
Graduate work in Geographic Information Systems

After graduating SUNY Delhi I trained horses and managed horse farms until 1989. At one point I was a partner in a racing stable, racing horses at Saratoga NY. In 1989 I earned my licenses to sell real estate in NY and MA. While selling real estate I realized it was time to go back to school to learn how to use computers. That led to completing a Bachelors degree at Cornell University. After completing my degree I was technical write data manager for the Diagnostic Laboratory Cornell College of Veterinary Medicine. While helping with the Raccoon Rabies program I became interested in GIS (Geographic Information Systems). After complete two graduate courses I developed the GIS system and a model for Raccoon Rabies. This system was then used to track other diseases.

In 1997 I was offered a job to manage a marina in Puerto Rico. After a short trip down to see the area I fell in love with the sunshine and water. Upstate New York Finger Lakes region is noted for being very cloudy and though there is plenty of water it is not blue and it is definately not warm. Hurricane Georges ended that job and I moved to St. Thomas. I was assistant manager at Crown Bay Marina for a short time and then was hired at the Conservation Data Center University of the Virgin Islands as Assistant Data Manager/GIS specialist.

I now work at the Virgin Islands National Park Biosphere Reserve as Data Manager/GIS specialist. The staff at the Biosphere generates a lot of data from all the different research so I am always challenged in this job.

Abstract

The Virgin Islands National Park was established in 1956. Because it contains examples of most tropical Western Atlantic terrestrial, coastal and marine ecosystems it was designated a Biosphere Reserve in 1976. Throughout the park's history it has been a site for the collection of invaluable data. Some of the data sets that have been collected over the years include: water quality, water temperature, coral disease, coral cover, coral growth and recovery, seagrass densities and recovery, turtle nesting, pelican nesting, benthic recovery after vessel groundings, fish population monitoring and terrestrial forest dynamics. In addition, many scientists come to the National Park to perform their own research including genetics, coral colonization, long-term reef health and terrestrial studies.

Two of our most requested data sets are water temperature and water quality. Both are works in progress as data is continually collected and historic data is being converted or manually entered. Our water temperature data dates back to 1988 providing one of our longest data sets.

GIS is now used in most data collection projects making it possible to return to sites with greater accuracy or to determine where to monitor based on the analysis of existing layers or using the program to provide random locations for statistical analysis. The graphical representation of data improves our ability to visualize, track and present data.

With the benefit of years of experience combined with the use of modern technology the Virgin Islands National Park will continue be pioneers in marine and terrestrial research.