

THE EVOLUTION OF CONSERVATION EDUCATION ON THE ISLAND OF RODRIGUES,  
MAURITIUS, INDIAN OCEAN

By

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April, 1998

In October 1995 the Philadelphia Zoo's Curator of Large Mammals, Kim Whitman, embarked on an expedition to the island of Rodrigues in the Indian Ocean. Her species of focus was the Rodrigues fruit bat (*Pteropus rodricensis*) and her goals were twofold. Her first objective was to catch wild bats in mist nets and obtain small samples of their wing membranes so that their DNA could be analyzed in her study of the genetic variability of the wild population. Her second objective was to initiate an education program about bats on the island.

At the same time Kim was planning her expedition, the education subcommittee of the American Zoo and Aquarium Association's (AZA) Chiropteran Advisory Group began to develop a kit of teaching tools in response to the need for educational programming about the many endangered or threatened bat species worldwide. Kim's project on Rodrigues represented the ideal opportunity to test the kit.

I went with Kim to Rodrigues as her field assistant and to lend to the project the benefit of my experience with a number of *in situ* conservation education projects. On Rodrigues, Kim and I used the kit of teaching tools in two ways. First, we held a teacher training workshop. At least one teacher from each of the 12 primary schools on the island attended. At the workshop, each element of the kit was explained in terms of its use and conceptual background. The second use of the kit was in a 45-minute lesson that Kim and I taught to each of the twenty-five fifth grade classes on the island, reaching more than 600 students. We used elements of the kit to help explain the ecological importance of bats, the value of the Rodrigues fruit bat in particular, and ways in which the students could help bats. We evaluated the effectiveness of the lesson through the use of pre- and post-tests. Quantitative analysis of the evaluation results demonstrated that the lesson had been, at minimum, a short term success (Jamieson, 1996).

While the educational facet of the 1995 Rodrigues fruit bat project was a success, during our stay Kim and I were both overwhelmed by the many threats to the health of the island's ecosystems: deforestation, erosion exacerbated by many times the number of terrace-destroying cattle than the island could possibly sustain, and pollution in the form of ubiquitous litter. Kim and I each reached the same conclusion before departing from our two month stay on the island: the island needed a full time environmental educator, who, with a constant presence and a holistic approach to education and behavior modification, could facilitate the changes in behavior that were needed to have a positive impact on the island's wildlife.

We approached the Mauritian Wildlife Foundation (MWF) about their willingness to administer an educator position. MWF was receptive to the idea and I began the search for funding to make the position a reality. In 1997, the Chiropteran Advisory Group made the Rodriguan Environmental Educator Project an action plan priority. I then applied for and received a joint grant from the AZA's Conservation Endowment Fund and the Disney Wildlife Conservation Fund to cover start-up costs and training of the new educator. The Philadelphia Zoo's ONE WITH NATURE conservation and science program agreed to cover the educator's salary, and the British Airways Assisting Conservation programme covered the cost of two round trip flights from Philadelphia to Mauritius. The first flight enabled me to travel to Mauritius to advise MWF during the hiring process, the second to conduct a four week training/planning program.

The timing of the hiring stage was carefully planned so that it coincided with the end of the academic year (November 1997), a time when teachers could decide to change jobs without breaking their contracts. To maximize the candidate pool, the advertisement for the position was kept in general terms with no specific academic requirements listed. The only absolute was that the candidate must be Rodriguan. MWF received ten resumes and their staff and I interviewed eight candidates in the first round, selecting three people for final interviews. Our decision was unanimous: Mary Jane Raboude was selected to become the first full time MWF environmental educator for Rodrigues. Mary Jane has a B.A. from Catholic University in Sydney, Australia, where she went on full scholarship. She majored in English and took the equivalent of a minor in education.

Commencement of employment and training were delayed due to the holiday season, when little can be effectively accomplished. Mary Jane began her job in mid-January, 1998, with an intensive week's tour of MWF's field projects on Mauritius, including work on the pink pigeon (*Columba mayeri*), echo parakeet (*Psittacula eque echo*), the Mauritius kestrel (*Falco punctatus*), as well as several reforestation projects. My role during this stage of the training was to fill in the conceptual gaps, as Mary Jane's framework of biological knowledge needed strengthening. The next three weeks of training and planning were held on Rodrigues, where I taught her a variety of environmental education techniques and methodologies. I also provided her with guidance in making public presentations and working with the media.

During the three weeks on Rodrigues it had been our intention to not only craft a work plan for the coming year, but also a five-year plan. In so doing, we wanted to incorporate as many of the desires of the local stakeholders as possible. Meeting with the local citizenry, however, needed to take place in the proper political order, beginning with the Minister of Rodrigues. Unfortunately, the Minister was not on Rodrigues for the first half of my stay, and the second half was affected by a cyclone that thankfully only skirted the island, but slowed all facets of life down dramatically. Consequently, the first of the stakeholder meetings was not held until right after I left. Work on the plan has proceeded by e-mail since that time.

In addition to meeting with stakeholders and developing the work plan, Mary Jane has developed information sheets on the three remaining endemic vertebrates. She is also collaborating on follow-up evaluation of the classroom lessons that were conducted in 1995 to determine if they had lasting effects.

The Disney Wildlife Conservation Fund has provided additional funds to enable me to travel to Mauritius to conduct a project inspection in July, 1998. If Mary Jane's work is found to be satisfactory, she will travel to the United States in September to receive additional training, visit environmental education centers, and attend (and hopefully present a paper at) the annual AZA conference in Tulsa, Oklahoma.

Contact: If you are interested in joining the Philadelphia Zoo's ONE WITH NATURE conservation and science program in support of Mary Jane's salary, or are interested in supporting this project in other ways, please contact Heidi Jamieson.

#### Reference

Jamieson, H. 1996. How We Taught about the Bats We Caught: In Situ Conservation Education on the Island of Rodrigues. *American Zoo and Aquarium Association Annual Conference Proceedings*, 164-169.