

## **PRESERVING TRADITIONS, PROTECTING THE FUTURE: MEDICINAL PLANTS IN BELIZE**

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Medicinal plant use in Belize was the focus of my project. This work was begun by Jenna Kurtz-Putman in December 2006. Kurtz-Putman completed a portfolio compiling information on 25 plants native to Belize that were used for everything from mosquito bites to sunburns. In December 2007, I expanded her project by adding new plants. I learned how these plants are used and where in the country they are located by conducting interviews. This information was compiled and turned into an informational booklet that includes all of the medicinal plants studied by Kurtz-Putman and me. This can be expanded upon in future years and be sent back to Belize. In this way, we hope to support and sustain the vital Belizean tradition of using plants for medicinal purposes.

### **LITERATURE REVIEW**

Due to rainforest deforestation, 50,000 species of plant and animal species, and insects go extinct every year. Because these rainforests are basically undiscovered storehouses of new medicinal information with unrealized potential for use in modern medicine, it is important that the people of Belize and other rainforest regions try to preserve medicinal plant use to help highlight the value of maintaining rainforests. Rainforests currently provide the source for one-fourth of today's medicines. Seventy percent of the plants found to have anti-cancer properties are found only in the rainforest. The rainforest and its undiscovered biodiversity holds the key to unlocking tomorrow's cures (Raintree, 1996).

For hundreds of years the native Mayan people of Belize had schools, including medical schools, that taught the role of plants in health care. With the decline of its civilization and the arrival of the Spanish conquistadors, many of these practices, including the teaching of this information, were banned and knowledge was lost. The conquistadors burned Mayan codices containing knowledge relative to the use of these medicinal plants, so transmission of this knowledge changed from written to oral tradition (Arvigo & Ballick, 1993).

In today's modern world, the continuing reliance on oral tradition has led to even greater loss of ethnobotanical information. Ethnobotany, the study of the complex relationships among plants and cultures, focuses on how plants have been used or are being used, managed, and perceived in

human societies. However, if a father who knows a lot about the plants with healing properties teaches his son very little about their use, this important knowledge begins to decline. As subsequent generations lose interest in the ways of their elders, the knowledge can vanish altogether. This cycle ultimately ends the preservation of valuable information (Arvigo and Balick, 1993).

### **THE COMMUNITY'S NEED**

While on the ground working alongside Ivan Gillett from Programme for Belize to gather more plants and to expand on Kurtz-Putman's research, I was able to witness this cycle for myself. Local elders provided me with most of my information, but when asked the same questions, their sons or daughters knew very little to nothing at all. When asked if their fathers or grandfathers had passed down knowledge about the plants and how to use them, they said very little had been verbally transmitted and that the majority of their knowledge came from growing up around the plants and picking up on how to use the more common ones. Without preservation, knowledge about medicinal plants is likely to vanish.



Because minimal information has been available about medicinal plants in the northern section of Belize, Kurtz-Putman's and my research makes a significant contribution to the field. Our group's research mainly focuses on northern Belize and is specific to the area in which the McMaster School has worked inland and around the Rio Bravo Conservation and Management Area. I hope that this project will continue with each subsequent McMaster team working in Belize.

### **PROJECT DESCRIPTION**

The protocol for my project was to listen and gather

information whenever possible. When we went out to the surrounding villages, I worked with the local population, mostly the older people, gathering information about medicinal plants they know and use, where the plants can be located, and how to use them. While conducting these interviews, I used a voice recorder and then went back and refined my notes at a later time. I also gathered my information from our guide, Ivan Gillett.

Upon reviewing my research materials, I concluded that knowledge about medicinal plants is being passed down sporadically and haphazardly throughout the region, primarily by the men. Along with the book we sent to our community partner, I hope we can include information about the importance of keeping medicinal plant knowledge alive by sharing and passing it down to future generations.

### **REFLECTION**

As preparation for a career in public administration, this trip provided me with a valuable experience in how to speak and interact with a population of people with whom I had no prior experience. I learned to adapt as circumstances changed and to work on my feet. My time in Belize reaffirmed my future work and plans. I proved to myself that I now know from actual experience that I am capable of helping make life better for people.

### **REFERENCES**

- Arvigo, R. B. & Ballick, M. J. (1993). *Rainforest remedies: One hundred healing herbs of Belize*. Twin Lakes: Lotus Press.
- Raintree (1996). *Welcome to the Rainforest*. Retrieved November 26, 2007, from <http://rain-tree.com/index.html>