



# THE ANGUILLA NATIONAL TRUST

## *Preservation For Generations*

### **Eco-Corner**

#### **Environmental Economics: The Forgotten Development Variable**

One year ago. Forest Bay beach. A group of approximately 20 bleary-eyed ALHCS Environmental Club students step onto a beach. The early morning light – the day's first rays of sun – hits the white sand causing it to glisten almost as brilliantly as the turquoise waters that lap the shore. A pelican glides by perhaps looking for breakfast – or a comfortable tree so it can watch the unusual bustle of activities. The students are armed with garbage bags, rakes, and a mission. Refuse is scattered along the beach and within the vegetation that buffers the coastline from the road. The garbage has mostly washed up during the high tide, probably from ocean dumping or from some of the nearby islands. The students have decided on their plan of action. Their goal is simple: to clean the beach in three hours. They work hard that morning to accomplish it; the pelican would approve of their efforts.

A scenario. A practically untouched stretch of beach stretches along a tree- and shrub-lined Caribbean coastline. At first glance, it looks empty with only a messy collection of thorny, scrubby plants lining the top of the sand. Taking a closer look, it becomes so much more: a species of ant found only in the northern windward islands is busy changing their nest, bees are pollinating plants that could be picked and boiled to cure an upset stomach, lizards are catching mosquitoes that are threatening to become an annoying pest, and a kili-kili circles in the air searching for that mouse it spotted just a minute ago in the shrubs. Meanwhile, the buttonwood trees are photosynthesising, removing carbon dioxide from the air and offsetting the effects of climate change in its small (but important) way. At the same time, the coarse beach grass is keeping the loose sand from being completely washed away by the ebb and flow of the tides. The beach is rich with life and full of activity. But unless a moment is taken to consider the intricacies and wonder of the natural environment, it may never be seen, understood, or even valued...until something is built on it and a price tag is attached.

#### **Can A Price Tag Be put On The Natural Environment?**

Environmental economics – a field that became popular in the 1990s – argues that it can be and that the value of the environment depends on the goods produced (for example, agricultural crops that we eat, medicines that make us feel better, and fibres for the clothes that we wear), the services provided (for example, air and water purification and climate regulation), and the cost of replacing them with technological alternatives. One of the reasons for valuing biodiversity economically is that it allows us to understand the cost of degrading or destroying the environment and to help create a mechanism that can be used to hold the agencies, corporations, and individuals who exploit (and usually over-exploit) natural resources accountable for the impacts that they cause.

In 2003, Robert Costanza, an environmental economist and the first person to put a price on nature (**US\$33 trillion**, in fact, for the biosphere – more than the annual gross national products of all countries combined), has suggested that intact ecosystems actually yield returns of 100 to 1. That is, there is a return of US\$100 for every US\$1 invested. That is a lot of money and, in real world market trading, an incredible investment opportunity.

So how does this investment work? With that type of return, why are beaches and the vegetation found on them not being protected and why are developers clearing land instead of preserving it? According to the

principles outlined by Adam Smith, an 18<sup>th</sup> century economist who defined the free market economy, economies and markets are most efficient when they are based on self-interest. This means that the forest brings in more money when it is cut and sold as lumber than if the trees were left standing. This is because the outside costs related to the clearing of the forest (loss of trees that hold carbon dioxide, that release oxygen, that hold the soil together...) are passed on to all the other human beings on the planet. The profit of one individual, corporation, or agency that decided to cut the forest down means losses for everyone else. What are actually outside or external *costs* are being called *profits*.

According to the theory of free markets, as long as there is a demand, anything can be bought or sold; everything has a price. Costanza uses this same model to show that a price tag can also be attached to the natural environment – but this price tag is more than what any individual or country can afford. In fact, the value is so high it is practically priceless.

Although the popularity of environmental economics is growing, there are a number of people who argue that putting a price on the environment – which is technically life itself – is similar to putting a price on friendship or love and is therefore impossible. Critics maintain that the environment and the complex relationships that bind it together (including those with human beings) is worth more than money and by putting a monetary value on it, its real value is ultimately lost. They argue that the environment's value goes beyond the cost-benefit analysis and into the emotional, spiritual, and religious. It is an argument that maintains that once a dollar figure is associated with the environment, then it becomes replaceable and if it is damaged or destroyed then a fine will cover the costs. It does not consider the value something has just for existing, or on a larger scale, for the ecological balance that took millennia to achieve. What should we do when technology does not have the answer or when we have not yet determined how the ecological systems worked in the first place?

Today. Forest Bay beach. A backhoe traverses the beach, compacting the sand because of the weight of the vehicle. All the while, the sand is turned over and the vegetation is raked up, giving the beach a brown hue. Most of the vegetation has just been cleared. Piles of branches, dead grass, and remnants of shrub are piled into tall pyramids. Only the odd buttonwood has been left standing – for the time-being. The extensive root system that held the loose sand in place during heavy rains and strong storms is now gone. A view of St. Martin and Anguilla's strikingly blue-green nearshore waters are now visible from the roadway and beyond. It is a view that is highly sought after – the affluent would pay millions of dollars for it, especially if it came with a luxury villa. The reasons for the clearing have not yet been made public.

But how much is an expanse of land worth – with its shrub-land still intact and with a beach that would be able to survive the harsh weather that comes with the rainy season (including strong storms and hurricanes)? How much is that beach worth with trees that provide shade and that purify the air and the water still standing? How much is a piece of land worth if it is untouched? If it is protected? Is its value only associated with what is built on it or the view that a person can have while standing in the middle of it? And is it right that the monetary benefits of that clearing is enjoyed predominantly by a small number of individuals if the rest of society must bear the burden of the costs?

Understanding and protecting the value of the natural environment does not necessarily mean that all development must be stopped. Rather, it means supporting a type of development that promotes the idea of getting better rather than getting bigger, of working with the natural environment instead of against it, and recognising and abiding by its limits so that the impacts can be absorbed instead of overwhelming it. It also means working within a long-term plan that has considered the alternatives, the effects and repercussions, as well as the benefits and the costs (social, political, economic, and ecological). This plan should include a vision of what this island should look like in fifty or one hundred years instead of the five year political cycle. And finally, this plan should be developed with the active and real participation of the people who live on this island since they are the ones who will have to carry the burden of poor decisions; the rate of development should occur at a pace that communities can absorb and adapt to.



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We will need to think carefully about what it is that we want for this island, how many sacrifices we are willing to make, and how much a beach lined with trees or any other habitat or ecosystem is actually worth to us as it is. While this may seem like a difficult task, it must be done now before it is too – late the future of the island depends on it.

Note: Lissa Harris wrote a brief informative article for the on-line magazine, Grist. Information from this article was used to support comments made in this month's Eco-Corner. "At What Cost" can be found at [www.grist.org/news/maindish/2003/04/08/what/](http://www.grist.org/news/maindish/2003/04/08/what/).



Clearing of vegetation, as has occurred in Forest Bay, can have serious environmental impacts (photos taken on 31 January 2007).

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**Eco-Corner is a regular feature provided by the Anguilla National Trust in co-operation with The Anguillian. The Anguilla National Trust welcomes questions, comments, and suggestions. If you would like to voice your opinions and/or concerns, please contact the Trust at 497 5297 or at [axanat@anguillanet.com](mailto:axanat@anguillanet.com). Together we can make a difference. *Preservation for Generations*.**