ECOTOURISM: BEHIND THE GREEN CURTAIN Melissa A. Zappulla

A new type of tourism, coined "ecotourism," has recently emerged and is quickly gaining in popularity as a leisure activity. Ecotourism, a type of "gettingback-to-nature" excursion, brings people into environmentally sensitive areas to view exotic and, more often, endangered plants and animals. Proponents of this type of travel such as John Whiteman, a partner in a tourism and community-development consulting firm, and Stefan Gossling from the Human Ecology Division of Lund University, view ecotourism as not only beneficial but essential to both the environment and economies of these often-depressed regions. Through such an ecological experience the traveler is supposedly changed or "spiritually renewed," and gains a new-found respect and sensitivity for nature. This, in turn, is expected to promote more environmentally responsible decisions in daily life. Whiteman states, "While there, [tourists] enjoy a sense of spiritual renewal. And they leave behind an intact ecosystem and increased wealth for the local community" (96). Furthermore, the governments and citizens of the areas in question are, presumably, encouraged to take steps to preserve these tourist sights in order to continue to reap the benefits of the tourist dollar (Gossling 1; Whiteman 96).

Unfortunately, when popular sites of ecotourism such as Uganda and the Galapagos Islands are carefully examined, it becomes apparent that ecotourism does not provide the benefits so readily claimed by its proponents. The economies of these regions see little benefit. The local people remain impoverished, and offer no protection to the environment: in fact, they are often angered enough to lash out against these fragile ecosystems. The environment is harmed directly by the physical presence of tourists; it is simply not possible to bring people into an area where few humans would otherwise exist without altering or harming the very environment which we seek to preserve. It seems self-evident that groups of people walking through environmentally sensitive areas will not have an impact. From ostensibly small effects such as crushing plant-life underfoot and soil erosion, to larger effects such as altered animal behavior, it is highly probable that the ecological footprint left by tourists will not go unnoticed. As Heather Lindsay observes in "Ecotourism: The Promise and Perils of Environmentally-Oriented Travel," "even harmless-sounding activity like a nature hike can be destructive, as hikers can contribute to soil erosion

and damage plant roots" (5). Upon examination, the ecological dangers of ecotourism are readily apparent.

In both Uganda's Bwindi Impenetrable National Park (BINP) and the Galapagos Islands, altered animal behavior is a significant concern. Studies have shown that, when in the presence of tourists, animals abandon their nesting and feeding sites. Perhaps worse, when animals become accustomed to the presence of tourists, they lose the instinct to flee thus leaving them vulnerable to poachers. In BINP, habituation of the gorillas is fundamental to ecotourism so that they may be safely observed by tourists (Adams 5). Unfortunately, this purposeful habituation may have lead to the gorillas losing the instinct to flee from poachers or soldiers. In looking at this problem, Hamilton tells us that "initial indications are not encouraging" (2). What then, will become of these animals if they lose the instinct to flee from danger in their environment? Surely the outlook is not promising. Losing their survival skills places these animals at risk for extinction.

In the Galapagos, habituation of the wildlife is not intended; however, it has been noted that, "scientists began noticing behavioral changes in the animals—such as iguanas waiting for tourists to give them bananas" (Honey 111). It has also been observed that the normally docile male sea lions of the Galapagos have recently become more aggressive. In her work, *Ecotourism and Sustainable Development: Who Owns Paradise?* Martha Honey states that, at present, it is unclear if this aggression can be attributed to an increase in tourism or an increase in sea lion population (111). Some scientists believe that the impact of tourism on other mammals and birds is minimal but that the system is becoming weak in particular areas (Honey 112). It is important to note that a particular area of the Galapagos is now closed because turtle nests and vegetation were so badly trampled by tourists that these species were threatened with imminent extinction.

Beyond the issues of altered animal behavior and trampled vegetation is the problem of newly introduced organisms to these visited ecosystems. When tourists arrive, they present the threat that they carry with them, on their person or in their mode of transportation, bacteria, disease, animals and insects foreign to the environment. This is one of the biggest issues the Galapagos Islands are currently facing. Honey states, "At the top of the agenda of many scientists and park officials is tracking and eliminating the introduced species—plants, animals, insects, fungi, bacteria—that are brought in by boat or plane by tourists, new immigrants, and illegal

fishing operations" (114). The problem with this is that many of these foreign organisms are capable of "out-competing" the unique indigenous species of the Galapagos (Honey 114). Since the native species of the Galapagos evolved without the threat of such organisms, they may be driven to extinction, leaving the ecosystem irreparably changed. For example, black rats introduced to Pinzon Island kill tortoises as they hatch. Pigs on Santiago Island eat the eggs of sea turtles, thereby reducing their survival rate from eighty percent to a mere three percent while introduced aphids are killing native plants (Thurston 3). In a related article by Martha Honey and Ann Littlejohn, "Paying the Price of Ecotourism," Tom Fritts, a biologist with the National Biological Survey, calls this "a critical time" for the ecosystems of the Galapagos Islands, and speaks of its current state as being pushed "towards the brink of disaster" (5). The stakes are high. Ecosystems are forever changed by the consequences of tourism. Fritts tells us that we are dangerously near the "precipice of irretrievable damage" (5). Simply, certain damages cannot be undone. There is no remedy for extinction.

Similarly, in Bwindi Impenetrable National Park, disease transmission between humans and gorillas has become a significant concern. William M. Adams of the University of Cambridge states that "the loss of animals to human diseases" is a great risk posed by this type of tourism (5). Diseases that may be rather inconsequential to humans present the possibility of killing gorillas. In response to this dilemma, the International Gorilla Conservation Programme is now instituting an education program for guides and tourists. It is their hope that once people are educated, close contact between humans and gorillas will be reduced (Hamilton et al. 2). However, even if human contact is reduced, it will not be eliminated, and diseases transmission will remain a significant threat.

Indeed, even on the base level of examining the physical impact of tourists on the environment, we see the complexity of the issues surrounding ecotourism. It is without doubt that even in the best situations, where tourists and guides are educated and environmentally sensitive, the ecosystems in question will be altered. Even if the issues of carelessness and lack of education are somehow successfully eliminated and fool-proofed, our presence will not go unnoticed; animal behavior will inevitably be altered, plants and nests trampled, and foreign organisms introduced. Major flaws of ecotourism reside in the impact of the exterior influence of human beings on these ecologically fragile ecosystems. Even the most responsible, environmentally sensitive

tourist would not be aware that they were carrying a bacteria or virus capable of driving a species to extinction.

It is important to note that these "tours" are vacations for people, and they have paid for them with their hard earned money. They, like anybody else who takes a vacation, are entitled to enjoy their experience, within reason, as they see fit. Perhaps this includes feeding an iguana or coming face to face with a gorilla or sea lion. Yet, one must wonder if these tourists are truly concerned about the effects of their presence on these foreign places, since they eventually leave and return to their normal lives. The locations affected by ecotourism are so far removed from what most tourists know to be everyday life that it is improbable that only a few days in these sensitive environments translate into a long lasting sense of "spiritual renewal" which ecotourism supporters speak of. The sense of belonging to a greater ecological consciousness and the urgency to preserve the environment is likely to fade into the background as the tourists resume the reality of their daily lives. After all, that fragile ecosystem is *there*, not in the tourist's backyard. To believe that some sort of ideal, symbiotic relationship between fragile ecosystems and tourism can be generated in a few days is to defy logic. Moreover, even when the supposed economic advantages of ecotourism is examined, it does not live up to all that supporters claim it to be.

One claim by proponents of ecotourism is that tourism creates job opportunities. Some locals will set up stands selling crafts, while others find employment with hotels, restaurants and tour companies. Employment is often proclaimed to be one of the foremost benefits of ecotourism; in fact, Gossling proposes that increased revenues are *essential* to the continued existence of these environmentally sensitive areas. Ecotourism's "sustainable uses may outweigh the costs of conservation," he proclaims, and even asserts that many "species and ecosystems would no longer persist without tourism" (13). While this offers us a pleasing picture of the relation between environment and economics, this overly idealistic view leaves out some very important realities: locals tend to remain poor, natural resources are strained, and the environment is altered and polluted by the establishment of infrastructure, transportation and other such accommodations necessary to support tourism. The only ones who truly benefit economically are the foreign investors and tourist companies.

In Rethinking Tourism and Ecotravel: The Paving of Paradise and What You Can Do to Stop It, Deborah McLaren offers us a view of some of these realities when

she refers to the "economic myths" of ecotourism (72). She argues that while supporters of ecotourism claim economic benefits for the environment and disadvantaged locals alike, a closer examination of what is actually occurring reveals contrary evidence to the proponents' fundamental beliefs. McLaren also brings to light the fact that the majority of workers in these countries are "semiskilled," or "unskilled," and that, consequently, better paying positions are usually filled by foreigners. Furthermore, the "majority of locals are left with low wage jobs" and because tourism is largely seasonal, the low paying jobs given to locals are seasonal and offer no benefits (McLaren 73). Lindsay illuminates the situation further when she informs us that the monies generated by ecotours are "siphoned off to foreign investors" (5). The revenues are not reinvested in the local communities, but "natural resources are degraded and the needs of the local population are marginalized" (Lindsay 5). Although ecotourism creates job opportunities, the locals do not reap the economical benefits which occur within their own communities. In the end, the indigenous population is left economically disadvantaged with the added environmental woes of pollution and strained natural resources.

Unfortunately, misguided locals, in hopes of improved income, often switch their focus to the tourism industry, uprooting their families to live in commercially toured areas. Once at home in the Galapagos, they soon realize that economic opportunity is limited because they are not capable of competing with the larger, foreign establishments. As these areas were largely uninhabited by humans, and there are often restrictions on the areas locals are permitted to occupy, overcrowding and strain on natural resources has become a problem. Honey and Littlejohn tell us that the Galapagos is Ecuador's fastest growing province (5). Since the 1960's, the population has increased from few hundred to approximately twelve thousand, all of whom are confined to three percent of the territory outside of the national park (Honey and Littlejohn 5). Biologist Drumm says that this immigration "is presenting the greatest threat the Galapagos has faced since perhaps the whaling industry back in the nineteenth century" (Honey and Littlejohn 5). Not only are locals disadvantaged in moving their families to the Galapagos, but the environment suffers as well. The natural resources of the Galapagos are simply not equipped to handle this influx of human population.

In Uganda, the local population has seen no more benefit from tourism than the inhabitants of the Galapagos. In fact, they have even been displaced from their

normal surroundings. In the establishment of the BINP, locals were closed off from the forest, robbing them of valuable natural resources essential to their health and well-being. For instance, they were denied access to the medicinal *nyakibazi* tree, which is routinely used to treat internal parasites (Hamilton et al. 2). Alan Hamilton, author of "Conservation and Conflict in Uganda," makes us aware that "89 percent of people around Bwindi are infested with whipworm and 34 percent with Ascaris. Yet, to be caught collecting *nyakibazi* could result in a fine or imprisonment" (2). In Uganda, "the poor have become even more economically marginalized" (Hamilton et al. 4). It has become evident that local communities are not benefiting from ecotourism as the tourist industry so loudly proclaims. In fact, the effect on the inhabitants of these regions is outright contrary to those offered by the defenders of ecotourism. Local residents are not enjoying an improved quality of life nor are they enjoying an enhanced economic status but are harmed by the tourist industry's claim on their environment.

The displacement of residential communities and the lack of revenue obtained by local people causes resentment and backlash against the environment. In Bwindi, locals have purposely set fires to the BINP and threatened the safety of the gorillas (Hamilton et al. 2). More vividly, Hamilton states, "It is estimated that over half the 240 gorillas in the original sector of Kahuzi-Biega National Park (DRC) have recently been killed. . . probably by hungry villagers following the withdrawal of park guards when war erupted locally in August 1998" (2). This statement screams at us, calling to attention the impoverished state of the locals and the resulting backlash that occurs against the environment. The fact that guards must be in place to protect these fragile ecosystems speaks volumes and cannot easily be ignored. Where is the economic benefit for the locals and the resulting inclination to preserve the environment?

Similarly, the Galapagos has experienced a backlash against ecotourism. There, poaching has become a major concern and "a significant portion of the reserve's budget must go to guarding the reserve from poachers" (Lindsay 5). Everything from sea cucumbers, to giant tortoises, to seal teeth and genitalia are under attack for financial gain. Violence has also become a reality.

In January 1995 and again in September 1995, an unruly mob of masked sea cucumber fishers descended upon the headquarters of the National Park Service and Charles Darwin Research Station. Wielding axes and machetes, they harassed staff and threatened to take tourists hostage, to

kill animals—including Lonesome George, last of the Pinta Island race of tortoises—and to burn parts of the park if their demands were not

met. Station director Blanton received death threats. (Thurston 4) As in the BINP, locals in the Galapagos are pushed aside for the gain of the tourist industry, culminating in violence against tourists and the fragile ecosystems in question. We desperately need to understand that where there is little financial gain for indigenous communities, there is little incentive for local people to actively preserve the environment in question. More importantly, there is motivation, whether for political protest or financial gain, to commit crimes against these sensitive environments. This hardly matches the picture of joyful, environmentpreserving, local communities that the proponents of ecotourism so eagerly portray. Without a doubt, these situations are the exact opposite of what any environmentally concerned individual would hope for.

Beyond the realization that very little money is obtained by the local community, and the resulting backlash, the environment is inevitably harmed by the physical establishments necessary for tourism in an ecologically sensitive area. Lindsay points out that where there is tourism, accommodations to support tourist activity will be needed and, of course, local resources will be utilized. She states, "Tourists represent an increase in population, however temporary, and their demands on local resources can require the installation of additional infrastructure, produce large amounts of waste and pollution, and further the degradation of fragile ecosystems" (5). Whiteman agrees that the implementation of tourist accommodations is essential and concedes that this may, indeed, have negative repercussions since tourists "contribute to traffic and pollution" and "disrupt the traditional tenor of country life" (100). In the Galapagos Islands, for instance, an airstrip, tourist boats, and hiking trails have been built to make the once virtually inaccessible islands available to tourists. In Uganda, making tourism possible is even more complex than the mere establishment of accommodations and means of access. A system of guard-accompaniment has been established which entails guards escorting groups of tourists throughout BINP because Uganda and surrounding areas are so politically unstable that tourists have been killed. "On 1 March, 1999, Ranger Paul Wagaba and eight tourists were murdered in Bwindi Impenetrable National Park (BINP).... Less well publicized has been the recurrent, rebel-related violence at nearby Rwenzori Mountains National Park, with hundreds of deaths over recent

years" (Hamilton *et al.* 1). Obviously, where accommodations, infrastructure and guard systems are needed, enormous costs and environmental damage occur. One must seriously consider where all of the proponent-claimed advantages are.

Local communities, economics, politics and environmental concern all come together in the topic of ecotourism, with the result being a very messy, complicated convergence of issues with boundaries which are often difficult to delineate. It is a mistake, and it is irresponsible, to examine a single issue without acknowledging its relativity to the other issues at hand. We must not focus so intently on the pleasing ideas of "spiritual renewal" and economics in alliance with the environment that we turn a blind eye to the very real pitfalls that exist with this type of tourism. Ecotourism in environmentally sensitive areas is harmful to the ecosystem in question. This fact cannot be ignored. Fragile ecosystems which exist in places such as the Galapagos Islands and BINP are at an enormously threatening risk of extinction. Animals exhibit altered behavior, unique vegetation and nests are trampled, and foreign species and diseases are introduced. Even with the enforcement of strict guidelines and the most careful adherence to them, destruction of these ecosystems will invariably continue to occur. Common sense tells us that tourists cannot walk through an area without stepping on vegetation. They cannot arrive without pollution-causing transportation. The most caring tourist would not be aware that he or she is caring a bacteria or virus capable of wiping out the species they are coming to view. More importantly, we need to recognize that this environmental danger cannot be justified or made less significant by the political and economic factors involved. At what price is environmental ruin acceptable?

Adams and Whiteman argue that the revenue from ecotourism is no less than essential to the survival of these protected areas since money is needed for maintenance and protection and to encourage locals and their governments to take an interest in conservation. However, economic benefits for local communities are not what they should be, and this often fosters a sense of ill will, encouraging such things as poaching and violent acts against the ecosystem in question. Moreover, it seems to be a paradoxical issue, because if the environment in question is destroyed, what has been accomplished by ecotourism? Guidelines for successful ecotourism are offered by many, proponents and critics alike, yet these guidelines lack a reasonable ecological position when applied to such sensitive areas as the Galapagos and the BINP. There is no compromise possible where such fragile environments and

unique species are concerned. Guidelines cannot render our presence harmless nor can they let us off the hook for the ensuing damage.

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