Preserving Innocence: The 21st Century Sanctuary Movement By Michael Tobias and Jane Morrison

Whether in orangutans, lambs or human children, innocence conjures a call to the heart; one that, in the musings of the Prophet Isaiah, evokes a vision of the wolf, lamb, leopard and goat nestled together in harmony. Such hints of vestigial Eden present tantalizing scenarios not entirely out of kilter with the best laid plan of conservation, namely, the protection of large ecosystems with their intact assemblages of plants and animals. This was the dream of Abraham Lincoln, who not only brought the nation together, but sought to include within that community protected natural areas beginning with his gift to the nation of the Mariposa Big Tree Grove of Giant Sequoias and Yosemite Valley on June 30, 1864. This action led to the creation of the national park system which some consider to be the best idea America ever devised.

The ideal commending the public's protection of ecological commons quickly became a global mandate, and one that surged from our deepest instincts: not those of fear or flight, but of loving engagement and protection of the natural world. The very act of celebrating nature may be as deeply woven into the human heart as any other intellectual conceit and could be a key to our species' survival. With over 114,000 protected areas representing nearly 12% of the terrestrial Earth, there is reason to be guardedly optimistic about our collective conservationist resolve.

That said, one cannot deny the plethora of negatives –not just the seemingly minor daily disasters, but all those incremental compromises resulting in the scraping of mountains for coal, conversion of tropical forests into palm oil, zircon, soy or biofuels, continuing huge gaps dividing rich and poor, global warming, the spread of nuclear weapons and the fact that human consumption, to paraphrase Boris Pasternak, resembles a runaway train in the dark night with its headlights turned inward.

The risk of losing precious lives and species has never been higher and this loss of biodiversity is by far the most pressing crisis –among many- that humanity and the earth herself faces.

Take but one example that would have escaped most radar screens, but goes to the heart of changing biological parameters: In 2006 Californians witnessed a precipitous drop in the numbers of migrating butterflies. At one site, Painted ladies (Vanessa cardui) declined from a recorded number of four per second to four per month. The U.S. Fish & Wildlife Service (USFWS) is charged - under the authority of the 1973 Endangered Species Act (ESA) - with identifying and listing Threatened or Endangered species in North America. At the ESA's inception, 78 species appeared on the list. By the end of January 2008, the agency had designated 607 animal and 744 plant species as Threatened or Endangered. Today, the agency has Approved Recovery Plans for an additional 1,116 species. It must be noted that only 22 species

have recovered sufficiently to be removed from the list, while many others have declined in numbers. In some cases, populations have been reduced by 98%, as in the case of America's Black-Footed Ferret.

Globally, the World Conservation Union (IUCN) has Red Listed over 16,000 species as Threatened or Endangered and has identified more than 40.000 species at risk of becoming Threatened. If current impact trends continue, many scientific organizations project the likelihood of our losing between 40 to 60 percent of all life forms on Earth by the 22nd century. New findings released in May 2008 - following a meeting in Bonn of the international signatories to the United Nations Convention on Biological Diversity (a treaty formulated back in 1992 at the Rio Summit) revealed that the species' extinction rate has escalated to an average 25,000 times higher than the natural background extinction rate. That normal rate of 3 species per million years on average has long been perverted by humanity's interventions. What is positively startling about this predicament are the numbers themselves. Until recently it was believed by zoologists that there were a maximum of ten million species on earth. Research discoveries have pushed that number to over 100 million species. If human consumption trends are not modified, that scientific consensus indicating a loss of as much as 60 percent of all life forms during this century thus translates into approximately 60 million species. Averages for the number of individuals per species vary across the entire suite of life forms, or taxa, but some have pointed to a mean number of 3 million individuals per species. Hence, the possible extinction of 180 trillion individuals. Most of these will be of the Phylum Arthropoda, namely, insects, spiders and crustaceans. But the number will include gorillas, whales, lions, tigers, cheetahs, black-footed ferrets, cinnabar trees, orchids, dolphins, penguins, giraffes, parrots, falcons, wild tulips and wolves, among countless others.

The numbers represent more than cold calculus. Each individual of each species has an amazing, mysterious face, possesses a personal biography and a primeval lineage. To make matters even more dire, one study has shown that the fate of every Threatened and Endangered species involves countless other co-dependents, usually beneath our quantitative or legal screens. The cumulative hazards are such that whole systems involving incalculable millions of ecological community members are likely to break down and perish. We have already seen it happen amongst fisheries.

Yet, for all this jeopardy, there is a clamor of pro-active hope. The combination of science, legislation, community and individual activism, increasing concern about animal rights and new tools for honing the science of conservation biology represents a convergence of forces that constitutes nothing less than a 21st century incarnation of the sanctuary movement.

For a thousand years in England, sanctuary from harm or arrest was afforded anyone who could physically enter the confines of a sanctuary-designated church. In the last decades of the $20^{\rm th}$ century, the sanctuary ideal was applied by human rights

and religious groups to provide safe haven for immigrants and political, ethnic and intellectual refugees facing deportation and possible death. Today, ecological circumstances have propelled another sort of outpouring of support for the at-risk underdog in the form of a rallying cry to save habitat and countless species from obliteration.

One potent data-set used by governments to assess some of the most critical areas of high biodiversity is known as the "hotspots" methodology. Coined by Norman O. Myers and effectively applied by Conservation International in Washington D.C., this cathartic tool for shaping conservation policy recognizes that an overwhelming share of the world's most diverse biological heritage is actually consolidated in 2.3 percent of the terrestrial Earth, as measured by the number of rare flowering plants found nowhere else. Comprising a known 35 domains – from Southern California, New Zealand and Japan, to the Tropical Andes, the East Coast of Brazil and areas from the Himalayas to Central Africa - these hotspots have become magnets for timely action to save what is left of the Earth's richest biological treasures.

Other ecologically redemptive approaches have also been initiated. For example, goals set for the year 2010 by the European Union seek to create larger protected areas. The World Wildlife Fund has come up with a priority list of 200 Global Ecoregions or areas "of the Earth's most biologically outstanding terrestrial, freshwater and marine habitats" needing continued or newly formulated protections.

In the United States, where most environmental discussion appears focused on the price of oil and of food, exuberant advocacy for the protection of what remains of America's rich biological heritage is in serious play. As of April 2008, at least 22 major bills were before Congress seeking to advance legislation that would enshrine wilderness areas within the existing Tongass National Forest and Arctic National Wildlife Refuge in Alaska, as well as adding additional acreage to, or designating new protected areas in Washington, California, Oregon, New Mexico, Arizona, Colorado, the Northern Rockies, Georgia, Idaho, Utah, Virginia and West Virginia. In Wyoming a strong coalition of citizenry is fighting to save some of that state's most precious habitat from more oil drilling. Other trends are equally encouraging: the EPA last year banned Carbofuran, a toxin that kills nearly as many birds as DDT, while new visions of "Wildlife Without Borders" are circulating throughout Washington's Natural Resources Subcommittees.

U.S. consumer trends have increasingly looked to organics and cruelty-free agricultural products, as well as goods locally-produced, bearing low-carbon trails. Everyone is flashing green, from catwalks at Cannes to the covers of nearly every magazine. Moreover, investors, stockholders, environmental auditors, food manufacturers and service industries are taking a hard look at the most serious arena of pain in the global landscape: slaughterhouses which mark the assault on the largest number of victims of human consumerism. According to United Nations Food and Agricultural Organization data, over 53 billion vertebrates killed for

human consumption each year. That number does not include fish. More and more consumers are chosing a kinder, more compassionate path, however.

All these trends are part of the sanctuary movement, that long called-for reconciliation between humans and other species. Improving interspecies relations may also result in preserving that which is best about human beings: our innocence. After all, as biological timelines go, we are a young species, filled with hopes, dreams and idealism. Now it's time to go to work.

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Michael Tobias and Jane Gray Morrison of the Dancing Star Foundation are authors, ecologists and filmmakers. Their most recent book, SANCTUARY: Global Oases of Innocence, published by Council Oak Books, was officially launched in Washington, D.C. on June 25th at the 2008 Smithsonian Folklife Festival. Their latest feature film documentary HOTSPOTS will premiere nationwide on public broadcasting November 2nd and 3rd, 2008, following a European premiere in September at the IUCN in Switzerland.