Conservation, Numbers, and People

In terms of biodiversity conservation, the numbers speak for themselves. A recent *New York Times* editorial reported that the snow leopard population across Asia is likely fewer than 7,000. Another editorial in the *Washington Post* states that more than 60,000 elephants and 1,600 rhinos have been lost to poachers just in the last two years. The World Wildlife Fund reports that, "two-thirds of the world's fish stocks are either fished at their limit or over fished."

These are but a snapshot of what is a growing trend of decline in species population numbers. However a new, related trend in biodiversity conservation and communication is just beginning to take look at a different set of numbers – numbers in terms of people, their level of understanding of biodiversity, and their willingness to change or not change behavior.

Today, more than ever before, the numbers of national parks, wilderness areas, zoos and aquariums are increasing as are the numbers of people that visit them. In fact, a recent survey by the World Association of Zoos and Aquariums (WAZA) reveals that annually, more than 700 million people visit zoos and aquariums alone. The global reach in visitors numbers suggest a large number of people are exposed to the value, as well as the threat to biodiversity. These large designated nature hubs and their reach to the public also cause one to think that ecologically responsible citizens are increasing in numbers. Yet, the biodiversity decline continues.

According to Dr. Stanley Asah of the University of Washington's School of Environmental and Forest Sciences, "All biodiversity decline can be traced to the interface of natural systems and people's actions. It is how we behave toward nature or biodiversity that leads to these results."

Dr. Asah's research on the human dimensions of natural resource management and conservation psychology offers two possible reasons as to why people often fail to act ecologically responsible. For one, the conservation community has focused perhaps lopsidedly on awareness and education. This is the idea that facts and figures will enter the public consciousness and instigate positive behavioral change towards the environment. As Dr. Asah and an increasing number of social science experts argue, conservationists must transcend making people aware of a problem and focus on motivating pro-environmental action through strategic communication and other behavior change strategies.

Second, to motivate people, conservation communicators should study and draw from the playbook of social marketers, specifically, the idea that a positive narrative – one that can stir an emotional and other motivational responses – is persuasive and more influential than communicating facts. In other words, to motivate people to take action, a more successful approach may be to replace "shock and scare tactics" with awe, wonder and amazement. It means flooding the public consciousness with images that inspire hope and action. Even in an urban setting such as Washington, DC, peoples' love and interest in nature is sometimes surprising but strong. Bird enthusiasts as well as everyday commuters in the DC Metro area were captivated recently by an unpredictable invasion of Snowy Owls that migrated south from the Arctic along with some very cold air. What has been called a once in our life-time invasion or "irruption," as its referred to by ornithologists, these beautiful birds are captivating the city, scientists and birders alike as they collaborate to report sightings on citizen, research and social media websites.

"It is this kind of opportunity that we could seize to remind people of their connection with nature and especially to motivate biodiversity conservation," says Dr, Asah.

An urgent need for behavior change is suggested by the upsurge in wildlife trafficking. The demand for ivory in hotspots like China, Southeast Asia, East/Southern Africa and, the eastern borders of the European Union, some markets in Mexico, the United States, parts of the Caribbean, parts of Indonesia and New Guinea, and the Solomon Islands is attributed to the increase in human populations. The unprecedented surge of illegal trade in wildlife is not just disrupting population numbers of species most at risk, it is disrupting ecosystems, triggering a further loss of biodiversity. Many argue that until the demand for these products is addressed through successful communication campaigns and other relevant behavior change strategies targeted at changing peoples' attitudes and actions, wildlife trafficking numbers will only increase.

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Amazing variety at Georgia Aquarium.

It is now imperative that the conservation community move beyond awareness to a stronger focus on behavior change. Nonetheless, Dr. Asah argues that "One of our top priorities must be to influence institutions and leadership." After all, science communication is reflective of the long history of scientific organizations that stems from an invisible divide between an all knowing expert and uninformed public.

Some organizations are, however, making strides in facilitating world conservation leaders' creative thinking discourses on the human dimension of biodiversity. The International Union for Conservation of Nature's Commission on Education and Communication (IUCN CEC), in partnership with the Convention on Biological Diversity (CBD) hosted a Thought Leaders Deep Dive in 2013 to brainstorm how human and social dimensions of biodiversity conservation can be more effectively mainstreamed into communication activities and knowledge products.



As a result of this effort, CEC has committed to facilitating this emerging area of conservation communication by working with the CBD and other organizations to help communicate the latest social science research, better connect a growing number of experts in this area, and identify strategies to integrate this science into successful public awareness and outreach activities.

Some organizations already support a greater role for behavior science. Conservation International, as part of their Conservation Leadership Programme works in partnership with BirdLife International, Fauna & Flora International, the Wildlife Conservation Society, and BP plc "to promote the development of future conservation leaders and provide them with the capacity to address the most significant conservation issues of our time."

The Conservation Leadership Programme is a great example of behavior change as part of the leadership course where young conservation leaders living and working in Africa, Asia, East/Southeastern Europe, Latin America and the Caribbean, the Middle East and the Pacific Islands are trained and mentored to implement successful practices. Perhaps through programs such as these, the conservation community will begin to expand social science research and better understand the numbers related to people, which will hopefully reverse the numbers related to biodiversity decline.

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