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# Birding

AMERICAN BIRDING ASSOCIATION

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# Conservation Through Commodification

by Cagan H. Sekercioglu

In the long-run, the quality of our birding (and the length of our lists) depends on our success in conserving birds and their habitats. Who would not love to see a Labrador Duck during a pelagic trip, have Carolina Parakeets fly overhead on a CBC, or photograph a Bachman's Warbler foraging in a canebrake—not to mention observe a half-ton Malagasy Elephant Bird or tick any of the estimated 2,000 bird species thought to have gone extinct as a result of human colonization of Pacific Ocean islands? It may be too late for those species, but if birding and bird conservation can be better integrated, it may not be too late for the Madagascar Fish-eagle, the Whooping Crane, the Marvelous Spatuletail, and many other endangered species that birders would love to see.

The International Ecotourism Society's definition of ecotourism is "responsible travel to natural areas that conserves the environment and improves the well-being of local people". Ideally, ecological tourism should create local incentives for conserving natural areas, by generating income through sustainable, low-impact, low-investment, and lo-

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Alto Madidi National Park in Bolivia, where these Red-and-green Macaws (*Ara chloroptera*) where photographed, is little known by birders, despite being home to close to a thousand bird species. Unfortunately, this spectacular wildlife area is threatened by an imminent hydroelectric project. *Alto Madidi National Park, Bolivia; October 1998. © Cagan H. Sekercioglu.*

cally-owned operations. Unfortunately, this ideal is rarely achieved. In some cases, nature tourism actually creates new financial incentives for encroachment of natural areas through land speculation. Add to that the exclusion of local people, "economic leakage", disturbance of wildlife, pollution, and even outright habitat destruction that is seen in many operations, and it is easy to understand why many people consider ecotourism just another marketing device. Nevertheless, properly conducted ecotourism can both protect natural areas and benefit local people.

Birders, who form the largest single group of ecotourists, can improve community-based conservation if birding is conducted with the well-being of local ecosystems and human communities in mind. Birders are, on average, well-educated and affluent. Because of our zeal and the resources that we are willing to invest in this sport, birding is becoming "the fastest-growing and most environmentally conscious segment of ecotourism and the best economic hope for many beleaguered natural areas" (Salzman 1995).

Here, I review the economic potential of birding for community-based conservation, outline potential benefits and problems, and provide suggestions for improving the conservation value of birding. I focus on less-developed countries, especially in the tropics, and I provide a few examples from my own birding experience in more than 30 less-developed countries, to supplement limited published data. Even though birding tourism has the potential to improve the financial and environmental well-being of local communities, many

governments are unaware of this potential. Research on the economic and environmental impacts of birding is sorely needed, and much needs to be done to increase the financial contribution of birding to local communities.

The Lappet-faced Vulture (*Torgos tracheliotus*) is one of over 500 species of birds that one can observe during a three-week trip in Kenya. If impoverished local people do not have financial incentives to protect bird habitat, however, such trip lists may soon be history. *Masai Mara Reserve, Kenya; July 1998. © Cagan H. Sekercioglu.*

## Economic Potential of Birding

According to the estimates of the most recent National Survey on Recreation and the Environment (NSRE), about 69.0 million Americans over the age of 16 viewed, identified, or photographed birds in the 12 months preceding the survey—as many people as who did any fishing or day hiking in the preceding 12 months (Cordell and Herbert 2002). Keeping in mind that the NSRE standards for what constitutes birding are very broad, 28% of birders (which would project to 19.3 million people) reported birding more than 50 days per year. Since 1983, the number of birders has increased by 332%, making birding the fastest-growing outdoor recreational activity in the country.

The results of the NSRE study have been criticized recently (*e.g.*, Haas 2002), and it is possible that the 5,000 people surveyed by the 2000 NSRE do not provide a representative cross-section of U.S. society. However, the 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation—another, and rather detailed, survey conducted by the U.S. Census Bureau and the U.S. Fish and Wildlife Service—interviewed 80,000 households and came up with qualitatively similar, albeit lower, estimates (USDI *et al.* 2001). According to this survey, of Americans 16 years old or older, 46 million observe birds and 18 million take birding trips; moreover, 3.9 million birders can identify more than 40 bird species, and 2.3 million birders keep lists (FHWAR 2001).

One thing that is not debated is that birders are educated and affluent. The average income of a birder in the U.S. is over $50,000, and about a third of American birders have at least a college degree (USDI *et al.* 2001, Cordell and Herbert 2002). For ABA members, the average family income is $60,000, and 80% are college graduates (ABA 1994). The combination of education and income makes birders ideal ecotourists, since they are likely to have a high awareness of nature and also to spend significant amounts of money in pursuit of birds. According to the 1996 NSRE, birding-related expenses in the U.S. were estimated to be over $23 billion in 1996, contributing to the employment of almost 800,000 people. In that year, an estimated 17.7 million U.S. birders traveled more than a mile from their homes in order to observe birds, and they spent about $7.6 billion on trip-related expenses, excluding equipment. The annual economic contribution of birding to five major U.S. sites ranged from $2.4 million to $40 million (Kerlinger and Brett 1995). Munn (1992) estimated that a macaw visiting a clay lick in southeastern Peru can potentially generate $750–$4,700 in tourist receipts in a year and $22,500–$165,000 in its lifetime.

Forty-nine percent of ABA mem-


Here is a Burrowing Owl at the Salton Sea. Even though the Salton Sea International Bird Festival is one of the most successful in the country, this site is threatened by the water problems affecting the states sharing Colorado River. *Salton Sea National Wildlife Refuge, California; March 2000. © Cagan H. Sekercioglu.*

bers have traveled out of the country for birding, and, within this group, 32% have taken part in an organized bird tour (ABA 1994). There are at least 127 companies that offer birding tours worldwide (Birding.com 2003). Since the average trip to a less-developed country by one of the six largest birding companies (over 150 birding tours/year) has 12 participants and costs over $4,000 per person, the financial impact of international birding can be substantial.

Birders often visit places outside the tourist season or places that have no other tourist attractions. In addition to the purchase of typical travel goods and services, independent birders and birding tours often hire local guides, for as much as $300 per day, even in low-income countries such as Kenya and South Africa. In 1999, the Costa Rican Tourism Institute (ICT) estimated that 41% of the $1 billion tourism income for that year was from birding tourists. Given their education, birders are more likely to make efforts to reduce their environmental impact, to appreciate different ecosystems, and to pay protected-area fees than are other ecotourists, although there has been little research on these issues (Hill *et al.* 1997).

## Potential Benefits of Birding

***Why commodification may be a good thing***

Birders' knowledge of birds and their expectations of seeing many species provide a direct link between avian diversity and local income. Although birders are sometimes criticized for commodifying nature through "listing", this commodification actually makes it possible for areas with many and/or rare bird species to generate more income from hosting birders than from hosting non-birding tourists. Local people who observe the direct monetary benefits of bird diversity may be more likely to conserve ecosystems that harbor unusual birds. That would not be the case were locals to host ecotourists for whom a muddy forest trail, a waterfall, and a few unusual organisms constituted an "exotic adventure".

***Increased value of local differences due to unique bird species***

One of the biggest concerns regarding the environmental effectiveness of market-based initiatives is global competition among ecotourism sites. Many people do not differentiate between natural areas, with the result that these natural areas become competitors in a single market (Isaacs 2000). This is especially the case for rainforests, which, although very diverse, may seem identical to one another, in the eyes of tourists with limited knowledge. Competition and fear of profit loss may make it less likely that operators will follow more costly environmental principles as a marketing strategy, especially if clients do not discern habitat-quality differences among sites. Operators may try to minimize costs, and they may stop taking costly measures to limit pollution, habitat disturbance, harassment of wildlife, and other detrimental consequences of tourism. They may seek vertical integration and may contract with an international chain to take advantage of economies of scale to reduce costs and uncertainty (Isaacs 2000). This strategy often results in less local control and lower economic returns to local communities, violating one of the most important principles of responsible ecotourism.

Since birding, especially "listing", is based on identifying distinct bird species, the differences among unique bird communities become highly significant. A birder who wants to see the threatened White-

breasted Mesite, as well as many other Malagasy deciduous forest endemics, for example, has no choice but to visit that deciduous forest habitat. Thus, there is a reduction in

Pelagic birding tours can be an alternative source of income to many fishermen that have been hard-hit by disappearing fish stocks. This Black-browed Albatross was photographed during a pelagic trip off Cape Town. *Cape Town, South Africa; August 1998. © Cagan H. Sekercioglu.*

global competition among natural areas and a more even distribution of birding tourism across the globe, as can be seen from the itineraries of birding companies. Differentiation of birding destinations increases local control and profits, motivating local people to care for the environment. In addition, the importance of specific destinations provides a greater incentive for birding tour operators to protect these places.

### *Inclusion of areas without official protection*

Better ecological knowledge and higher expectations of birders also result in the preservation of many areas without official protection. Birds do not pay attention to boundaries, and many species can only be observed outside officially protected areas—at places such as garbage dumps and sewage ponds. It is not uncommon to find rare species hanging on in small forest remnants, and the regular presence of birders and associated income may create local incentives to protect these small patches from destruction. There is also a growing number of private nature reserves, such as Rara Avis and Monteverde in Costa Rica, where good bird habitat is protected in order to obtain income from visiting birders.

### *Birding guides*

A good guide is key to the success of any organized birding trip, and for independent birders, hiring a local guide increases the chances of seeing rare and local species, contributes to the local economy, and creates an incentive to protect birds. For example, Mustafa Sari, a guide who lives in Sivrikaya, Turkey, maintains a chain across a dirt road to prevent illegal hunters from driving to the remote leks of Caucasian Grouse, a potentially threatened species and Sari's major source of income.

In many places, indigenous people lack the education and essential financial resources required to invest in ecotourism, and they may only qualify for menial and low-paid jobs. Guiding, however, is less demanding, it pays better, it values knowledge, and it has minimal language requirements. Bird names amount to just about the only English that many successful guides speak. Although knowledge of natural history has been integral to many indigenous communities, dependence on manufactured goods has resulted in its disappearance from many areas. Earning income as a birding guide provides an incentive to bring back this knowledge into native communities. Birding companies, non-governmental organizations (NGOs), and ornithologists working in less-developed countries can promote birding and conservation with guide-training programs. My personal experience with local birding guides has been mostly positive and has been characterized by high quality and very affordable fees. Using local guides whenever possible not only creates a big incentive for the local community to conserve bird habitat, but it also delivers the most birds for the buck.

## Potential Problems with Birding

### *Disturbing birds*

Even though birding has lower environmental impact than many other

One can see the Caucasian Grouse (*Tetrao mlokosiewiczi*) in northeastern Turkey, thanks to the tireless efforts of Mustafa Sari, who protects and shows this species to birders. *Kackar Mountains, Sivrikaya, Turkey; July 2001. © Cagan H. Sekercioglu.*

outdoor activities, one of the biggest concerns about negative impacts of birding stems from the sometimes-excessive zeal of some birders. For example, nest failures have been caused by birders flushing owls from nests (Hanson 2000). Especially during the breeding period, flushing birds and playing tapes may stress birds considerably, and these activities may also expose bird nests to predators—an especially serious problem if the species is rare or endangered. Rare species are usually more sensitive to people because of their biology, increased exploitation, and more disturbance by birders seeking them out. Such harmful behavior is strongly discouraged among the birding community, as reflected in the ABA Code of Ethics, and birders should always put a bird's welfare first.

Guides also have an important role to play in minimizing disturbance of birds by birders. In fact, this makes good business sense, since the long-term presence of staked-out birds will increase a guide's success rate and reputation. Rigorous training, combined with certification and regulation of guides (especially in less-developed countries) by governments and by birding companies, is also integral to educating birders and minimizing disturbance.

Although there are no numerical data on the frequency of birds being flushed by birders, I personally have witnessed fewer than ten cases during my 13-year-long birding career with over 1,700 field-days. Birds can also tolerate a certain amount of human presence. For example, breeding songbirds in Wyoming alpine forests were found to tolerate low levels (one person for 1–2 hours per week) of intrusion (Gutzwiller *et al.* 1998). When visitors are concentrated in small parts of penguin and albatross breeding colonies, nesting birds may habituate to people and may not respond to human presence as a stressor (Burger and Gochfeld 1999). Nevertheless, birders should always show great care to minimize disturbance to birds and their environment, and they should be particularly careful with nesting and threatened species.

Unfortunately, there are few well-designed, long-term studies of bird disturbance by birders and other nature observers (Hill *et al.* 1997). Such studies are sorely needed, especially in the tropics, where there has been almost no published research on bird disturbance. There have been no studies on the effects of tapes on birds, and this impact should also be a priority for researchers studying disturbances to birds.

***Indirect impacts***

Because birders have high average incomes, they may demand high-end establishments more than the average ecotourist does. This demand may lead to increased environmental impact on and "cash leaks" from local communities—that is, the transfer of profits from local communities to foreigners and urban dwellers who are far more likely than rural residents to own high-end establishments in less-developed countries (Weaver 1998). Local people who are excluded from protected

The Long-tailed Ground-Roller (*Uratelornis chimaera*) is only found in the "spiny forest" of southwest Madagascar. A guide named Musa, who had no shoes and spoke no English except for bird names, found this bird and all of the other local specialties of Ifaty in less than one day. *Ifaty, Madagascar; July 1998. © Cagan H. Sekercioglu.*

areas and who do not benefit from ecotourism are likely to resent tourists and to resist conservation policies. In addition, visited areas can be contaminated by tourist waste, and habitat clearance can result from the construction of buildings and facilities (Weaver 1998).

Conversely, birds take priority over comfort for many birders who will stay in basic local establishments in order to see species of interest. Additionally, some high-end resorts attract birders by minimizing environmental impact, maintaining private reserves, and hiring local birding guides. These establishments are likely to benefit the local communities more than is the case with lodges without a birding focus. If birders wish to aid local communities as much as possible, then they should make efforts to frequent locally-owned establishments with environmentally-sound practices.

## Overview of Birding Impacts

Despite the potential for disturbance, birding is preferable to land clearing, certain forms of hunting, and other exploitative, unsustainable activities. In addition, information gathered by birders—for example, during Breeding Bird Surveys, Christmas Bird Counts, and other "citizen science" projects—can contribute substantially to ornithological knowledge, especially in tropical areas with few researchers. Birders should make constant efforts to minimize their negative impact on birds by adhering to ethical guidelines, while contributing as much as possible to local economies. They should do so in the face of high expectations of finding species of interest and be particularly careful with nesting or threatened or near-threatened species. Birders should insist on certified guides and should criticize guides' improper conduct. Contributing to and educating local people and minimizing wildlife disturbance may encourage communities to preserve good bird habitat and may help ensure the continuous presence of birds to be watched.

### *Independent birder* vs. *birding tour*

Independent birders may be more likely to contribute locally because they frequent smaller and more modest establishments than do tour groups. Because they are not part of a tour, independent birders often hire local guides and are less likely to be isolated from the communities they are visiting. Conversely, independent birders are usually not subject to monitoring by bird guides trained in low-impact practices, and they may be more likely to disturb birds.

Birding tours, especially those from more-developed countries, although often significantly more expensive than independent birding, may contribute less to local economies. Tours have their own guides and often make use of the best operations and accommodations available, which are likely to be owned either by foreigners or by the urban elite (Weaver 1998). Nevertheless, it is important not to draw hasty conclusions about economic leakage due to birding companies, since there are exceptions to this pattern, and there are very few data on the kinds of establishments that birding tours use in less-developed countries. In addition, when they do make use of a local establishment, tour companies may contribute significantly to the local economy. Many tour companies also hire local guides and likely pay significantly more than independent birders do.

Not only do these companies have a moral obligation to contribute to the conservation efforts of the less-developed countries in which they operate, but it is also in their long-term interest to create financial incentives for bird conservation.

## Suggestions for Improving the Conservation Value of Birding

*Research and promotion*

Overall, there is a pressing need for data on the financial contributions and environmental impacts of independent birders and tour companies, especially in less-developed countries. Financial data on birding may increase the likelihood of tourism ministries becoming aware of the potential benefits of birding in their countries. Even in well-known birding destinations, such as Ecuador, tourism promoters know very little about birding. One good way to promote birding and to create revenue is through festivals. In the U.S., there are more than 240 bird-related festivals, which bring millions of dollars to many small towns in 47 states (DiGregorio 2002). There are, however, few examples of birding festivals in less-developed countries (Birdlife International 2002a). Creation of such festivals could increase earnings, as well as educate locals about birds, conservation, and birding as alternative sources of income. Another possibility is to donate some of the income from birding festivals in more-developed countries to bird conservation programs in less-developed countries. One successful example is the British Birding Fair, which raises funds for tropical conservation and which raised over $190,000 (U.S.) in 2000 to protect threatened Cuban wilderness (Birdlife International 2002b). It is also essential to educate governments, companies, and individuals interested in birding on the potential negative environmental impacts of birding, as well as on ways to minimize these impacts. Not only is this an important conservation priority, but it is also integral to the long-term success of birding tourism.

*Birding tour companies*

Birding companies should be more involved in promoting and supporting conservation at their tour destinations, possibly by making contributions directly related to the number of species seen on their trips. This approach could have significant financial and symbolic value for local communities and would provide publicity for the companies involved. One possibility is to pledge to a local conservation organization a contribution of $1 for each species seen during a birding tour—and in advertising, inform prospective clients that this contribution will be made.

I analyzed the prices of 272 birding tours to 62 less-developed countries included in the online catalogues of the top six international birding companies (Birding.com 2003). The tour prices did not include flights to the tour destinations, and botanical, ship-based, and trekking tours were excluded from the analysis. The average tour had 12.1 clients, ran for 15.2 days, and cost $264.40 per day. Meanwhile, the total number of species per tour, divided by the number of days of the tour, came out to *ca.* 10–25 species. In most countries, $1 per species would amount to a cost increase of 0.3%–0.8% per trip participant. Even donating $1 for each species seen by each participant would not be unrealistic, increasing the costs by 3.8% to 9.5%. For example, after a three-week tour in Kenya during which 517 species were observed, the company could contribute $517 to a Kenyan bird conservation NGO; obviously, this amount is considerably smaller than the combined total of about $67,500 that the clients would expect to pay for such a tour. Another possibility would be to donate an additional $20 for each threatened species and $10 for each near-threatened species observed, which would mean more funds for places with more species at risk. Independent birders would also do well to contribute a percentage of their trip budget to local bird conservation NGOs.

When properly conducted, tourism-revenue sharing, although marginal for the companies and birders involved, may: (1) add up to significant amounts for the countries visited, (2) show a link between biodiversity and income, (3) increase local support for conservation, and (4) give competitive advantages to the tour companies who demonstrate their environmental concerns. International NGOs that do ecotourism research, such as Birdlife International, Conservation International, and the World Wildlife Fund, can work with major birding companies to increase their local contributions in exchange for certification. Certification would provide beneficial publicity for the companies involved, thus profiting both sides.

## Conclusion

Birding is a most promising branch of ecotourism because birders constitute a large and increasing pool of educated and well-off travelers who desire to observe birds in their native habitats and whose activities have relatively low environmental impact. Among various kinds of ecotourism, birding has the highest potential to contribute to local communities, educate locals about the value of biodiversity, and create local and national incentives for suc-

Shown here are Ross's Geese flying over Tule Lake National Wildlife Refuge, California. National Wildlife Refuges across the U.S. harbor hundreds of bird species, sometimes in spectacular numbers, and they generate significant income for local communities through visiting birders. *Tule Lake National Wildlife Refuge, California; February 2000. © Cagan H. Sekercioglu.*

cessful protection and preservation of native habitats. Governments of less-developed nations, managers of protected areas, NGOs, and birding companies should emphasize birding promotion and education. These entities should also strive to increase the contribution of birding to local communities and grass-root organizations, since birding has a significant potential to generate income through the protection and promotion of natural areas.

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