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Reprinted from WORLD WATCH, May/June 2000

## Watching vs. Taking

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# Watching

*We are seeing a shift in human relationships with wildlife, as millions turn from taking other species for furs, food, or sport to just watching. In a way, it's a new kind of hunt.*

---

by Howard Youth

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*“Get over here ... It’s back,”* whispers a stone-faced Philadelphia man into his walkie-talkie. He’s crouched at a campsite in the Bentsen-Rio Grande Valley State Park in southernmost Texas. A short distance away, two forty-something men launch into a fervent but silent race-walk. The site, festooned with bird feeders, backs up to a dense curtain of granjeno, catclaw, and other native brush that harbors some of North America’s rarest birds. Eight binocular-toting bird watchers (or “birders,” as they call themselves) already ring the site, peering through their optics at a brown, sparrow-sized bird—a female blue bunting. Unaccompanied by a colorful male companion, this Mexican bird is the only member of her species known to be visiting the United States.

*“Where’s the blue?”* asks a woman, a native Texan who is camping nearby.

*“You won’t find any. That’s the female,”* says a Maryland birder who, tipped off by the local rare bird alert, pulled up in his rental car just a few minutes before.

*“Yes!”* whispers one of the just-arrived racewalkers, his teeth and fist clenched.

*“That’s a big tick for you,”* comments his friend—the “tick” referring to a check on his lifetime list of birds seen.

*“Look at the warm brown tone all over the bird,”* says another watcher, perhaps talking herself out of any disappointment at not seeing the bright blue of the missing male. *“She’s a real beauty in her own right.”*

## RESPLENDENT QUETZAL

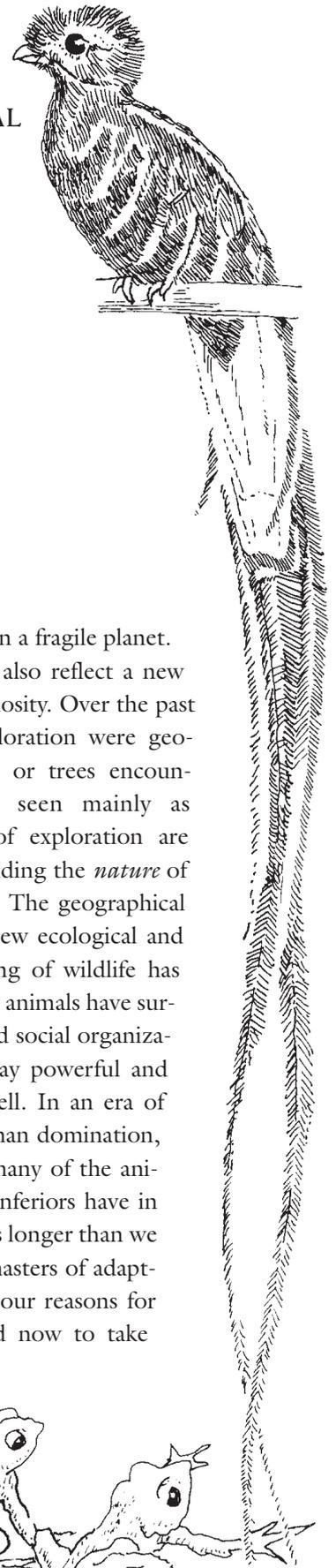
# vs. Taking

The blue bunting encounter, which I witnessed during a December 1999 trip to South Texas, could have taken place in any of a thousand locations across North America. The species of bird might vary—it might be a piping plover or an elegant trogon or a northern hawk owl—but the intensity of the fascination would be much the same. Birding has become one of the continent's fastest growing outdoor pastimes, and it's leading a whole parade of newly popular wildlife-watching avocations: there are also people (and organizations) devoted to sighting butterflies, wildflowers, wolves, mountain lions, and whales. Nor is this growing fascination with wildlife confined to North America; it appears to be a global phenomenon, with large economic and ecological implications.

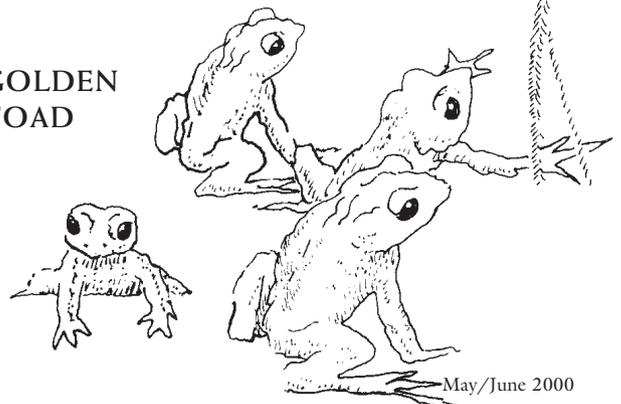
It has come on fast. Today, some species are worth as much—if not more—in their natural habitat, alive and free, than they bring as game. In parts of Africa where tourists pay well to see lions, for example, a lion that remains alive has been estimated to be worth \$575,000. In many cases, where wildlife-watching tourism has grown, poaching has declined. In Belize, as manatee-watching tours have brought a growing income, illegal hunting of the big mammals has become less of a problem. And in South Texas, there is now hope that the remaining habitats of the blue bunting, the small wild cats called ocelots, and other rare species won't fall to bulldozers.

The growing interest in wildlife watching draws attention to a growing perceptual chasm, or difference of fundamental values and sensibilities, between those who view wildlife as a resource to be exploited, and those who share a resurgent awareness of wild

animals as our co-inhabitants on a fragile planet. The interest in watching may also reflect a new kind of frontier for human curiosity. Over the past millennium, the goals of exploration were geographical—and strange beasts or trees encountered along the way were seen mainly as curiosities. Now, the goals of exploration are increasingly those of understanding the *nature* of the world we have conquered. The geographical mysteries have given way to new ecological and biological ones. Close watching of wildlife has led to the realization that many animals have surprising levels of intelligence and social organization, and that many plants play powerful and complex ecological roles as well. In an era of dangerously unsustainable human domination, it is of growing interest that many of the animals we have considered our inferiors have in fact thrived for millions of years longer than we have, and have proven to be masters of adaptability and survival. Whatever our reasons for watching, we are less inclined now to take wildlife for granted.



## GOLDEN TOAD

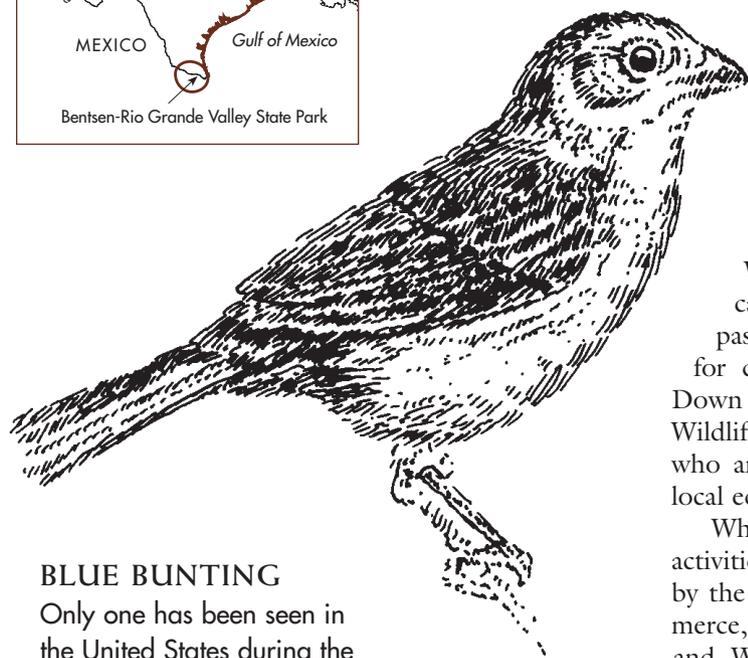


"The more we know of other forms of life, the more we enjoy and respect ourselves."

## Down on the Rio Grande

Once best known for citrus, cotton, cabbage, and as a haven for winter-fleeing "snowbirds" (people in Winnebagos or Airstreams) from the north, towns in the southern tip of Texas now herald themselves as wildlife-watching paradises. Birders, butterfly watchers, and other nature lovers arrive to take in subtropical sights that can be found nowhere else north of the U.S.-Mexico border. The new tourism may have arrived just in time. By 1999, after decades of conversion to cattle pastures, farm fields, and housing subdivisions, more than 95 percent of the natural environment of the region had disappeared. Today, Bentsen-Rio Grande Valley State Park and other protected areas account for most of the remaining natural habitat of the Lower Rio Grande Valley.

Although birders have been coming to southern Texas for more than 30 years, their growing numbers only recently caught the attention of many local businesses. Now, visitors to the Best Western Inn in Harlingen are greeted by paintings *not* of cowboys,



### BLUE BUNTING

Only one has been seen in the United States during the past year.

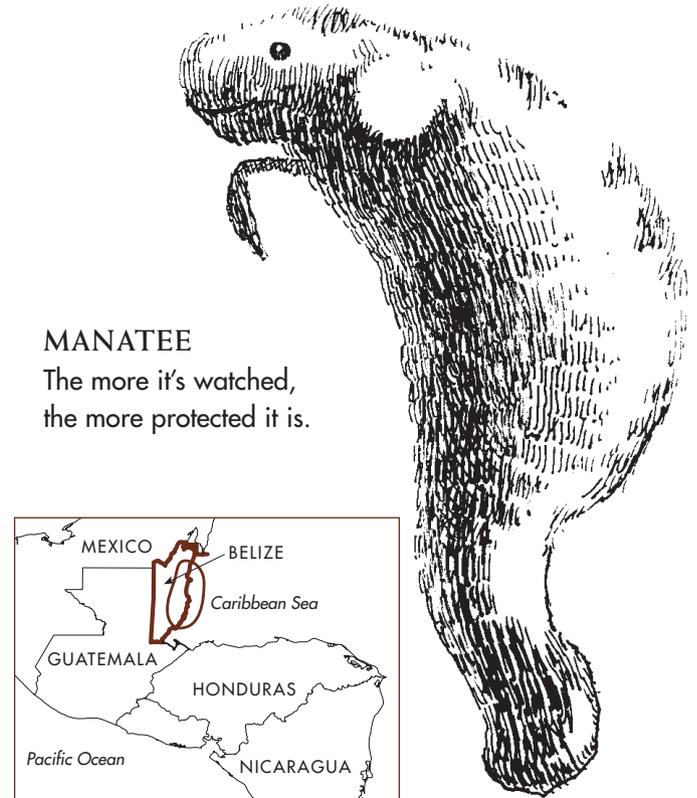
bucking broncos, and ten gallon hats, but of the red-crowned parrot and ringed kingfisher. A Harlingen Area Chamber of Commerce brochure, titled "Hooters, Hawks, and Hummingbirds," contains alluring photos of the green jay, chachalaca, kiskadee flycatcher, buff-bellied hummingbird, groove-billed ani, and other local birds. Three South Texas cities—Harlingen, McAllen, and Raymondville—now hold annual birding festivals that lure crowds of out-of-state bird lovers for field trips, seminars, and specialty sales, where they snap up the latest binoculars, books, and spotting scopes. These were among the first such events on the continent; now more than 200 annual nature-oriented festivals are scheduled throughout the United States and Canada. "A lot of things coalesced about five years ago," says Frank Judd, a 30-year Texas resident and biology professor at the University of Texas-Pan American in Edinburg. "Ecotourism is being championed in the local press and other media, and this has made local people aware that they can derive income from it. And it doesn't hurt anything—it just brings in money."

Just how much money? One measure is the worth of the only known U.S. nesting pair of yellow-green vireos, which resided in South Texas's Laguna Atascosa National Wildlife Refuge for several years in the early 1990s. These chickadee-sized songbirds generated an estimated \$150,000 per year for local businesses near the refuge. About a three-hour drive to the north, 200 wintering whooping cranes attract an annual \$1.2 million in tourist dollars for the small town of Rockport. The cranes arrive on the central Texas coast each fall, after breeding in Canada's Wood Buffalo National Park. Most of the cranes spend the winter at nearby Aransas National Wildlife Refuge. Visitors staying in Rockport can buy tickets for boat rides that ferry them past spots where the birds can be seen searching for crabs, fish, and frogs in the shallow water. Down on the Rio Grande, the Santa Ana National Wildlife Refuge draws 100,000 birders each year, who annually contribute about \$14 million to the local economy.

While the full economic impact of wildlife-related activities can't always be so easily quantified, a study by the U.S. Departments of the Interior and Commerce, the "National Survey of Fishing, Hunting, and Wildlife-associated Recreation," suggests that watching has become more than a fringe industry. In 1996, according to the report, 77 million adults—

about 40 percent of the U.S. adult population—participated in some form of wildlife-related recreation. Their activities generated \$100 billion from sales of equipment, transportation, permits, lodging, food, and other expenses relating to their outdoor interests. Of course, these figures include those for whom wildlife-related recreation means hunting or fishing, and a lot of that \$100 billion was spent on guns, bullets, and lures. But if those who *watch* wildlife are broken out, the number still comes to 63 million people, who generated \$29 billion. Between 1991 and 1996, wildlife watching trip and equipment expenditures rose 21 percent. Almost equal numbers of men and women reported participating in these activities.

Wildlife watching has gained popularity in other regions of the world as well. In 1994, an Australian government report indicated that 53 percent of adult Australians planned to take nature-based trips within the following year. And according to a survey conducted by the Royal Society for the Protection of Birds (RSPB), more than 1 million people in Britain, out of a total population of some 59 million, are regular birders. “Birdwatching in this country is the third most popular leisure pursuit, only beaten by angling and golf,” says Graham Madge, an RSPB spokesman. Madge adds that an interest in birds often evolves



### MANATEE

The more it's watched,  
the more protected it is.

into broader interests in butterflies, small mammals, and wildflowers that share bird habitats.

### Why Watch?

Undoubtedly, at least some of the millions of people who watch birds or whales do so for reasons that have little to do with raising ecological awareness. Keeping personal lists of species sighted can be like keeping score in a game, and weekend outings may be more satisfying for the social experience than for any bonding with nature they induce. Nonetheless, it would be hard to imagine any activity having more potential to heighten people's interest in—and their willingness to seriously protect—the other life of the planet than that of closely observing some of that life. It could be of considerable interest to know what really motivates most wildlife watchers, and to what degree that motivation can be harnessed to larger ends.

Certainly, one factor in this movement has been the sharply increased media coverage of environmental issues over the past three decades—particularly the escalating documentation of global biodiversity loss. Articles in *WORLD WATCH* over the past few years, for



### YELLOW-GREEN VIREO

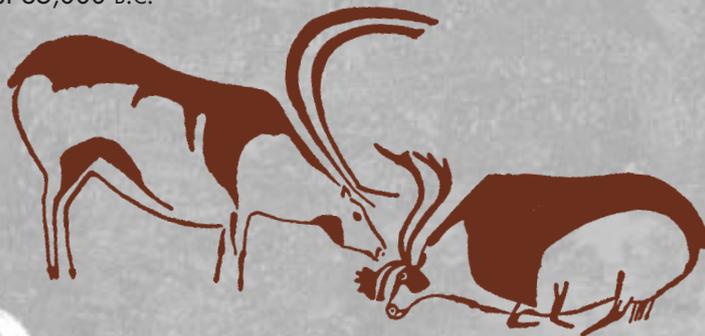
Was worth \$150,000 a year, untouched,  
to businesses in South Texas.



WHALE 2-meter-long  
stone etching, northern  
Norway around 7000 B.C.



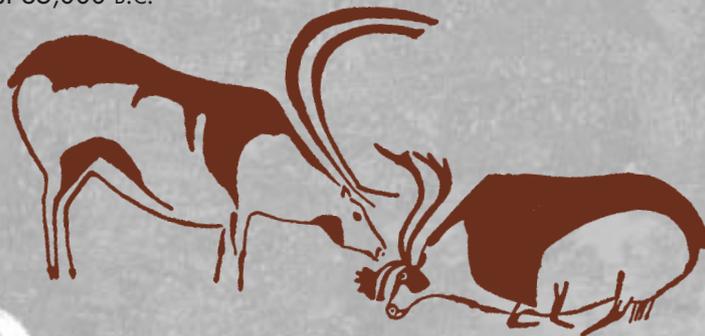
ELK stone engraving, Erenhus,  
Norway, around 7,000 B.C.



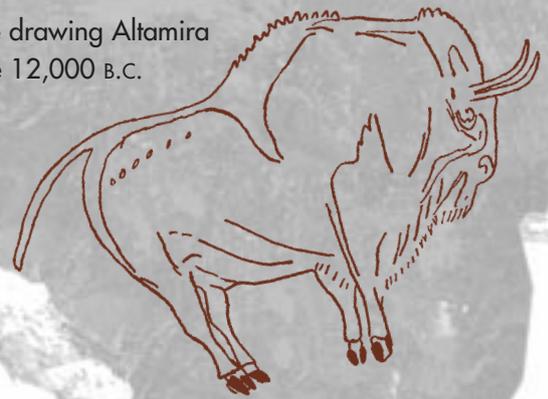
REINDEER Cro-Magnon poly-  
chrome cave painting, Font de  
Gaume (France), about 35,000 B.C.



OXEN Val Fontanalba, north Italy.  
As seen from above.

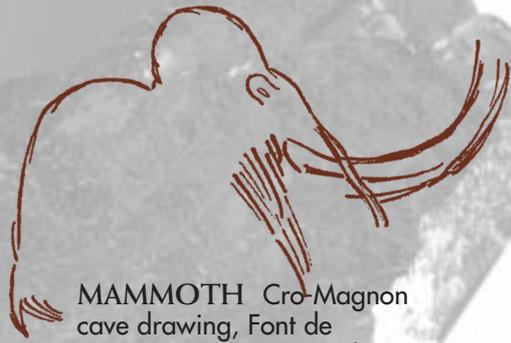


BISON cave drawing Altamira  
(Spain) before 12,000 B.C.



## Ancient Preoccupations

*Tracings of old cave paintings and other artifacts suggest that humans have long been fascinated with other species—and not simply because they are dangerous or edible.*

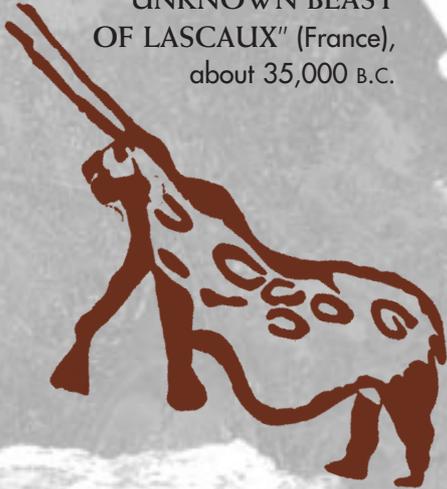


MAMMOTH Cro-Magnon cave drawing, Font de Gaume (France), around 35,000 B.C.



OWL Bronze Jutland (Northern Germany) around 1000 B.C.

"UNKNOWN BEAST OF LASCAUX" (France), about 35,000 B.C.



example, have documented sharp declines in thousands of species of birds, fish, reptiles, amphibians, marine mammals, and primates. As a species becomes rarer, it acquires a greater curiosity value. When only a few hundred members of a species remain, those last members may ironically attract thousands of humans who paid little attention when the species was common: witness the crowds that gather to observe captive pandas, gorillas, or California condors.

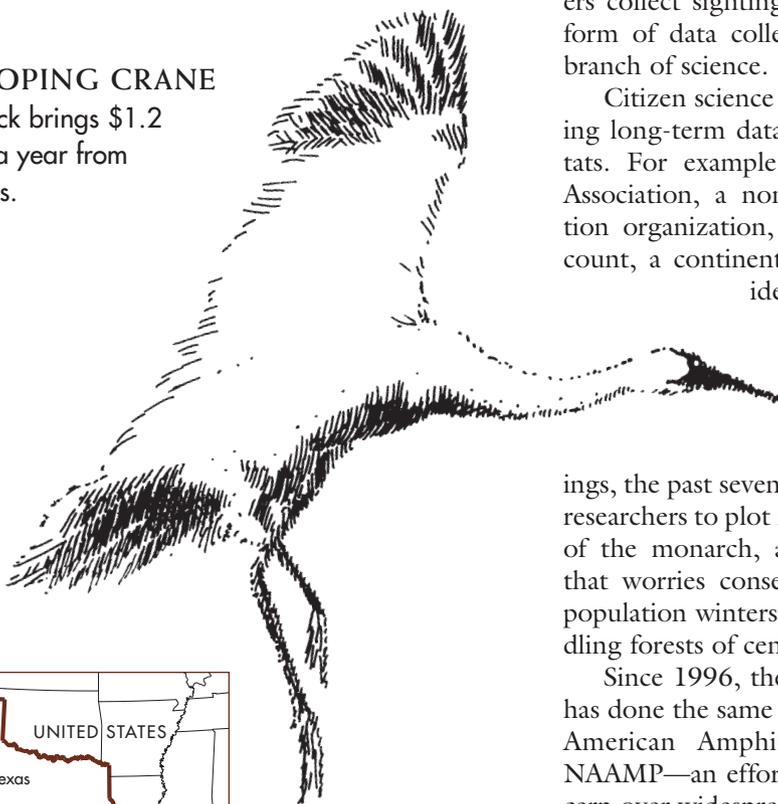
Threatened species lists—and the rescue movements they engender—have also produced a plethora of TV documentaries and coffee-table books celebrating the wonder those embattled creatures inspire. The movements have been aided by advances in camera technology, allowing photographers and filmmakers to record aspects of the private lives of animals that had never been seen before the last decade or so. And for people who want to see the real thing, the advent of compact field guides has greatly eased the way. Beginning in 1934, Roger Tory Peterson, using arrow-marked and simplified paintings, revolutionized field identification with his North American and European bird field guides. Since then, the market has burgeoned and diversified; you can walk into almost any major bookstore and find the *Field Guide to the Palms of the Americas*, or a *Field Guide to the Orchids of Costa Rica and Panama*.

Beyond the rising concern about threatened species and biodiversity loss, some scientists believe humans may harbor an innate affinity for other species—what the evolutionary biologist E.O. Wilson calls “the urge to affiliate with other forms of life,” or “biophilia.” Over time, what was a physical connection with its origins in hunting and gathering also became one of culture, religion, and spirit. “We are a biological species [that] will find little ultimate meaning apart from the remainder of life,” writes Wilson.

This link has always been apparent—as reflected in the great prevalence of animals in the myths, religions, and art of human cultures since prehistoric times. Cro-Magnon cave painters, for example, drew pictures of the creatures they hunted and observed more than 30,000 years ago. Many of the same or similar animals dominate children’s story books today. (In 1983, Yale environmental scholar Stephen Kellert found that more than 90 percent of the characters featured in pre-school reading and counting books were animals.) There is the myth of Romulus and Remus, being raised by wolves and then founding Rome. There is the bald eagle becoming a symbol of the United States. Or, there is the turtle recurring as a native American symbol of the world itself. Animals have always been a part of human culture, but what may have happened in the past few decades is that the world’s dominant cultures—increasingly overwhelmed by technological and industrial development—have become traumatically

## WHOOPING CRANE

One flock brings \$1.2 million a year from watchers.



separated from what once sustained them.

In any case, we know that across economic, ethnic, and regional lines, people appear to be universally moved by nature—whether in the form of a flying bird, a rolling surf, or the blaze of fall foliage. For many, it takes only a bit of inspiration, perhaps a nature walk led by a school teacher or naturalist, to draw them in. Once hooked, some birding and butterfly-watching enthusiasts research and stalk their quarry almost as though conducting ritualized, non-lethal hunts. Whatever the initial inspiration, most wildlife watchers are driven to learn more about the animals or plants they love.

## Citizen Science

This growing interest in watching has brought more than just a surge in hotel reservations and binocular sales. News about impending extinctions, for example, arouses not only curiosity but—often—deep concern. The concern may lead to participation in habitat-saving or species-saving activities, and to a more informed and organized kind of watching—creating a feedback loop that brings still more intensity to the watch. One result has been the rise of a kind of citizen science, in which thousands of watch-

ers collect sightings not just as a pastime, but as a form of data collection for a highly consequential branch of science.

Citizen science now plays a critical role in gathering long-term data on vulnerable wildlife and habitats. For example, the North American Butterfly Association, a nonprofit, 3,500-member conservation organization, holds an annual Fourth of July count, a continent-wide effort in which volunteers identify and tally butterflies living near their homes. The resulting database will provide important insights into butterfly distribution and abundance. Among other find-

ings, the past seven years of observation have enabled researchers to plot major summer concentration areas of the monarch, a widespread migratory butterfly that worries conservationists because much of the population winters in only a few localized and dwindling forests of central Mexico.

Since 1996, the U.S. Geological Survey (USGS) has done the same for toads and frogs with its North American Amphibian Monitoring Program, or NAAMP—an effort spurred by growing global concern over widespread amphibian declines. Volunteers track frog and toad calls during the spring and summer breeding seasons. “It’s as close as you’re going to get to an idea of what’s happening all over the whole patchwork of U.S. and Canadian landscapes,” says NAAMP coordinator Linda Weir, who works with states and provinces to set up affiliated monitoring efforts. So far, groups in 29 states have joined, using more than a thousand volunteers to cover about 1,000 designated roadside routes. A similar program recently started in Australia, while regular monitoring programs have been ongoing in Great Britain and a few other European countries. In Britain, for example, the Common Birds Census, conducted since 1970 and carried out primarily by volunteers, has helped create an index on national bird populations. The census has tracked dramatic drops in populations of once-common farmland birds that are thought to be declining due to the destruction of farm hedgerows and increases in pesticide use, and due to harvesting practices that destroy nests and habitat during the birds’ breeding seasons. Between 1970 and 1998, for example, the Common Birds Census found an 82 percent decline in grey partridge numbers, a 55 percent decline in song thrush populations, and a 52 percent drop in skylark populations.

One of the oldest citizen science programs is the Christmas Bird Count, which is sponsored by the National Audubon Society and is now in its 100th year. More than 50,000 volunteer birders participated in December 1999 and January 2000, canvassing the wintering grounds of various North American

birds. Another well established project is the U.S. Geological Survey's Breeding Bird Survey (BBS), which began in 1966. Volunteers annually cover 3,000 roadside routes, tallying singing and breeding birds across the United States and Canada. Similar surveys are conducted locally in various U.S. states and in Spain, Great Britain, and Australia.

All of this counting of other species could ultimately help drive further shifts toward sustainability in human life itself, by providing inputs to basic policies governing land use, habitat protection, and the like. The Common Birds Census has been instrumental, for example, in persuading the government of the United Kingdom to press for such changes in national agricultural practices as setting harvest times that don't coincide with prime nesting times.

## The Backyard Eden

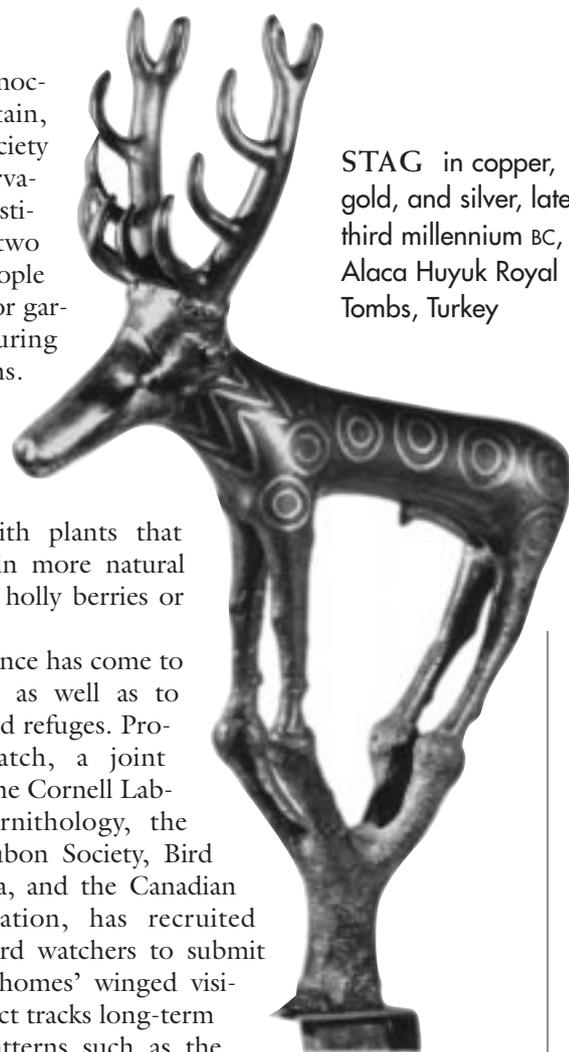
Most of the media's attention to wildlife watching has focused on ecotourism, largely because that's where much of the money is. With tourism booming all over the world, reporters and investors are eager to know what, exactly, people are looking for in their travels. If they'd just as soon choose a ticket for a whooping crane-watching boat as for a theme park ride, that's a significant piece of information. But in fact, the lion's share of nature lovers practice their avocation at home. Of the 63 million wildlife watchers counted in the 1996 National Survey of Fishing, Hunting, and Wildlife-associated Recreation, 44 million reported observing wildlife, mostly birds and mammals, around their own backyards. "Nearly one-third of the adult population of North America dispenses about a billion pounds of birdseed each year, as well as tons of suet and gourmet seed cakes," writes Stephen W. Kress in *Audubon* magazine. Backyard wildlife enthusiasts spend billions of dollars each year on food,

feeders, and binoculars. In Britain, the Royal Society for the Preservation of Birds estimates that two out of three people put out food for garden birds during winter months.

Many backyard wildlife watchers also landscape their yards with plants that provide food in more natural forms, such as holly berries or cherries.

Citizen science has come to the backyards, as well as to public parks and refuges. Project FeederWatch, a joint effort among the Cornell Laboratory of Ornithology, the National Audubon Society, Bird Studies Canada, and the Canadian Nature Federation, has recruited 14,000 backyard watchers to submit data on their homes' winged visitors. The project tracks long-term distribution patterns such as the expanding range of the recently introduced Eurasian collared dove; short-term irruptions of species outside their normal ranges; and the spread of some easily identified diseases, such as conjunctivitis in finches.

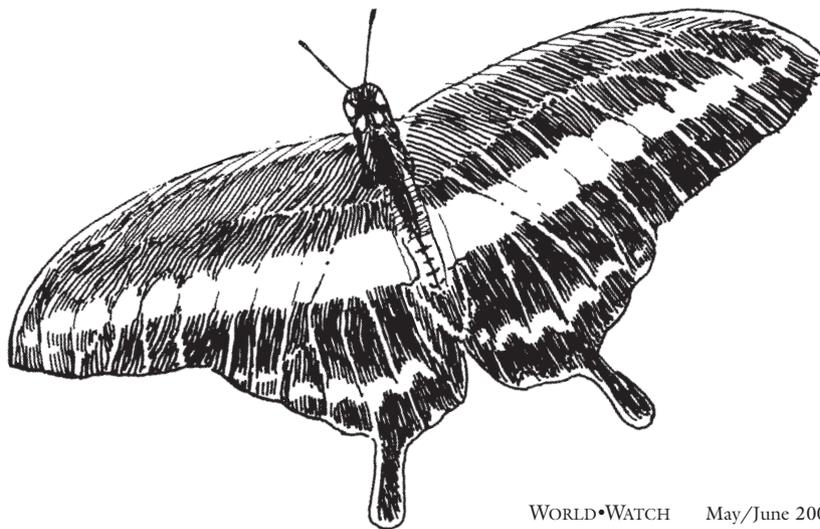
Backyards may also engender a greater sense of responsibility because they are small, and stewardship for a small area may make people more conscious of any threats to the area than they'd be in a large park or wilderness. In Great Britain, for example, many



STAG in copper, gold, and silver, late third millennium BC, Alaca Huyuk Royal Tombs, Turkey



**BANDED SWALLOWTAIL BUTTERFLY** In Singapore, something to watch besides the stock prices.





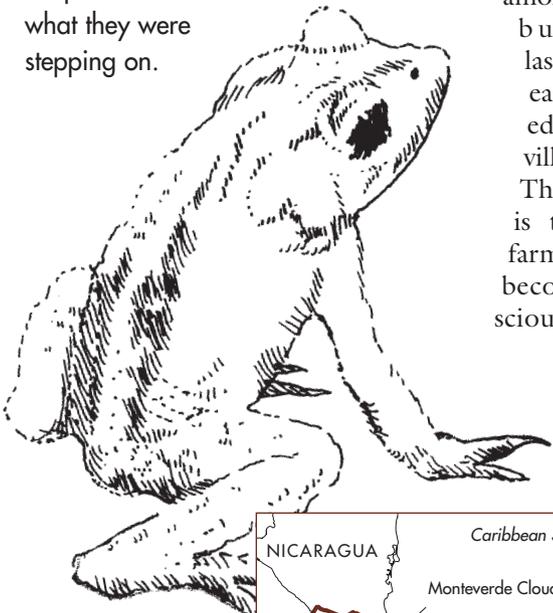
Detail of internal panel from a silver cauldron, middle La Tene culture (Europe), circa first or second century B.C.

gardens are quite tiny, and birders don't have to look far to see beyond their own property lines. A natural outgrowth of their backyard watching has been the fostering of community projects such as the RSPB's defense of the cirl bunting, a colorful (rust, yellow, and black) European songbird whose last British stronghold is in South Devon. The villages of

Bishopsteignton and Stoke-infeignhead, after learning that they were among the cirl bunting's last refuges, each adopted it as their village bird. The upshot is that local farmers have become conscious of its

### GOLDEN TOAD

People never realized what they were stepping on.



plight and have changed some of their old practices to save it. "There are no real areas of wilderness left in the U.K. and there is not a bit of land that isn't managed for something," says Sue Ellis, a spokesperson for English Nature, an organization that promotes the conservation of England's wildlife and habitats. "Wildlife is on people's doorsteps, so when something happens, people are very, very aware."

### Is This a Good Thing, or Not?

While backyard wildlife watchers get less media attention than ecotourists, many of them—in addition to expanding their attentions to community projects—will eventually *become* ecotourists. In 1998, world tourism as a whole generated an estimated \$441 billion, according to the Spain-based World Tourism Organization. In her book *Ecotourism and Sustainable Development: Who Owns Paradise?*, Martha Honey calls ecotourism "... the most rapidly growing and most dynamic sector of the tourism market." It is big enough to sway critical decisions in biologically rich but cash-poor countries.

A notable example is Costa Rica, which was little known as a tourist destination two or three decades ago. But as word of the country's verdant rainforests, whitewater rivers, and gaudy tropical birds spread, the number of visitors arriving each year from Europe, Japan, and North America jumped from 200,000 to 1 million. Many of them came to see the country's outstanding national parks and reserves, which comprise about a quarter of its total area. Ecotourism has become one of Costa Rica's largest sources of foreign exchange.

In Kenya and Tanzania, too, safari-style eco-

tourism has become a key revenue source. In 1995, the Kenya Wildlife Service estimated that tourism, 80 percent of which was wildlife watching, was bringing in one-third of the country's foreign exchange. Other countries for which nature-based tourism provides needed foreign exchange include South Africa, Botswana, Belize, Zambia, Ecuador, and Indonesia. In the United States, a group called the Tourism Works for America Council estimated that in 1996, National Park Service lands brought \$14.2 billion dollars to local communities and supported almost 300,000 tourism-related jobs.

This isn't always unmitigated good news for local communities and ecosystems, however. The benefits of ecotourism—economic, ecological, and educational—can be offset by all sorts of disbenefits. People eager to see charismatic species can trample less conspicuous ones; building hotels for the visitors cuts large pieces out of the very ecosystems they are coming to see; and the nature trails and jeep roads they use typically lead to increasing fragmentation of what remains. Jet planes and Land Cruisers emit greenhouse gases, the eventual effects of which may weaken ecosystems still further. What ecotourists assume to be harmless observation can turn out to be painful intrusion.

I unwittingly contributed to such an intrusion on Kenya's Masai Mara Reserve, when I joined a safari trip to Kenya in 1995. While traversing the reserve, our van driver suddenly pulled off the road and crashed through the grassland, flushing nesting birds before rumbling within a few feet of a male lion that was lying next to a freshly killed young giraffe. The lion, clearly disturbed by our presence, strained to drag his meal to cover as other safari vehicles rolled through the tall grass towards us. Some of us felt horrible, but I could see that others—their telephoto lenses swiveling—relished being so close.

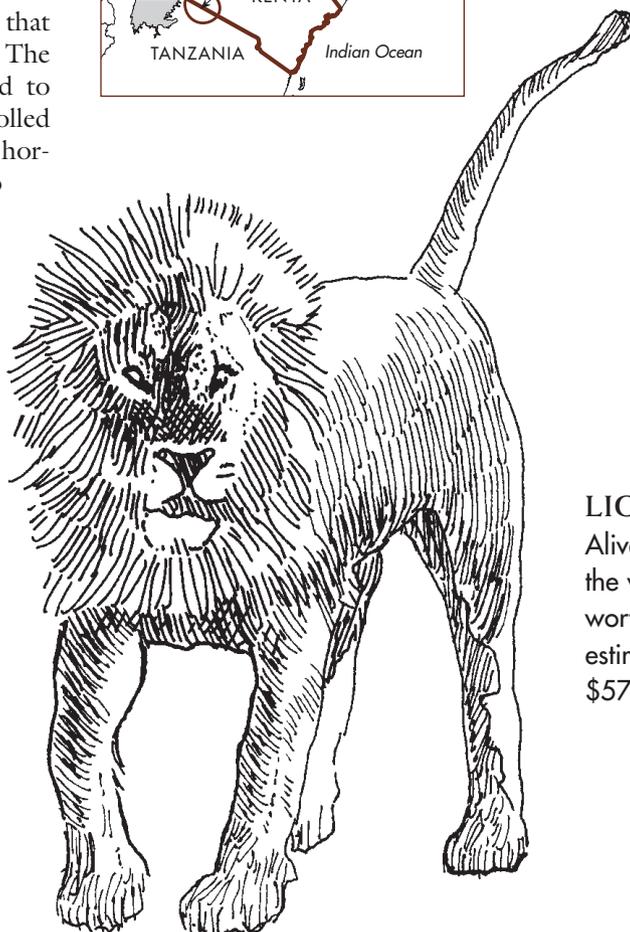
At the time of my visit, Kenyan tour operators were not forbidden to leave the roads in national reserves. Over the past few years, partly as a result of visitors' outcries, the practice has been banned. But other problems, including water pollution caused by sewage leaching from hotel toilets into nearby wetlands and the widespread gathering of firewood for hotel "safari" campfires and wood-burning furnaces, remain.

As sites grow more popular, other park and reserve managers are beginning to control visitors' movements more carefully. For instance, many parks, including Santa Ana National Wildlife Refuge, now ban vehicular traffic much of the time, with the result that interactions between walkers, bikers, and wildlife are no longer so disruptive. Visitors to Alaska's Denali National Park must leave their cars behind and may only enter the park's wilderness in scheduled

buses. The same is true in such parks as Mudumalai Wildlife Sanctuary in India, where visitors ride in on jeeps, buses, or on elephant back to observe wild Asian elephants, tigers, gaur (a kind of undomesticated cattle), and other large, sensitive, and potentially dangerous animals.

Unfortunately, it's often difficult for a group of travelers to know if their tour operator is green or just going *for* the green. "We need to [have] some kind of reviewable ethical standard," says Megan Epler Wood, president of the Vermont-based Ecotourism Society. The Ecotourism Society defines ecotourism as "responsible travel to natural areas that conserves the environment and sustains the well-being of local people." But no global standard or certification process currently exists for tour operations, although Costa Rica and Australia now have strict ecotourism grading standards and efforts are underway to establish them in Kenya.

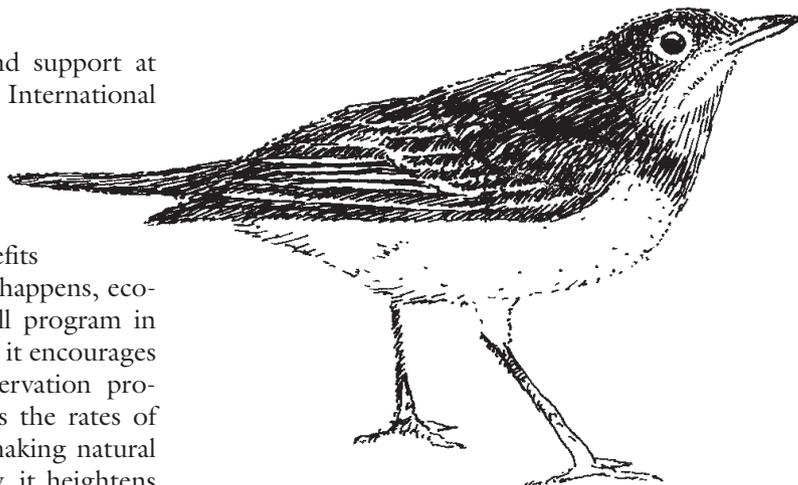
"We see ecotourism as part of an integrated conservation strategy," says Greta Ryan, manager of



**LION**  
Alive and in the wild, it's worth an estimated \$575,000.

ecotourism enterprise development and support at Washington, D.C.-based Conservation International (CI). The nonprofit CI works in 23 countries, with ecotourism now constituting an important component of its work in 17 of them. The key, says Ryan, is to make sure the benefits stay within the community. When this happens, ecotourism tends to reinforce CI's overall program in three ways. By generating local income, it encourages communities to welcome other conservation projects. By alleviating poverty, it reduces the rates of poaching and deforestation. And by making natural assets the centerpieces of the economy, it heightens environmental awareness among both the local people and their visitors.

Often, nature tourists enjoy the sights unaware that their money is being siphoned away from local communities by big-city or out-of-country tour operators who have little ultimate interest in conserving wildlife. "In Kenya, those communities that do not realize a benefit are less likely to consider wildlife positively, and are more likely to want to remove the wildlife from the land," says Neel Inamdar, a director of Eco-Resorts, an ecotourism-oriented travel company, and a board member of the Kenya-based African Center for Conservation. "Basically, a lot of



### CONNECTICUT WARBLER

It helped protect a bean farm from the bulldozers, and the bean farm returned the favor.



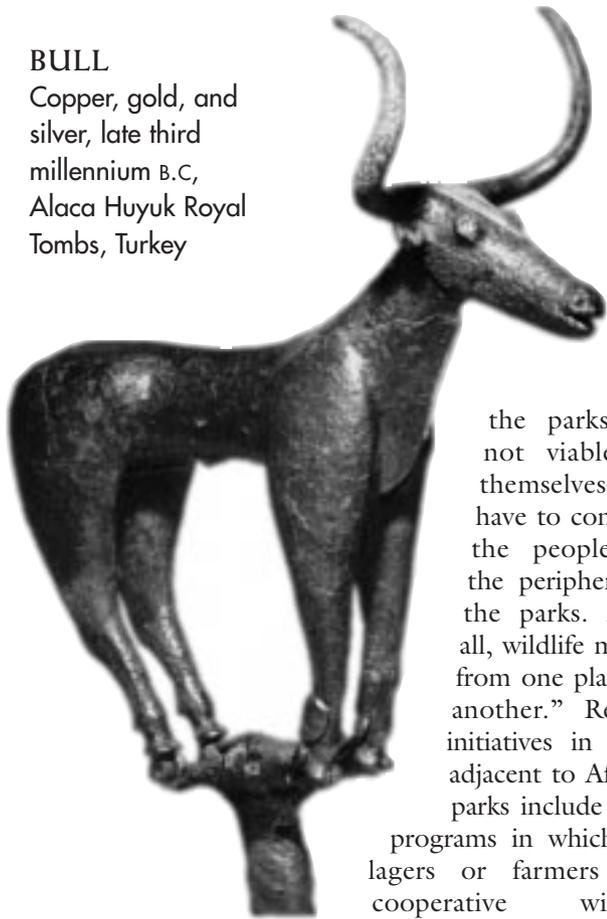
reserves on their lands, guiding and hosting paying visitors instead of converting the areas into agricultural land or livestock range.

Some fragile areas, or those within reserves, may simply be unsuited for *any* nature tourism. For instance, there are the rainforest pools once home to golden toads within Costa Rica's Monteverde Cloud Forest Reserve. In the September/October 1990 issue of *WORLD WATCH*, I quoted Ray Ashton, director of an international consulting firm called Water and Air Research, as saying, "People are tripping over golden toads so they can go see quetzals." Today, the exotic red and green streamer-tailed birds still breed in the reserve, but the golden toad may be extinct. In fact, no one has seen a golden toad since shortly before my article went to press in 1990. While one widely accepted hypothesis suggests that climate change caused the die-off, another suggests that tourists may have unwittingly contributed to the toad's disappearance by bringing in pathogens on their shoe soles.

On balance, if carefully managed, nature tourism offers large benefits to the environment. Wildlife watchers, a relatively affluent and well educated lot on the whole, are usually willing to pay for their watching—and their economic clout favors protection of the places where they like to do it. A 1995 survey by the Travel Industry Association of America found that 83 percent of U.S. travelers are inclined to support "green" travel companies and are willing to spend, on average, 6.2 percent more for travel services and products provided by environmentally responsible travel suppliers.

### BULL

Copper, gold, and silver, late third millennium B.C., Alaca Huyuk Royal Tombs, Turkey



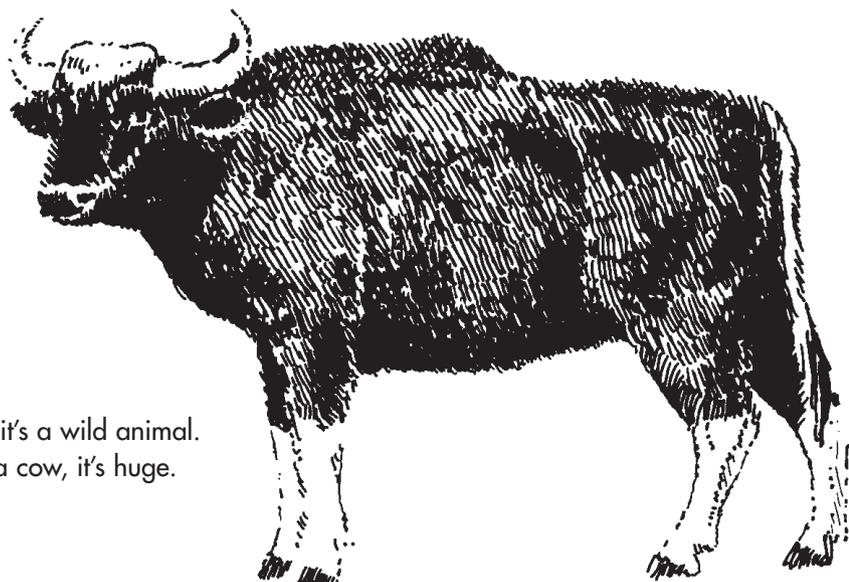
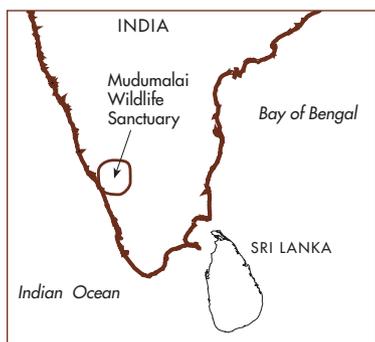
the parks are not viable by themselves—we have to consider the people on the periphery of the parks. After all, wildlife moves from one place to another." Recent initiatives in areas adjacent to African parks include pilot programs in which villagers or farmers run cooperative wildlife

In the United States, national parks and wildlife refuges now charge entrance fees, and park fees in other countries are being raised. Private landowners, too, are finding they can charge visitors a fee. South Texas ranches that were off-limits a decade or two ago now court birders as a side business. In Cape May, New Jersey, farmers Les and Diane Rea have managed to supplement the income from their 80-acre lima bean farm, which they feared losing a few years ago because of rising costs and pressure from developers, by maintaining habitat for one of the East Coast's most popular birding areas. In 1999, the Cape May Bird Observatory struck an agreement with the Reas to lease birding rights for the property, paying for the lease with funds collected from permit-buying visitors. Now, each spring and fall they welcome scores of paying visitors. The farm draws a dazzling array of winged migrants, including the elusive Connecticut

warbler and about three dozen other warbler species.

"Certainly the precedent existed," says Pete Dunne, vice president for natural history information at the New Jersey Audubon Society, who helped the Reas get the program up and running. "Hunters have been doing this for years. We didn't see any reason not to extend it to birding as a way of showing that birders certainly are willing to pay to support their hobby—and as a way of combatting development pressures. Most farmers want to hold onto their farms," says Dunne. "In this case, birders are just another cash crop. You don't have to water them, fertilize them, or till them, and on top of that, they will go to your farm stands and buy vegetables."

Birder, writer, ecotourist, and former *WORLD WATCH* associate editor Howard Youth lives in Rockville, Maryland.



**GAUR** Yes, it's a wild animal. Compared to a cow, it's huge.

### FOR MORE INFORMATION

North American Butterfly Association (NABA) [www.naba.org](http://www.naba.org); 4 Delaware Rd. Morristown, NJ 07960, tel: (973) 285-0907

North American Amphibian Monitoring Program (NAAMP) [www.mp1-pwrc.usgs.gov/amphibs.html](http://www.mp1-pwrc.usgs.gov/amphibs.html); 12100 Beech Forest Rd., Gabrielson Bldg. 242, Laurel, MD 20708

Royal Society for the Protection of Birds (RSPB) [www.rspb.org.uk](http://www.rspb.org.uk); The Lodge, Sandy, Bedfordshire SG19 2DL, United Kingdom, tel: 01767-680551

Breeding Bird Survey (BBS) [www.mbr.nbs.gov/bbs](http://www.mbr.nbs.gov/bbs)

Christmas Bird Count (CBC) [www.birdsource.org/cbc/index.html](http://www.birdsource.org/cbc/index.html); National Audubon Society, 700 Broadway, New York, NY 10003, tel: (212) 353-0347

Project FeederWatch <http://birdsource.cornell.edu/pfw>; Cornell Lab of Ornithology, P.O. Box 11, Ithaca, NY 14851-0011, tel: (607) 254-2473