

PROTECTING THE ENVIRONMENT:
THERE OUGHT TO BE A LAW!

Barbara Haynes
August 25, 2002

An important spiritual issue is how we fit into nature's big picture. The sanctity of nature is at the core of a number of religions. (Paganism, American Indian to name a couple.) One of the things that gives us all a sense of well being. The health of the environment is itself a spiritual topic—one that is important to me.

Some questions we can ponder:

Why would people with supposedly good intentions attempt to kill wildlife listed as endangered species?

Why are there so many chickens and so few bald eagles?

Did you know that the buffalo are back? How come?

Music - program

We are all stewards of the environment. This is a particular goal of UU's. Especially in this area of the world where we have such natural beauty around us. This is one approach to this problem—some food for thought that I felt merited some understanding as we try to meet our goals of safeguarding the environment.

We have passed laws to protect the environment—are they working? Let's look at one of the most important laws.

Several species of animals and plants are threatened with extinction. Examples of endangered or threatened animals include the northern spotted owl, the timber wolf, the black panther, and the grizzly bear. In order to protect these animals, **The Congress passed Endangered Species Act in 1973** (initially to protect the bald eagle.) Requires citizens not to harm the specified animals in their habitat. Any time an endangered animal is found living on private land, the owner is required to stop using the land and leave it for the use of the animal. According to the Act, the cost to the landowner is not to be considered. No compensation is provided for owners if their land must be taken out of production to provide habitat for an endangered species.

Some facts: Virginia has 72 endangered species. (List available) State with the fewest endangered species is Alaska. State with the most endangered species is Hawaii. (I did not realize that an endangered species in one state might be very plentiful in another state. Designations: **(E) verge of extinction, (T) threatened—numbers dwindling. In so many cases, these policies are just not working.!**

Some headlines of the times:

Nebraska farmer deliberately plows under endangered prairie grasses. 1990.

Northwest logger destroys a spotted owl nest after finding it on his timberland.

Montana rancher charged for killing a mother timber wolf and her litter found living on his land near Yellowstone Park.

Florida developer organizes employees to hunt and kill any endangered birds living near a proposed shopping center development.

Are these evil people?

The theory behind laws such as the Endangered Species Act is that animals and plants provide a benefit to everybody. Since the public benefits from their enjoyment of plants and animals, individual landowners should not be allowed to harm those plants and animals, even if protecting them requires landowners to hold back on farming, grazing, building or other activities. As a result, the public receives a benefit that it does not pay for. The costs are borne by the individual landowners. Many landowners resent having to pay these costs for others. If no endangered species were to be found on their land, they would not have to pay the costs. So a law like the Environmental Protection Act creates an incentive for landowners to kill or otherwise remove certain animals they find on their property. This is not what Congress had in mind!

Laws never work when the people who pay the costs so not receive comparable benefits.

We might look at some alternative ways to reach the desired goal of saving these endangered species.

Policy Goal: Wolves once lived in many places in North America. They were driven into near extinction because they damaged livestock and pets. In place like Montana, people were for reintroducing wolves to help control the populations of deer and elk, which now overgraze the land. As you can imagine, this met with a great deal of opposition by ranchers. Initially, a fund of \$100,000 (donated money) was set up to pay any rancher who could prove that his livestock was injured or killed by wolves. Surprisingly, not as much of this fund was used as had been expected. What worked best is that when wolves are discovered on private property, (particularly a female with pups) the rancher is paid \$5,000 for not using the land occupied by the wolves and for any risk the wolves present to the rancher's livestock. As a result, many Montana ranchers protect wolves, even though they potentially could lose livestock.

Good news—the buffalo are back!

The buffalo offered a lot to Native Americans and white hunters—they were depended on for food and clothing. Buffalo provided a cheap source of food for crews building the railroads. But it was difficult to establish ownership rules. It was too expensive to fence in the herds, and nobody could determine who owned the free-range buffalo. Since no one owned the buffalo, nobody would benefit by limiting the killing. A buffalo not taken today would be one that someone else took tomorrow.

In the 1870's the buffalo population is estimated at 14 million. By 1889, there only remained 150. These remaining buffalo were in Yellowstone National Park and were protected by the U.S. Cavalry who were empowered to shoot poachers. They, actually, were the first park rangers.

Today about 10,000 buffalo live in herds managed by the government. The population of this herd is kept at a steady level. On the other hand, buffalo on private ranches are estimated to total 110,000 to 130,000 privately owned buffalo have been increasing at the rate of 25% per year. (Imagine, all the buffalo alive today are descendants of that original 150).

Why are the buffalo back? Because buffalo meat is considered to be a health food and is in increasing demand. Buffalo meat contains about 4% more protein than beef with half the calories. It tastes good to many people who eat meat with 45% less cholesterol than beef and is low in fat. Private producers of buffalo are building up herds in order to produce meat increasingly desired by health-conscious consumers. (This logic also explains why there are so few bald eagles and so many chickens.)

Looking internationally, It is estimated that, because of poaching, the African elephant population has been reduced in recent years by as much as two-thirds in Kenya and three-fourths in Zambia. Why during the same

period, elephant populations in South Africa, Botswana, and Zimbabwe have been growing? (In Zimbabwe, that is until the recent breakdown of civil government under President Mugabe which has disruptions in this program.)

Some information—that I didn't know. African elephants have larger ears than Asian elephants and both males and females have ivory tusks. Only male Asian elephants have tusks. CITES— the Convention on International Trade in Endangered Species of World Flora and Fauna, has 106 member nations. In 1989 they voted to add ivory to the list of goods banned international trade. The governments of South Africa, Botswana, Namibia, and Zimbabwe have protested the ivory ban. (the U.S. participates in this ban.)

In an interview, a Kenyan villager compared elephants to “huge, gray rats,” noting that they eat enormous quantities of food, have a tendency to trample gardens and destroy crops, and drink precious water supplies. In Kenya and Zambia, villagers tend to at least ignore, if not encourage, the activities of ivory poachers. In Kenya and Zambia with their huge game parks, elephants are a “national resource” and hunting is prohibited. The Kenyan government has created special ranger patrols, trained them in guerrilla warfare, and ordered them to shoot suspected poachers on sight. Nonetheless, the elephant population in Kenya fell from 140,000 to 20,000 in about 10 years.

On the other hand, in South Africa, Zimbabwe, and Botswana, poachers are routinely reported and have even been killed by villagers intent on protecting the elephants. In the Zambezi valley of Zimbabwe, villagers organize “village wildlife committees,” and appoint “animal reporters” who monitor wildlife movements and report poachers, even when animals destroy crops.

Under a Zimbabwean program known as CAMPFIRE (Communal Area Management Program for Indigenous Resources) the government issues hunting permits for elephants and other game animals to the local villages. The number of permits issued depends on the size and health of the herds of animals in a particular area. The villagers may, if they choose, sell the hunting permits. Botswana and South Africa have similar programs. In Botswana, the elephant herd grew from 20,000 to 50,000 during a 10-year period, despite an increase in the number of hunting permits issued by the government.

Big Game hunter and lawyer, John Jackson, estimates that he has spent \$500,000 hunting elephants in Africa. Jackson speaks with respect of the majestic animals, describing the “thrill of stalking an elephant with 80-pound tusks.” Like about 70% of foreign hunters in Africa, Jackson is an American.

Many African villagers live at subsistence level, at which even small changes in income have significant impacts. In one recent example, a distribution of \$13 to each of the 574 households was adequate to feed each family through a full year of drought. Trophy fee paid by a hunter for an African elephant averages about \$7500—the average big game hunter spends \$1000 a day. since 1993, 12 local districts, representing 400,000 people earned more than \$1.5 million from hunting fees and almost \$98,000 from tourism from the CAMPFIRE program.

A very similar program is being carried out in areas considered prime hunting areas (for example the western U.S) To solve the problem (landowners bear the costs of wildlife on their property, but receive no benefits) where privately owned land host publicly owned wildlife. **Ranching for wildlife programs** have proven beneficial to wildlife, landowners, and state game agencies. This program gives landowners the opportunity to earn income as a result of certain rule changes. Longer hunting seasons are allowed long with a limited number of hunting tags that landowners can sell for hunts. Result: provides the incentives for landowners to protect

habitat and provides property specific game management that helps control wildlife numbers. Best of all, these programs come at little cost to the state.

A success story – Ducks Unlimited. Pay farmers to not drain ponds, provide habitat to ducks on flyways.

Grid Activity (with paper clips) I've seen this done in a couple of workshops.

**TRAGEDY OF THE COMMONS – Punishes the careful selector
Rewards the aggressive**

When property is held in common it tends to be overused because each person who uses it gains the full benefit of use but all the cost are shared by other individuals. No one has a strong incentive to conserve the property. I saw a strong link to what happens in the Chesapeake Bay.

We know certain things about the way people behave.

- *People's choices influence the environment.
- *People's environmental choices have unintended results (Alligators in Mobile, Alabama)
- *People's choices are influenced by rewards (incentives). Monetary or intrinsic.
- *People are more likely to take better care of things they own and value.

One of the papers put out by PERC – the Political Economy Research Center – a research institute that explores market solutions to environmental problems. I found this paper really fascinating.

HOMESTEADING THE OCEANS

The paper talks about efforts by the government to stem the tide of declining fish stocks. Twenty-five years ago the U. S. government extended federal control over ocean fishing from 12 miles to 200 miles from its shores. Has not eliminated over fishing. Ocean fishing (and the Bay) are classic examples of the tragedies of the commons. In a commons situation, entering the fishing grounds first and capturing the fish first is a compelling strategy. (This is when cost are the lowest). Thus each fisher is motivated to invest in equipment (e.g. faster boats and better detection devices) to improve the chances of winning the race. One way of dealing with the problem is with **ITQ- individual transferable quotas**. This would allow each quota holder a certain percentage of the total allowable catch—something he or she could bank on. (Example, if the allowable catch was 740,000 pounds a fisher have with a 0.1% share would be entitled to harvest 740 pounds. The quota can be bought or sold. Two advantages of this program – the quota holder faces the certainty that his or her share of the total allowable catch will not be take by someone else. Removes one of the characteristics of the commons. Second, because trading is allowed, quotas tend to end up in the hands of the most efficient fishers—those with the lowest costs, and pay for the ITQs. Less efficient producers sell their shares and move to other industries. Thus, ITQs help reduce the cost of catching fish and enhance the quality of fish delivered to markets.

Program used throughout the world to deal with severe overfishing and overcapitalization. New Zealand, Iceland, Canada (used in halibut and crab industries), Australia, Greenland, and the Netherlands.

The longest-running federally managed fishery with ITQs in the U.S. is the mid-Atlantic surf clam and ocean quahog fishery (Adopted in 1990). The fishery is currently ranked among the top 20 in turns of the annual

revenue the fishers receive. Also used with the Alaskan halibut because this industry was suffering a number of problems.

Not a perfect solution.

- Does have the problem of tossing small fish for larger ones. Not bad if the smaller fish survive.
- Does require enforcement.
- quotas generally by a bureaucratic regime—who may or may not establish an efficient level of harvest. too high and fish stocks are depleted

The current dilemma in the wasteful race to fish can be resolved by establishing property rights. Individual transferable quotas are a step in this direction. **The ultimate solution is full-fledged property rights.** This approach has been successfully used in near-shore fisheries for species whose territories are limited. Even for migratory species on the high seas, new technologies are making it possible to define and enforce property rights. The more secure the property rights, the healthier fish populations and fishing communities will be. We will all benefit.

CLOSING:

Wayne Dyer said, in his talk, *The Ten Secrets to Success and Inner Peace*, that one of the secrets was to “have a mind that is opened to everything and attached to nothing.” As we go our separate ways today, may we use an open mind to creatively nurture and protect the wonders of nature that we hold so dear.