

PRESERVING SPECIES

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Abstract: With the 40th anniversary of the passage of the Endangered Species Act it becomes necessary to review the history of this act and its impact on achieving its goals of preventing the extinction of endangered species. Many environmentalists have argued that the only way to prevent the extinction of animals, most notable Elephant populations in Africa, is through government management and ownership. However, we argue in this paper that the best solution to preserving endangered species is creating a more free market- oriented system of private property rights over animals and land use.

Our argument is two-fold, first - that without a true market with effective property rights we encounter a tragedy of the commons where there is no effective incentive among individual actors to protect endangered animals. Second is the unintended consequences of regulation by government actors that distort the incentives of individuals to protect endangered animals. By instituting a more market oriented way of governing all animals would significantly benefit by reducing the tragedy of the commons problem and the unintended consequences of government management. Using examples from the American buffalo, African elephants, fish farms, and farm animals we try to build the case for more free market-oriented policies in achieving the goal of species preservation.

Key words: species extinction, private property, tragedy of the commons

ОПАЗВАНЕ НА ЖИВОТИНСКИТЕ ВИДОВЕ

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Резюме: С настъпване на 40-годишнината от приемането на Закона за застрашените видове става необходимо да се направи исторически преглед на този акт и неговото въздействие върху постигането на целите по предотвратяване на изчезването на застрашените видове. Много природозащитници твърдят, че единственият начин да се предотврати изчезването на животни, сред които най-вече се отличават популациите на слонове в Африка, е чрез управление и собственост от страна на правителството. Въпреки това, в тази разработка ние твърдим, че най-доброто решение за запазване на застрашените видове е създаването на по-свободна пазарно-ориентирана система за правото на частна собственост върху животни и използването на земята.

Нашият аргумент е двупосочен: първо, че без истински пазар с ефективни права за собственост, ние се натъкваме на трагедията на обществената собственост, където няма ефективен стимул сред индивидуалните защитници на застрашените животински видове. На второ място са непредвидените последици при регулация от страна на държавните представители, където се наблюдава изкривяване на стимулите, които да насърчават индивидуалните защитници на застрашените животни. Чрез въвеждане на по-пазарно ориентиран начин на управление всички животински видове ще бъдат значително благоприятствани чрез намаляването на проблемите, свързани с обществената собственост и непредвидените последици от държавното управление. Използвайки примерите с американския бизон, африканските слонове, рибовъдните стопанства и селскостопанските животни, ние се опитваме да изградим по-свободна пазарно-ориентирана политика в постигането на целта за опазване на животинските видове.

Ключови думи: изчезване на животински видове, частна собственост, трагедията на обществената собственост

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Of the world's 1.7 million species that were evaluated in 2010, 17,315 are listed as endangered or in critical condition (*Conservation of Biodiversity*). Wild life and animal extinction are often cited as a problem that needs to be addressed by government intervention and regulation. However, another approach exists to solve this challenge: privatization of wildlife and the environment in which they live. This is not an obvious solution. To many, it appears far too simple because they believe that animal extinction is the result of human greed and capitalism. Whether it is hunting elephants in Africa or destroying the rainforest in Brazil, the problem of extinction appears at first glance to be one that would require mechanisms of preventing such harmful human activity.¹ The only obvious mechanism that readily comes to mind is that of state regulation and prohibition.

However, we argue that privatization can actually provide a much better solution than heavy-handed government intervention. We reason that markets produce the most efficient outcomes. For them to exist, however, people must be able to own the market's goods – in this case, the endangered animals. The market has a very effective way of self-regulating the problems of resource allocation when property rights are fully enforceable and clearly defined.

Let us first identify the problem of species extinction. What is the optimal amount of species, we ask? Extinction is only a problem if it reduces human welfare.² This can occur if the extinction of a seemingly insignificant species disrupts the food chain and leads to an ecological disaster that threatens the survival of species of more importance.

Another negative could simply be the loss of being able to enjoy the extinct animal. For instance, safaris might be less fun without the cheetah; the loss of a certain type of bird would make an area less beautiful. Conversely, there can be positives to the extinction of species – for instance, the mosquito. Fang (2010) writes that

Malaria infects some 247 million people worldwide each year, and kills nearly one million. Mosquitoes cause a huge further medical and financial burden by spreading yellow fever, dengue fever, Japanese encephalitis, Rift Valley fever, Chikungunya virus and West Nile virus. Then there's the pest factor: they form swarms thick enough to asphyxiate caribou in Alaska and now, as their numbers reach a seasonal peak, their proboscises are plunged into human flesh across the Northern Hemisphere.

Given its harmful deeds, the mosquito might be a species that we should try to kill and make extinct.³

¹ We adopt the perspective that the optimal amount of copper, corn, and cabooses is that which maximizes human welfare, and see no good reason not to regard animals in precisely the same way.

² In some quarters, this would be a controversial statement. Some scholars maintain that our brothers of field and stream have intrinsic value, not only instrumental, for our purposes. Some go so far as to claim that animals have rights. If so, the deer would have a valid legal case against the wolf that attacks it. QED.

³ On the other hand, it might pay for some university biology departments or pharmaceutical companies to keep these species safe under controlled circumstances, the former for pure research, the latter in case a positive use is ever found for them. But this decision would best be made by profit seekers. If it is done by government, it runs counter to Sowell's insight: "It is hard to imagine a more

Another example of how extinction could be positive is in the realm of a virus. For instance, killing the small pox virus was an immeasurable positive event for the humanity. According to Animal Planet,

while it's incredibly hard for most people to fathom, extinction can indeed be a positive thing. The most notable examples of positive extinctions lie in the realm of microorganisms and viruses. Smallpox, for example, was a major threat all around the world for much of human history until vaccine distribution helped fight it off.

Rather than expending resources to protect all species and prevent all extinctions, we must focus on deciding which species to protect and, more importantly, on how to protect them.

We believe privatization is the best answer. By creating a market for animals, all of them, we allow ownership of endangered species. In such a market, the value of an animal will rise as it gets closer to extinction, giving private enterprise an incentive for figuring out ways to increase the animal's numbers. If the animal is not worth anything, or even harmful such as the mosquito, then it will be left to dwindle. One obvious objection is the following: just because an animal is not economically beneficial, don't we still have a responsibility to save it? The market gives us the answer. If people truly feel a responsibility and that it is worth it to keep the species alive, then they will create a demand for that creature. That demand will lead to the incentives to safeguard it.

Therefore, if there is no demand, even among those who believe in saving nearly all species, then that would clearly be a signal that this species is not worth the resources to save. Only species that are truly harmful, or those whose extinction would not have negative effects, would be allowed to go extinct in the free market.

Consider the Asian elephant in Africa. Their population has dwindled in the last few decades due to loss of habitat and poaching. The government solution, which proved ineffective, was to give them large land reserves. According to Math Bench Biology Modules,

To the people living around them, elephants are a nuisance, or worse. Elephants trample crops, dwellings, and even humans, and they can make it through most fences (unless the fences are electrified). One elephant can devour a family's entire food supply in a single night.

The situation improved, however, when communities were allowed to own the elephants. Although not privately owned by a company or individual, the communal ownership at least gave some market incentives to preserve these creatures. It was used to promote ecotourism which helped the community. This led to more privatization schemes. It would be much better to allow full ownership as that would then create the optimal market conditions which would lead to the most efficient outcome.

Allowing the market to take over aligns the incentives of everyone involved in the right direction. Elephant tusks are prized by many people around the world. If private entrepreneurs were able to farm and sell them they would have huge incentives to increase the number of elephants just as in the case of cows.

A free market approach to species extinction is the best way to solve the

stupid or more dangerous way of making decisions than by putting those decisions in the hands of people who pay no price for being wrong” (http://www.brainyquote.com/quotes/authors/t/thomas_sowell.html).

problem (Simmons & Kreuter, 1989). It allows for the optimal amount and extent of species by mobilizing the profit-and-loss system. Privatization of endangered animals is the best solution to species extinction available to us.

In Section II, we argue that the Endangered Species Act places animals in danger. Section III is devoted to an analysis of private property rights, the *sine qua non* of saving species. We conclude in Section IV.

The Endangered Species Act: Placing Animals in Danger

When the Endangered Species Act of 1973 was passed under the Nixon administration, it became one of the most polarizing laws ever written, sparking conflicts between environmentalists and free-marketers. As with many federal policies pertaining to animal welfare, it has been a complete failure. The unintended consequences of the Endangered Species Act have been significant. The law has managed to do more harm than good. There have been deleterious effects inflicted on humans, as well as on the very species the law was presumably intended to protect.

At the heart of the debate is the question of who should conserve and protect endangered species. The most common opinion is that it is the government's responsibility to ensure the protection of species and land. For this reason, many government agencies have been created based on the Endangered Species Act. They continue to spawn as anti-market environmentalism becomes increasingly important in today's world. These agencies are in charge of regulating private businesses and their interactions with the environment in the hopes of conserving the land and precluding commerce. Also, they are entrusted with the duty of monitoring the number of endangered species and enforcing laws meant to pave the way for their sustainability.

In contrast, in our view is that endangered species would be best preserved if left up to profit-and-loss mechanisms and private property rights. Some recent examples indicate that private property rights do indeed benefit animals. A market uninterrupted by the government would be more effective in protecting species than any federal law. Such legislation as the Endangered Species Act undermines fundamental private property rights and leads to various unintended deleterious consequences.⁴

The second part of the debate centers on the claim that the environment is being harmed when private interest run counter to the interest of the environment due to firms pursuit of short-term profit maximization. This argument is made by the supporters of environmental laws, who suggest that the only way to protect the environment is by restricting, if not outright preventing, the usage of the land by businesses, as well as by enforcing a set of rules on owners of land where endangered species are found.

Not surprisingly, the very opposite is true. The motivations of businesses are not short-term profits, but instead maximizing net present discounted value created from resources. The free market will allow businesses to use resources most productively, which will then lead supply and demand to dictate the value of these

⁴One such phenomenon is known as sss: "shoot, shovel and shut up." If an endangered species is found on an owner's land, and he is foolish enough to reveal this to the EPA, they will in effect virtually nationalize his property, in a misguided effort to save these animals. Far better to align the landowner's interest in the very opposite direction. If a group such as Ducks Unlimited, or Western Wilderness Concept, will pay this person to maintain the habitat, he will have an incentive to do so, and Smith's (1776) "invisible hand" will be aimed more properly.

uses. This process will actually cause resources to have a much longer lifespan and will also keep them from disappearing. Business motivations will prevent companies from harming the environment, and those that do will pay the consequences in the market.

Overview of Endangered Species Act of 1973

It is important to outline the reasons behind the law's passing and some specific provisions in order to have a better understanding of the controversial Act, which is enforced by the U. S. Fish and Wildlife Service and the U. S. National Oceanic and Atmospheric Administration Fisheries Service. The stated objective of the Endangered Species Act of 1973 is:

... to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section.

This mission statement plainly illustrates the goal of using the government and several of its agencies to take control of the environmental issues facing the country.

Perhaps the most controversial parts of the legislation are those that list the government's power when an endangered species is known to live in a certain area or migrates to a new area. These provisions are outlined in Sections 4 and 9, and state that if an endangered species is found and listed on a piece of land, the Secretary of Agriculture can determine if that piece of land is a "critical habitat" for the species and then issue regulations the landowners must follow. If these regulations are violated, the landowners can face criminal charges. Specifically, Middleton (2011) explains:

Section 9 is arguably the most powerful provision of the ESA, as it prohibits all persons and agencies from taking (generally speaking, to harm or kill) threatened and endangered species, without exception. Those who take a species in violation of Section 9 face civil and criminal penalties, including civil fines of up to \$25,000 per violation, as well as criminal penalties of up to \$50,000 and imprisonment for one year. (n.p.)

These harsh provisions have sparked the debate over the legitimacy of the entire Act, as well as given its opponents evidence and examples of its ineffectiveness.

Claims to Support the Endangered Species Act

The "eco-friendly" movement was already an important aspect of American culture in the 1970s when the Act was passed, and it has been growing at a rapid rate ever since. The main culprit for the extinction of species, according to left-wing environmentalists, is mankind. More specifically, businesses and their use of natural resources have led to many species becoming endangered or extinct. An obvious indication of how the lawmakers at the time felt about free enterprise can be seen in one of the very first statements in the Act, which states, "The Congress finds and declares that various species of fish, wildlife, and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation". In other words, advances in technology and, therefore, more productivity are placing these animals at risk. In *Citizens Guide to the Endangered Species Act*, Matsumoto et al. share the same

thoughts:

Humans have caused or hastened extinctions—through habitat destruction, overhunting, and the introduction of non-native creatures—for at least 20,000 years. But things are different now. Humans have eclipsed all other influences and are causing extinctions at a catastrophic and utterly unprecedented pace, variously estimated by researchers at between a thousand and ten thousand times the natural rate. Many species—no one knows how many—are being extinguished even before they are discovered.

According to Cheater (2012), 99% of the over 2,000 species listed on the endangered species list since the Act was passed have avoided extinction.⁵ In the same report, the group pleads that humans have caused extinction of an incredibly large number of species, and that we must uphold the Act's provisions in order to stop big businesses from further destroying the natural ecosystem. The report also lists 13 current bills that are being pushed by lawmakers all over the United States that would “undermine the Endangered Species Act and its ability to protect our nation's imperiled wildlife”.

Free-Market Rebuttal

As with most government regulation, supposed good intentions coupled with poor reasoning lead to many negative unintended consequences. In the case of the Endangered Species Act, it ends up hurting species along with people. More specifically, it converts the animals into enemies of humans. The main problem is that the government has overlooked an incentive problem when implementing the Endangered Species Act because it ignores the importance of private property rights.

There are two main problems with the way species are dealt with in the world. The first involves the problem of the tragedy of the commons, where lack of ownership of species has caused their demise. The second is the regulation sent down from governments that are falsely believed to be a benefit to animals, but in fact harm them. Fortunately, the free market can solve both problems. The tragedy of the commons problem can best be illustrated by the story of the buffalo in America. Until the latter part of the 19th century, the buffalo population was, for the most part, safe from any real threat of becoming endangered. What happened during and after this period and its implications have been a highly debated issue. The supporters of government regulation see the result of the situation as a failure of the market. One pro-regulation thinker writes, “Using crude 19th century technology, American traders managed to kill roughly 15 million gigantic animals in less than two decades” (Merchant, 2011). He later adds:

Why did we all up and decide that it was time to do our damndest to drive species to the brink of extinction? Well, no particular person did any such thing: it was the free market that made the decision.

Merchant's conclusion is that the technological advances in the tanning industry that allowed for the use of buffalo's tough hide created a demand high enough to cause the extinction of the species. Storbek (2011) echoes Merchant, “The most important

⁵ Lomborg (1998, 249) explains how the success of the Endangered Species Act that its supporters have been touting is inflated. He notes the fact that many of the animals on the list that have been removed were actually a result of other factors, such as the removal of DDT saving many species of birds. Also, there are a large number of animals that are added to the list, and then removed after it has been found that the animals were never endangered in the first place. The U.S. Fisheries and Wildlife Service counts these species when calculating the Act's progress.

driver of the extinction of the American bison was technical innovation, globalization and unfettered capitalism.” In his paper, Taylor (2007) offers a thesis that there are

Three conditions are jointly necessary and sufficient to explain the time pattern of buffalo destruction witnessed in the nineteenth century. These are: (1) a price for buffalo products that was largely invariant to changes in supply; (2) open access conditions with no regulation of the buffalo kill; and (3), a newly invented tanning process that allowed buffalo hides to be turned into valuable commercial leather.

All three blame market forces for the extinction of buffalo, and feed the stereotype that the free market is a system where short-term business interest run counter to species preservation.

Unfortunately, these writers overlook the basic economic lesson of the tragedy of the commons. In this scenario, a public good is used up until complete disappearance. This result is no anomaly and the simple solution would be to introduce a system of private property rights for the buffalo and all species. The problem with the buffalo was a lack of ownership. There was no disincentive to killing a buffalo, since there would be no economic cost. Thus, the marginal benefits exceed the marginal costs, and hunters killed with no hesitation. Had there been property rights, the hunters would have had to face legal punishment for their crime and therefore would no longer see the killing of buffalo as a net gain as the marginal costs of doing so now outweigh the marginal benefits.⁶

The best example of a situation that could have had the same result as the buffalo but instead was successful was the case of the cow. The value of cows was discovered before the buffalo's, as cow meat and hide were higher in demand due to its ease and taste preferences. This led to a spontaneous creation of private property for cows that essentially prevented others from killing cows that weren't theirs. Fences were built to keep the cows in one area as well as keep hunters away and, before fences, branding was a means of marking ownership. Any trespassing or killing led to the guilty party's punishment. For this reason, the cow population has remained healthy and in no danger of becoming extinct. The same cannot be said for the buffalo, which was only recently⁷ privatized and was therefore a victim of tragedy of the commons.⁸

There is of course also an economic penalty for killing a cow, but not an unowned buffalo. If you butcher the former, you almost certainly would have had it tomorrow, had you not done so. Thus, the price paid by the owner includes the entire value of the beast (discounted by one day's worth of interest rate, of course). This is entirely absent in the case of the (unowned) bison, since if the hunter harvests this

⁶ Because the market is a human process, there are mistakes. However, these are not market “failures,” as many opponents would like to call them. Rather, they are mistakes made by the people within the market. Where the difference lies between the market and the government is the ever-important feedback characteristic that the market possesses. In the market, if a mistake is made, the laws of supply and demand will bring the market back to equilibrium. This is because the market responds to the mistakes, corrects them, and leaves the guilty parties liable. Mistakes made by the government, however, do not have the same automatic feedback mechanism. If the government makes a mistake, it does not go out of business like a company would in free-market capitalism. It is because of this that the market makes fewer mistakes than the government.

⁷ http://rationalwiki.org/wiki/Privatization_of_wildlife; <http://www.buffalogroves.com/buff-ranch-day.html>; <http://alaskawildgame.makeswebsites.com/>

⁸ For a critique of this doctrine, see Ostrom, 1990. For a defense of it, see Block 2011.

creature, the alternative cost is zero, since he would not have had it on the morrow if he had refrained today. The opportunity cost of killing a cow is one cow; that of the buffalo is zero. It is no accident that the latter was slaughtered with impunity, almost to extinction, while the former was preserved and protected.

Cows are slaughtered routinely and yet are not in any danger of disappearing. Elephants, as far as economic theory is concerned, are only bigger cows with funny looking noses and ears. If harvesting them were not allowed, there would be less profit to be earned from them and, thus, paradoxically to economic laypeople, less incentive to keep them alive and thriving. Cars, too, are traded domestically and internationally. If this practice were prohibited by law, the resource would be worth a lesser amount and would therefore be more likely to become extinct. Surely, a new automobile allowed by law to later on enter the used car market would be worth more than one precluded from such an option. Vehicles are merely elephants or cows with wheels attached, from a purely economic perspective.

Another example is that of the elephant and the threat of poaching for ivory trade. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is “An international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival” (CITES). The organization studies many current problems facing endangered species, and unfortunately suggests that stronger regulations are the answer for their recovery. The Endangered Species Act is not dissimilar in the reasoning behind CITES’ enforcement. CITES has actively monitored and attempted to stifle the poaching of elephants and trading of ivory all over the world, and has taken the stance that such trade is the culprit.

What the supporters of CITES do not realize is that free trade from privatization is the very best chance elephants have for recovery.⁹ Similar to the buffalo, the lack of ownership of elephants has caused a tragedy of the commons among elephants. CITES, along with the Endangered Species Act, have made it illegal to kill and trade elephants.¹⁰ Anderson and Leal (2001) discuss the results of the regulatory actions against ivory trade:

While the ban was successful in stopping the legal trade in ivory, which resulted in lost revenues for local conservation efforts in African countries, there is little evidence that is stopped poaching ... In Zimbabwe and Botswana, elephant populations have thrived for years because of successful conservation programs that capitalized on the legal ivory trade. In those countries, local people have a strong

⁹ The [United States Fish and Wildlife Service](#) and the [National Oceanic and Atmospheric Administration](#) together administer the Endangered Species Act, which has incorporated CITES. Perhaps, just perhaps, the real purpose of the EPA was to promote employment in these government bureaus. After all, if the rules it promulgated really preserved species, there would be less of a felt need for its continued existence. On the other hand, acting in a manner diametrically opposed to its presumed *raison d'être* would just about guarantee continued and ever perhaps expanded employment. “The crisis is getting more and more severe,” these bureaus might say. “Throw additional money at us to help us solve the problem.” Needless to say, had any private enterprise acted in this diabolical way, undermining its own (supposed) mission, it would be quickly and summarily bankrupted.

¹⁰ In 1989, President of Kenya, Daniel Arap Moi, made a public cry for help by burning 12 tons of ivory husks to bring attention to the growing poaching problem in Africa (Perlez). It seems counter-intuitive to burn these tusks in the first place, but it is the underlying problem that “the worry that tourism, which is the country’s biggest foreign-exchange earner, will fall off if the elephant disappears.” If Arap Moi would have allowed the elephants to be privatized, competing tourism companies would compete to provide the best product to their customers, which means protecting and taking care of their own elephants. This surely would have protected the species.

economic interest in protecting elephants from poaching because the revenue from tusks and hides and a portion of the money made from selling hunting permits go to local communities where the elephants live. It is property rights and markets that account for the rapid elephant population growth in Zimbabwe and Botswana and for the declining population in the rest of Africa.

Property rights create an incentive to protect species. In this case, the elephant was the source of revenue for the local people who therefore made sure to keep their “golden goose” intact. This is not unlike a business selling a finished product. It would not make sense for that company to deplete their resources and inventory, as that would cause their source of profits to disappear. While the same tactic can readily be applied to animals, unfortunately this idea faces resistance from the “watermelons.”¹¹

The Endangered Species Act fails to acknowledge profit incentives. The landowner must abide by the government rules in order to avoid harming, in any way, the habitat of the endangered species. This particular provision fails to account for such incentives. Consider the case of the red-cockaded woodpecker in North Carolina. Ben Cone, Jr., whose father purchased 8,000 acres of land there, replanted pines in the previously timberless area. Cone would burn the undergrowth in order to control it, and also thinned his trees every few years.¹² His plan was so successful that the pines he planted grew to heights that were tall enough for the first time ever, to attract the red-cockaded woodpecker, an endangered species. This immediately brought the land under regulation of the Endangered Species Act, since a listed species was found on the property. Cone pleaded before Congress about his struggles complying with the stringent rules of the Act:

By managing the property in an environmentally correct way, my father and I created habitat for the red-cockaded woodpecker. My reward has been the loss of \$1,425,000 in value of timber I am not allowed to harvest under the provisions of the Endangered Species Act. I feel compelled to massively clear-cut the balance of my property to prevent additional loss. (Cohen)¹³

It is easy to see the problems the Act causes, as it turns the endangered species into enemies of the landowners. Due to the strict rules landowners must abide by if they want to avoid criminal charges, the government has essentially taken over private property. It does not make sense for the private landowner to abide by those rules if they unnecessarily cause them to lose money doing so. As Cone said, he has a better incentive to burn down his trees so that the red-cockaded woodpecker would no longer cause him so much financial loss. This “shoot, shovel, and shut up” mentality caused by the Endangered Species Act is not uncommon, and it reveals obvious

¹¹Green on the outside, but red on the inside. Writers such as Brown, 1963, 1972, 1981, 2009, 2011, 2012; Commoner, 1990; Ehrlich, 1968; Ehrlich and Ehrlich, 1981; Gore, 1992; Suzuki and McConnell, 2007; Suzuki and McKibben, 2004; Suzuki and Hanington, 2012.

¹² He profited in two ways. First, he sold the lumber he cut down. Second, this allowed the remaining trees to grow faster and higher than would otherwise have been the case.

¹³ What this property owner should have done, if he wanted to maintain his property values was “shoot, shovel, and shut up.” He should have eliminated this pesky bird whether by shooting or poisoning. He should have then shoveled, buried it in the ground beyond the prying eyes of the EPA and kept his silence about these actions of his. It is a strange program (well, maybe, not so strange given that we are talking about government here) to safeguard species that gives land owners in out of the way places where they can easily get away with violating the law, incentives to regard them as economic vermin and exterminate them.

perverse human incentives.

Another case took place in Riverside County, California. Here the wildfire-prone residents were prohibited from clearing firebreaks as the construction would disrupt the habitat of the endangered Stephens' kangaroo rat. As expected, wildfires erupted and the entire area, including the residents' homes as well as the rat's habitat, was destroyed. This shows the unintended consequences that placing animals ahead of humans produces.¹⁴ By ignoring private property rights and incentives, the Act actually caused the destruction of the habitat for an endangered species it was supposedly trying to protect. Unfortunately, as is the usual, the government and its agencies were not held responsible for this debacle and were not punished for their mistakes. In the free market, in contrast, parties are held liable when mistakes are made and pay the price for their errors.

Negative consequences

The Endangered Species Act was obviously meant to protect endangered species and promote their recovery. Unfortunately, the legislation has led to just about the opposite results. It ignores the basic economic institution of private property and has therefore caused a problem of tragedy of the commons among endangered species, such as the elephant and buffalo. However, there are solutions to the problems that the Endangered Species Act has overlooked. Protecting private property rights would give people the incentive to defend endangered species, as it would generate revenue for the owner. In the case of the red-cockaded woodpecker, lovers of this species might have agreed to pay Cone more money to grow his trees even higher, so as to expand their habitat (Anderson & Leal, 2001). In a sense, this would be "barnyardizing" the wild animal.

Another option would be for the government to offer various forms of compensation to owners of property where endangered species are found. This is the very opposite of current regulation, which essentially consists of the government seizing land without compensating the owner. Stroup (2012) states:

One suggestion is to provide property tax credits for landowners who commit themselves to long-range habitat protection. Another is to pay landowners "bounties" or "rewards" for endangered species found on their land. Still another is to "rent" the land that is to be used for endangered species. All these approaches are worth considering. But the key change must be to remove the ability of the Fish and Wildlife Service to seize control of land without compensation.

There are problems here, though. He who relies on the government to act rationally, to subsidize what it (presumably) wants instead of penalizing it, will be bitterly disappointed. If central planning of this benevolent type were feasible,¹⁵ we would have already achieved some measure of rationality.

¹⁴Rothbard (2011) wrote about an example in San Antonio, Texas, where the city was facing a drought, yet could not extract any water from a nearby river because it would disrupt the habitat of an endangered species there. Because of the strict regulations of the Act, the city had to restrict its residents' water consumption. The president of the Texas and Southwestern Cattle Raisers Association, John W. Jones, complained, that this "puts the protection of Texas bugs before Texas babies." It shows the transformation of turning endangered species into enemies that the Act will create. Privatizing the body of water (Motichek, Block and Johnson. 2008; Whitehead and Block. 2002; Whitehead, Gould and Block. 2004.) would have solved the problem, as the market would have decided how much it would cost the residents to have access to water.

¹⁵ It is not; see on this (Mises, 1922).

Socialists such as Stroup (Block, 1990) place too much faith in statism.

The free market, if implemented, would be successful in turning endangered species into assets rather than debits. Compare the situation to that of oil. If a landowner discovers oil in his backyard, he will be certain to reap the benefits of owning such a wealthy piece of land. The opposite is true of the current endangered species laws; however, reform can improve them.

With a new, free market approach to the issue, the number of animals on the endangered list will likely decrease. The current strict regulations of the Endangered Species Act have managed in doing the very opposite. It is not the free market or capitalism that has caused species' population to diminish or even go extinct, but rather both natural selection or, in recent history, the overbearing regulations issued by the government.

Private Property Rights

Property rights are defined as the exclusive authority to determine how a resource is to be employed, regardless if that resource is owned by an individual, corporation, or governmental entity. Private property rights are not static, but rather are dynamic in the sense that they evolve through social arrangements that govern property ownership and allocation. As subjective measures of value increase for a resource, the perceived opportunity cost of losing that particular asset increases, which incentivizes entrepreneurs to develop mechanisms for establishing property rights. Under a private property system “market values of property reflect the preference and demands of the rest of society” which causes the use of the scarce resource to be “influenced by what the rest of the public thinks is the most valuable use (Alchian).” Demsetz (1967) argued that “property rights are an instrument of society and derive their significance from the fact that they help man form those expectations which he can reasonably hold in his dealings with others” (p. 347). As private property rights become more complete in the sense that there are no restrictions on the exclusive authority of a resource, then market exchange values become more influential in the use of scarce resources. “The fundamental purpose of property rights is that they eliminate destructive competition for control of economic resources” with regards to the allocation of scarce resources to those who value it the most (Alchian). Profit seeking ensures that property rights are allocated to the most valued use through Smith's (1776) “invisible hand.” However, if the benefits of establishing ownership to specific property rights are relatively low compared to the costs, then there is little incentive to define and enforce property rights.¹⁶ With regards to left-wing environmental conservationists and profit-seeking entrepreneurs, the gains of establishing property rights are won entirely by the beneficiary and the costs are borne entirely by the opposite party resulting in a zero-sum game.¹⁷

Anti-market conservationists¹⁸ argue that environmental degradation is a negative externality resulting from the failure of the market to place an objective intrinsic value on nature which subsequently results in underpriced amenities that tend to be overused, causing circumstantial damage (Beder, 1997). If environmental goods, such as endangered species, were captured by the markets' objective measures of

¹⁶ Demsetz (1967, pg. 350) stated that property rights develop to internalize externalities when the gains of internalization become larger than the cost of internalization.

¹⁷ A situation in which one participant's gain results only from another participant's equivalent loss. Therefore, the net change in total wealth among participants is zero; the wealth is just shifted from one to another (“Investopedia”)

¹⁸ See footnote 10, supra

subjective preferences, namely prices, then the relative prices of such resources would provide information to the market quantifying the value of these amenities. Once prices are established, subjective human values are optimally revealed through human action in that market and participants will reveal their preference through mutually beneficial trades in the *ex ante* sense. In the absence of objective measures of subjective individual values, “it is a problem of utilizing knowledge not given to anyone in its totality” (Anderson & Leal, 2001, p. 17).

The debate between left-wing conservationists and profit-seeking entrepreneurs regarding the appropriate allocation of natural resources comes down to the basic categorization of environmental resources. These categories are commodities for commercial use to entrepreneurs, which are vastly undervalued due to disequilibrium conditions resulting from the lack of objective standards, and amenities to market critics who derive value from the fact that their ownership represents the option of future utility. The issue arises when market preservationists recognize the benefits to defining and enforcing property rights when natural animal resources and amenities become more valuable. The profit-seeking entrepreneurs are leveraged to better reveal their preference for the commodity use of the natural resource over the watermelon’s desire never to utilize the amenity. Continuing from this false assumption, these so-called naturalists will then argue that the true costs of public hazards, such as pollution, will not be reflected in the market prices of commodities because “natural systems were assumed to absorb and clean all the waste created” (Durajapah, 2006, n.p.).

When dealing with such issues, left-wing environmentalists and entrepreneurs differ widely. The former “prefer[s] a lower probability of environmental damage and, hence, higher production costs,” while entrepreneurs will “strive to keep production costs low, and likely lower precautionary costs and are willing to take higher risks for accidental damage” (Anderson & Leal, 2001, p. 76). A solution to this zero-sum game is that in the absence of government “picking winners,”¹⁹ private property rights will internalize the costs associated with the market failures and reward the most efficient stewards so that only the latter will receive the scarce resources. In the absence of well-defined property rights, the relevant tradeoffs between harvesting and exploiting species must be weighed by a decision maker. Moving toward free-market environmentalism will incentivize market participants to take into consideration the relevant costs associated in the decision between environmental commodities or amenities. Since the cost of establishing the required property rights for environmental resources are high, often “substitute means of control are sought” (Alchian).

An inherent issue of public resource management is that central control of the means of production makes it difficult to optimize the tradeoffs between watermelon environmentalists and entrepreneurs. This is because it assumes planners have perfect knowledge when in fact they are prone to sub-optimizing the allocation of scarce resources. Hayek (1944) stated that

¹⁹ Picking winners results when government measures provide direct support to industries beyond what the free market is willing to invest. By picking winners the government is essentially misallocating resources in the market as private initiatives would not provide for the required funds. The most famous example of picking winners was Solyndra which received a \$535 million loan from the U.S Energy Department. The company promptly filed for bankruptcy in 2011 leaving taxpayers on the hook for up to \$129 million (Bathon). By not allowing private capital to own hitherto “wild” animals such as polar bears, elephants, buffalo, etc., the government is in effect picking *losers*, these selfsame species.

the question raised by economic planning is, therefore, not merely whether we shall be able to satisfy what we regard as our more or less important needs in the way we prefer. It is whether it shall be we who decide what is more, and what is less, important for us, or whether this is to be decided by the planner. Economic planning would not affect merely those of our marginal needs that we have in mind when we speak contemptuously about the merely economic. It would, in effect, mean that we as individuals should no longer be allowed to decide what we regard as marginal. (p. 126)

Instead, bureaucrats are incentivized to provide amenities to constituents since subjective values are revealed in the political system through voting. Large special interest groups, either environmental or entrepreneurial, spend vast funds in lobbying for special favors which only causes redistribution rather than the creation of wealth. Ultimately, this can prove to be costly to both tax payers and the environment as bureaucrats with multiple constituents will undoubtedly create “a battle ground where the developmental interests are pitted against the environmental interest in a zero-sum game (Anderson & Leal, 2001, tba). As endangered species are controlled by the political sector, environmentalists must compete against entrepreneurs who receive subsidies or tax breaks for the procurement of such environmental resources. Nevertheless, the reverse is also true. The private sector must compete with a supplier of recreational environmental amenities that do not face the discipline of profit and losses.

The incentives structures of the political controller will less likely be inclined toward efficiency as the nature of government is to externalize losses and internalize gains even though the political sector is typically assumed to be looking out for the public’s best interest. Thus, the case for ownership remains unclear when defined by the political sphere. One such reason is that instead of “establishing a legal system of rights which can be modified by transactions on the market, the government may impose regulations which state what people must or must not do” (Coase, 1960, p. 11). According to Coase (1960):

The government is, in a sense, a *superfirm* since it is able to influence the use of factors of production by administrative decisions. But the ordinary firm is subject to checks in the operations because of the competition of other firms, which might administer the same activities at lower cost and also because there is always the alternative of market transactions as against organization within the firm if the administrative costs become too great. The government is able, if it wishes, to avoid the market altogether, which a firm can never do. (p. 12)

Conclusion

If there is one point we can take away from the above remarks, it is this: privatization is the last best hope for the survival of endangered species. It may have been too expensive to employ private property rights when there was no scarcity of the elephant, rhino, buffalo, etc., but as these resources became more and more valuable, in the ordinary course of events, were the market left to its own devices,²⁰ these species would have naturally come under the aegis of private ownership. However, the government, with its regulatory bureaus, its CITES conventions, froze us into a tragedy of the commons with regard to these animals. Only a radical move

²⁰ All too often, political jurisdictions enacted legislation explicitly prohibiting hitherto unowned animal resources from coming under the rubric of private property ownership. This weakens the applicability of the Demsetz explanation.

toward private property can safeguard these natural resources.

References

1. Alchian, Armen. "Property Rights: The Concise Encyclopedia of Economics." *Library of Economics and Liberty*. N.p.. Web. 26 Oct 2012. <<http://www.econlib.org/library/Enc/PropertyRights.html>>.
2. Anderson, Terry, and Donald Leal. *Free Market Environmentalism*. New York City, NY: PALGRAVE, 2001. Print.
3. Anderson, Terry, and Donald Leal. *Free Market Environmentalism*. New York: Palgrave, 2001. Print.
4. Bathon, Michael. "Solyndra Wins Court Approval of Bankruptcy Exit Plan." *Bloomberg*. Bloomberg L.P, 22 2012. Web. 10 Dec 2012. <<http://www.bloomberg.com/news/2012-10-22/solyndra-wins-court-approval-of-bankruptcy-exit-plan.html>>.
5. Beder, Sharon, 'The Environment Goes to Market', *Democracy and Nature* 3(3), 1997, pp. 90-106.
6. Block, Walter E. 1990. "Earning Happiness Through Homesteading Unowned Land: a comment on 'Buying Misery with Federal Land' by Richard Stroup," *Journal of Social, Political and Economic Studies*, Vol. 15, No. 2, Summer, pp. 237-253; http://www.walterblock.com/publications/happiness_homesteading.pdf
7. Block, Walter E. 2011. Review essay of Ostrom, Elinor. 1990. *Governing the commons: The evolution of institutions for collective action*. Cambridge, UK and New York, NY: Cambridge University Press; in *Libertarian Papers*, Vol. 3, Art. 21; <http://libertarianpapers.org/2011/21-block-review-of-ostroms-governing-the-commons/>
8. Brown, Lester T. 1963. *Man, Land and Food*, W. W. Norton & Company
9. Brown, Lester T. 1972. *World Without Borders*, W. W. Norton & Company
10. Brown, Lester T. 1981 *Building a Sustainable Society*. W. W. Norton & Company
11. Brown, Lester T. 2009. *Plan B 4.0: Mobilizing to Save Civilization* . W. W. Norton & Company
12. Brown, Lester T. 2011. *World on the Edge: How to Prevent Environmental and Economic Collapse* . W. W. Norton & Company
13. Brown, Lester T. 2012. *Full Planet, Empty Plates: The New Geopolitics of Food Scarcity*. W. W. Norton & Company
14. Cheater, Mark, ed. "Assault of Wildlife." *Defenders of Wildlife*. Defenders of Wildlife, n.d. Web. 25 Oct 2012.
15. Coase, Ronald. "The Problem of Social Costs." *Journal of Law and Economics*. (1960): n. page. Print.
16. Cohen, Bonner. "The Endangered Species Act: Bad for People, Bad for Wildlife." *National Policy Analysis*. N.p., n.d. Web. 25 Oct 2012. <<http://www.nationalcenter.org/NPA511.html>>.
17. Commoner, Barry. 1990. *Making Peace with the Planet*, New York Pantheon Books.
18. *Conservation of Biodiversity*, Discovery Channel, <http://curiosity.discovery.com/question/how-many-endangered-species>
19. Demsetz, Harold. "Toward a Theory of Property Rights." *American Economic Review*. Vol. 57, no. 2. (1967): n. page. Print. <<http://www.jstor.org/discover/10.2307/1821637?uid=3739688&uid=2&uid=4&uid=3739256&sid=21101477882291>>.
20. Durajappah, Anantha. "Putting the Right Price on Nature: Environmental

- Economics:” *SciDev.Net*. N.p., 7 2006. Web. 23 Oct 2012. <http://www.scidev.net/en/policy-briefs/putting-the-right-price-on-nature-environmental-ec.html>
21. Ehrlich, Paul and Anne Ehrlich. 1981. *Extinction: The Causes and Consequences of the Disappearance of Species*; New York: Random House
 22. Ehrlich, Paul. 1968. *The Population Bomb*, New York: Sierra Club - Ballantine
 23. Fang, Janet. 2010. “Ecology: A world without mosquitoes,” *Nature.com*, *Nature* 466, July, pp. 432-434; <http://www.nature.com/news/2010/100721/full/466432a.html>
 24. Gore, Al. 1992. *Earth in the Balance: Ecology and the Human Spirit*, Boston: Houghton-Mifflin
 25. Hayek, Friedrich. *The Road to Serfdom*. Routledge, London: The University of Chicago Press, 1944. Print.
 26. http://www.informaworld.com/smpp/title~content=t713417006~db=all~tab=issue_slist~branches=11-v1111, Issue 2, June, pp. 147 – 155
 27. Lomborg, Bjorn. 1998. *The Skeptical Environmentalist: Measuring the Real State of the World*. Cambridge, UK: Cambridge University Press. Print.
 28. Matsumoto, Sarah, Cara Pike, and et al. “Citizen’s Guide to the Endangered Species Act.” *Earthjustice*. Earthjustice, n.d. Web. 25 Oct 2012.
 29. Merchant, Brian. “Free Trade Wiped Out the Buffalo, Report Finds.” *The Utopian List*. N. p., 11 2011. Web. Web. 25 Oct. 2012. <<http://utopianist.com/2011/04/free-trade-wiped-out-the-buffalo-study-finds/>>.
 30. Middleton, Brandon. “Section 9 of the Endangered Species Act: The Lynchpin of a Biological Opinion.” *PFL Liberty Blog*. Pacific Legal Foundation, 04 2011. Web. Web. 25 Oct. 2012.
 31. Mises, Ludwig von [1922] 1981. *Socialism: An Economic and Sociological Analysis*. Translated by J. Kahane. Indianapolis: Liberty Fund; <http://mises.org/books/socialism/contents.aspx>
 32. Motichek, Amy, Walter E. Block and Jay Johnson. 2008. “Forget Ocean Front Property, We Want Ocean Real Estate!” *Ethics, Place, and Environment*; Vol. 11, Issue 2, June, pp. 147 – 155
 33. Ostrom, Elinor. 1990. *Governing the Commons*, Cambridge Press
 34. Perlez, Jane. “Kenya, In Gesture, Burns Ivory Tusks.” *New York Times*. 19 1989: n. page. Web. 1 Nov. 2012. <<http://www.nytimes.com/1989/07/19/world/kenya-in-gesture-burns-ivory-tusks.html>>.
 35. Rothbard, Murray. “Environmentalists Clobber Texas.” *Mises Daily*. Ludwig Von Mises Institute, 23 2011. Web. Web. 25 Oct. 2012. <<http://mises.org/daily/5657/Environmentalists-Clobber-Texas>>.
 36. Simmons, Randy, and Kreuter, Urs. 1989. “Herd Mentality: Banning Ivory Sales is No Way to Save the Elephant,” *Policy Review*, Fall, pp. 46-49
 37. Smith, Adam. [1776] 1979. *An Inquiry into the Nature and Causes of the Wealth of Nations*, Indianapolis, IN: Liberty Fund
 38. Storbeck, Olaf. “How Free Trade killed the Buffalo.” *Economics Intelligence*. N.p., 13 2011. Web. Web. 25 Oct. 2012. <<http://economicsintelligence.com/2011/04/13/how-free-trade-killed-the-buffalo/>>.
 39. Stroup, Richard. “The Endangered Species Act: Making Innocent Species the Enemy.” *Property and Environment Research Center*. PERC. Web. 25 Oct 2012. <<http://perc.org/articles/endangered-species-act-1>>.
 40. Suzuki, David and David McKibben. 2004. *The David Suzuki Reader: A Lifetime*

- of Ideas from a Leading Activist and Thinker. Greystone Books
41. Suzuki, David and Ian Hanington. 2012. *Everything Under the Sun: Toward a Brighter Future on a Small Blue Planet*. Greystone Books
 42. Suzuki, David, Amanda McConnell and Adrienne Mason. 2007. *The Sacred Balance: Rediscovering Our Place in Nature*. Greystone Books
 43. Taylor, M. Scott. "Buffalo Hunt: International Trade and the Virtual Extinction of the North American Bison," Working Paper 12969, National Bureau of Economic Research, March 2007, 9-11.
 44. *Threats to Biodiversity, Animal Planet*, <http://curiosity.discovery.com/question/extinction-ever-a-good-thing>
 45. *Tragedy of the Commons*, Math Bench Biology Modules, http://mathbench.umd.edu/modules/env-science_tragedy-commons/page13.htm
 46. United States of America. Department of the Interior. *Endangered Species Act of 1973*. Washington, D.C.: 1973. Web. <<http://www.fws.gov/endangered/esa-library/pdf/ESAall.pdf>>.
 47. "What is CITES?" *Convention on International Trade in Endangered Species of Wild Fauna and Flora*. CITES. Web. 25 Oct 2012. <<http://www.cites.org/eng/disc/what.php>>.
 48. Whitehead, Roy and Walter E. Block. 2002. "Environmental Takings of Private Water Rights: the Case for Full Water Privatization," *Environmental Law Reporter*, October, pp. 11162-11176
 49. Whitehead, Roy, Catherine Gould and Walter E. Block. 2004. "The value of private water rights: from a legal and economic perspective," *Albany Law Environmental Outlook Journal*. Vol. 9, No. 2, pp. 315-343; <http://tinyurl.com/36p9he>; <http://141.164.133.3/faculty/Block/Articles%20for%20web/The%20value%20of%20Private%20Water%20Rights.doc>; http://heinonline.org/HOL/Page?handle=hein.journals/alev9&div=15&g_sent=1&collection=journals
 50. "Zero-Sum Game." *Investopedia*. Investopedia U.S. Web. 10 Dec 2012. <<http://www.investopedia.com/terms/z/zero-sumgame.asp>>
 51. <http://earthjustice.org/sites/default/files/library/reports/Citizens_Guide_ESA.pdf>.