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The Bronx, Beavers and Birthrights: The Case for Urban Wildlife

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ENVP 4000: Environmental Policy Research Seminar
May 13, 2012
The subject of animals’ rights has received a fair amount of attention over the years. Philosophers and activists alike have set out to ensure that animals in the wild and in other settings such as factory farms enjoy at least a bare minimum of rights and protections. While these are undoubtedly noble causes, they do leave a great deal to be desired. Almost always left out of these philosophical and moral debates are animals such as squirrels, pigeons, raccoons and the like – urban wildlife, if you will. Because of our constant exposure to them, or perhaps because they are not exotic, or even tragic to observe, they are often overlooked amidst these disputes. Thanks to this, these creatures often are left out of policy-making decisions, and even certain laws which one would expect to apply to them. Due to their limited legal status, these creatures are often marginalized and have their interests overruled by human populations. As long as they do not enjoy the rights and privileges as other forms of wildlife, it is my fear that this will always be the case. It is due to this lack that I believe a new ethic is needed for dealing with urban wildlife – one which will allow us to more fairly and effectively navigate our conflicts with the nonhuman entities which we share our cities with.

In order to arrive at such an ethic, a number of steps must be taken. First, by examining environmental ethics and the animals’ rights movement in particular, we can gain insight into the battles which are being fought, and the struggles which are already being undertaken on behalf of our fellow earthlings (to borrow the term from the documentary of the same name). It will also provide us with some background with which we may begin to construct our new ethic and frame our policies regarding urban wildlife. The philosophies of such great and influential figures such as Aldo Leopold and his land ethic, J. Baird Callicott’s continuation of this ethic, and Peter Singer’s utilitarianism will be examined critically in order to ascertain their strengths and weaknesses with regards to animals’ rights in an urban setting. Following this, the need for
this new urban ethic will be discussed. I will give my own input on why this ethic is needed, as well as provide factual evidence to support my thesis it is becoming a necessity for contemporary society. Various cases of interspecific conflict will also be examined.

Secondly, we must assess the current laws and policies which are in currently in place to protect nonhuman creatures. The Endangered Species Act of 1973, the USDA’s Animal Welfare Act in its current incarnation, as well as various other anti-cruelty laws and provisions will be the prime focus of this section. The degree to which these laws apply to urban wildlife, if they in fact do at all, should tell us much about current attitudes towards these animals. Undoubtedly there will be room for improvement, and steps to bettering these policies will be discussed.

The ensuing section shall bring our case study into view. The Bronx, its environmental history, and its returning beaver population will serve as a model against which will be cast the aforementioned philosophies and laws. Through this I am hopeful that the effectiveness of these philosophies and policies can be ascertained, and illuminate the path to a more just and equitable method of handling interspecific relations within the confines of urban society.

In the final section, I will detail my concrete policy solutions on the matter. These solutions will include how to incorporate the new urban wildlife ethic, as well as any new or amended laws which should be put into place in order to better protect urban fauna.

The goal of this discourse is not simply to construct these new ethics and policies, but also to expose and examine the current shortcomings of the system we are currently in. If this can be accomplished then perhaps we can avoid situations such as this where a group that should be protected simply falls through the cracks. It is my hope that with this perhaps a bit more insight will be placed into the construction of our laws so as to prevent further discrimination, whether intentional or not.
Traditional Animal Rights and Wildlife Ethics

Before we can move forward with this discourse, it is important that a thorough understanding of the animals’ rights movement be established. By viewing the historical, as well as contemporary philosophies, we can more fully grasp the current moral standing of animals in society and how this came to be. There exist today two main approaches to the subject. The first of these is a utilitarian argument put forth by Peter Singer, who uses classical utilitarianism as a base upon which he builds his case. Borrowing from the likes of Jeremy Bentham and John Stuart Mill, Singer’s utilitarianism holds true to their work, with the key exception being the inclusion of animals and their interests into the principle of maximization of pleasure and minimization of pain. By incorporating nonhumans into the equation, he is able to avoid the speciesist trap into which his predecessors had fallen. The second dominant faction which makes up debates today is Tom Regan’s deontological approach to animals’ rights. In this approach he argues in the style of Kant, stating that individuals have rights due to the inherent value they possess, which are to be respected. Because of this they are never to be treated as means to an end, but always as ends in and of themselves. In this system more credence is given to the individual rather than the species as a whole. Due to this discrepancy, Singer’s utilitarianism and Regan’s deontological ethics are often at loggerheads. Both men have contributed a great deal to the subject, however we will concentrate on the former, Peter Singer’s philosophy, as it is more pertinent to the discussion at hand.

Though it may not be as old and well-established as some other branches of philosophy, the animals’ rights debate is no less stimulating or deserving of a look than any other area. While we can see traces of it as far back as Jeremy Bentham and his utilitarianism around the nineteenth century, it is not the focus of his work, and therefore leaves much to be desired on the
subject. One thing to take away from Bentham, however, is his criteria for possessing rights, which is not based on any sort of measure of rationality as many others would have it, but rather based on a being’s ability to suffer. To him this is a much more just and inclusive measure than any intellectually based standard such as self-awareness. In his own words, “a full-grown horse or dog is beyond comparison a more rational, as well as a more conversable animal, than an infant of a day, or a week, or even a month, old. But suppose the case were otherwise, what would it avail? the question is not, Can they reason? nor, Can they talk? but, Can they suffer?”1 Through this simple shift in thought, Bentham was able to open the door for groups which would normally be excluded from discussions of rights, such as animals and other humans with lesser cognitive capabilities.

Still, Bentham did not take his utilitarianism far enough. Although he opened the door to a more inclusive system, he did not walk through it, allowing for a speciesist rather than a holistic interpretation of his work. It was not until Peter Singer took the stage in the mid-1970s that utilitarianism would throw off the shackles of anthropocentrism and include nonhuman forms of life in its equations. For Singer, just as it was for Benthem, suffering is the common denominator; to him this is the sole requirement for being a sentient creature deserving of moral consideration. He argues that the interests of sentient beings, regardless of species membership, should be given equal weight when it comes to matters which affect all parties equally. Among these matters are included life, happiness and freedom. He states that “where animals and humans have similar interests…those interests are to be counted equally, with no automatic discount just because one of the beings is not human.”2 This reasoning gave birth to Singer’s

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more inclusive version of utilitarianism, in which both human and nonhuman interests are assessed by the same standards.

By placing all sentient beings on equal footing regardless of rationality, Singer was able to eliminate the human bias which had plagued earlier incarnations of the philosophy since its inception. In this revised system, human interests are no longer immediately yielded to, which had been the case for so long. In lieu of simply pursuing human interests, one must instead find a way to aggregate all of the pleasure and pain which would arise from any given course of action, and subsequently devise a strategy which would maximize the former while minimizing the latter, in order to bring about the greatest happiness to the greatest amount of sentient beings. In his works, Singer states that he is in favor of vegetarianism, which he believes will alleviate unnecessary suffering caused on factory farms, as well as the abolition of animal experimentation, which he believes to cause more harm to those animals being experimented on than good for humankind.³

While Singer’s utilitarianism appears to be a sound philosophy, it does have some inherent problems and fails to address some key issues. Philosophers such as Mary Midgley point out some difficulties with this theory including the decision of which animals are actually capable of suffering, as well as how to weigh the suffering of these diverse sentient beings.⁴ These problems are rather glaring, as they seem to impact Singer’s theory directly. If animals which can suffer are written off as incapable of doing so, then conclusions drawn with regards to maximization of happiness are not necessarily true, or may actually be wrong altogether. This is a difficult line to draw, however, and science is pushing its boundaries daily. It could even be the case now that a great deal of creatures which have been overlooked are indeed capable of

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³ Robert Traer, Doing Environmental Ethics (Boulder, CO: Westview Print, 2009), 125.
⁴ Ibid.
suffering, but science has just not discovered this yet. If this is really the circumstance, then a great deal of decisions must be revised lest we risk an inconsistent philosophy.

The work of Aldo Leopold, a truly historic figure in the field of environmental ethics should also be discussed here. The father of modern wildlife management, Leopold had some unique ideas not only about wildlife, but about the very land as well. Published in his seminal work, *A Sand County Almanac*, is Leopold’s defining philosophy – his land ethic. This ethic states that “A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise.” From this we can see that Leopold has the utmost respect not just for animals, but for all things within the “biotic community.”

It is clear to see that the scope of this philosophy is broader than that of most others, including Singer. While Singer extends his ethics as far as those with the ability to suffer, Leopold’s ethic goes much further, encompassing not only all forms of life, but the ecosystems which they inhabit as well, and whereas Singer sought to raise animals to the status of humans by attributing sentience to them, Leopold seems to do the opposite, placing humans at the same level as all other life forms. He states that his land ethic “changes the role of Homo sapiens from conqueror of the land-community to plain member and citizen of it.”

Though one might expect Leopold’s views to essentially render him a preservationist, this was not the case. While Singer’s utilitarianism is ambiguous with regards to the suffering of

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6 Ibid., 204
wildlife, Leopold’s is much more forthcoming. He was not averse to interacting with nature, as long as his land ethic was upheld; whether this meant using the land for one’s own economic self-interest, or hunting deer to maintain a healthy herd size, so long as it was for the good of the biotic community it was allowed, and indeed encouraged. As a result of this, Leopold created a number of policies in areas such as forestry, agriculture and especially wildlife management. Regrettably, because our world is not like that of Tolkien’s Middle-earth from *The Lord of the Rings*, our forests are incapable of looking after themselves, and unlike Theodor Geisel’s *The Lorax*, they also find themselves lacking a figure which can speak on behalf of their interests. Due to these sad truths, these management policies are necessary in order to maintain health and stability in these areas.

Unfortunately, Leopold’s life was cut short when he suffered a heart attack while battling a neighbor’s grass fire, dying a year before *A Sand County Almanac* was to be published.\(^7\) At only 61 years of age, he almost certainly would have contributed more to the subject of environmental ethics had he not died prematurely. Though his life has come to an end, scholarship on his land ethic has not. Often considered the contemporary leading authority on the land ethic, J. Baird Callicott has written a great deal on the subject, including works such as *Companion to A Sand County Almanac*, and *In Defense of the Land Ethic*. As he is more or less the intellectual heir of Leopold, Callicott holds many of the same beliefs as his predecessor, including the fact that man is a part of nature, and that all acts should work towards the greater biotic good. There is more to Callicott’s philosophy than that, however. While he feels that individual members of the community possess intrinsic value and are therefore deserving of respect, he believes that their interests can be overridden if the result will be beneficial to the

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biotic community as a whole, and indeed that they should be. Such a draconian approach has led some, most notably Tom Regan, to criticize Callicott’s views as nothing more than what he calls “environmental fascism.”

Though these different forms of ethics are no doubt formidable, I feel as if none of them adequately address the problem of urban wildlife. While Singer’s philosophy could more than likely be applied to an urban setting, he seems to reserve it for animals in captivity for food and research, and not those found in our cities. Leopold and Callicott affirm the inherent rights of individuals and proclaim the magnificence of the biotic community, but do not address urban centers at all.

Fortunately, there is still hope for an adequate urban wildlife ethic. It is my belief that environmental pragmatism holds the key to this issue. Philosophers such as Andrew Light, Ben Minteer and Philip McReynolds have taken the Deweyan pragmatic tradition and applied it to environmental ethics. These same people are also beginning to apply this new environmental pragmatism to urban settings. Focused more on conflict resolution than metaphysics, this school of thought seems the best suited for dealing with the interspecific issues that arise in urban centers. By engaging in real world affairs rather than lofty debates, this viewpoint is undoubtedly the most conducive to problem solving, however this will be examined more closely later in constructing policy solutions.

*The Need for an Ethics of Urban Wildlife*

It is here that we arrive at the real crux of the matter: conflicts between humans and nonhumans. Every day a large number of interspecific conflicts arise in cities, and it is important to find effective ways of navigating these conflicts in order to assure mutual happiness. These conflicts can range from the mundane, such as birds excreting on cars, to more extreme cases
like a bear “terrorizing” a neighborhood. Raccoons knocking over and rummaging through garbage, squirrels gnawing through electrical wires, even birds defecating on cars and buildings are yet more examples of these conflicts which can cause millions of dollars in damages a year.

It is only natural for conflict to occur in urban settings. Animals which have been deprived of their natural habitats and now find themselves surrounded by unfamiliar scenes filled with cars and concrete are bound to do things that we would rather them not. Should these animals be punished for behaving as they have for countless years before human intervention? I say they should not, and to suggest otherwise would be ludicrous. You cannot expect a gopher to not dig up your yard, just as you cannot expect a coyote or any other predator to not “mistake” your outdoor cat for food. While these situations may be annoying or even tragic, the animals are simply acting on instinct.

The culprits and magnitude of these conflicts vary greatly from region to region, and some species which may pose a large problem in one area, may be a benign presence in another. Geography and climate play a large role in deciding the difficulties that an area must deal with. For instance although coyotes are a big problem in the southwest United States, accounting for 29,227 incidents between 1994 and 2003, they are essentially a nonissue in middle Atlantic states, with fewer than 330 incidents being reported during this span. Nationally, raccoons are responsible for the largest number of incidents in urban areas, with coyotes, skunks, beavers, deer, geese, squirrels, opossums, foxes and blackbirds rounding out the top ten. During this period, a total
of $550.8 million in damages were reportedly incurred due to issues with urban wildlife in the United States. Almost $400 million of this was a result of damages to personal property, while agricultural losses, human health and safety and natural resource losses accounted for $88.7 million, $50.2 million, and $14.1 million in damages respectively over the span.8

Among the more serious problems presented by urban wildlife are those which involve various forms of transportation, including airplanes. Although they have greatly altered the existing habitat, airports are still home to a great deal of wildlife, including Canada geese, red-tailed hawks and even white-tailed deer. Unfortunately, these animals and airplanes are not well-suited for one another’s presence, which can lead to some rather disastrous consequences. According a summary by Cleary et al. referenced in Urban Wildlife Management, strikes from birds and mammals on aircraft resulted in 364,626 hours of downtime, as well as over $170 million in losses between the years of 1990 and 2002.9 More seriously, however, are the deaths that can occur when a strike happens. According to Thorpe, these strikes have killed at least 190 people and have resulted in the loss of at least 52 civilian aircraft.10 Although not a common occurrence, this loss of life is still a major issue to be dealt with. Collisions between automobiles and deer also account for losses of life and money, and are much more frequent than strikes on airplanes.

We should not, however, forget that interspecific conflict is a two-sided coin. While we may think that we are the ones who are being wronged by these animals, let us stop and consider

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the effects of humankind on urban wildlife. Firstly, by building our societies we are destroying habitat which these animals were formerly dependent upon. The presence of cities does not affect all animals equally, though. To put it simply, “Urbanization, by its very nature, significantly alters the existing habitat…generalists, with their wider range of acceptable living conditions, adapt; and the interior specialists disappear.” As we can see, the mere establishment of human presence can have profound effects on nonhuman life. Other effects of urbanization include: altered biological cycles, altered reproductive rates, and reduced species diversity just to name a few. Studies have even shown that animal behavior differs in urban settings when compared to rural ones, such as great tits singing at higher frequencies when found in the latter. Constant interaction can even lead to animals such as bears or moose becoming more accustomed to the presence of humans, which can lead to some troublesome situations on occasion. In fact humans, not animals, may be responsible for some of the behavior such as this which we see as worrying. According to Adams et. al “More often than not [urban wildlife’s] exploitive behavior is aided and abetted by humans who, directly or indirectly, invite wildlife into their backyards or homes.” People often forget that while it may be their backyard now, it was home to bears and the like for countless years before our arrival, and so we are the ones who have really intruded on them.

To assess the usefulness of the two prevailing environmental ethics as stated above, those being Singer’s utilitarianism and Leopold’s land ethic, I will present a hypothetical conflict. Although simple and a bit crude, I believe that this example shows the inefficacy of these current

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philosophies, and the need for a new one, through which we can more adequately solve these interspecific conflicts. Imagine, for example, that a new road were to be built between two nearby cities, but in order to construct this road a patch of forest, uninhabited by humans, must be cleared. This project makes sense economically and socially for humans, as it will allow for easier travel between the two, with the hope of some sort of financial growth. Unfortunately, the animals inhabiting this stretch of forest will not enjoy the same benefits. Firstly, the clearing of the forest for the road will decrease the amount of livable habitat for the species who call the area home. This decrease means that the carrying capacity of the area will now be reduced, leading to declines in population. The construction will also decrease the amount of secluded interior habitat, and increase the area of the fringe habitat, resulting in declines in populations of certain species’ who require this interior habitat to thrive. This can lead to the rise of generalists, and the fall of specialists, as previously discussed. Additionally, population fragmentation and the disruption of social structure of those groups inhabiting the area could occur. It is also safe to assume that the increased traffic would result in the degradation of the remaining habitat due to vehicle emissions as well as any sort of litter being discarded along the stretch. Noise and light pollution also present problems, and could disturb the animals’ daily habits. Lastly, the increase in automobile traffic would undoubtedly lead to a rise in animal mortality rates. In certain areas activities such as hunting and poaching provide an additional threat to animal life.\textsuperscript{15}

Now we will assess the situation using our current ethics, starting with Singer’s utilitarianism. Because it is founded on the principals of the greatest good for the greatest number and the maximization of pleasure and minimization of pain, we must first take an inventory of all of those who are affected by this project, human and nonhuman alike. It is quite apparent that the primary stakeholders in this process are the inhabitants of both cities, as well as

\textsuperscript{15} Adams, \textit{Urban Wildlife Management}, 123.
the animals which occupy the stretch of forest that may soon be demolished. There are of course others who are affected by this (truckers or other thru traffic, migratory animals and the like), however to keep things simple they will be omitted from the equation. We must next examine the interests at stake. For humans, these interests include their economic well-being, as well as improved convenience. For the animals on the other hand, this construction could mean the loss of their lives. The human population of the cities would more than likely outnumber the animals dwelling in the area, and so in this case human interests would seem to trump those of the nonhumans. Or this would be the case if not for Singer’s stress that we not cause animals any undue stress or harm, which this construction would appear to do. Since this would cause undue suffering, according to this utilitarian view, the creation of this road would not be acceptable. If for some reason there were only a hospital in one of the cities, I believe that Singer would then approve of the construction as it would alleviate more pain than it would cause.

Although Leopold was in favor of using land in order to promote human economic self-interest, this was only the case if it was in accord with his other principles, namely his land ethic. In this case it seems clear to me that the construction of this road does not act in accordance with it, as it does not promote the integrity, stability or beauty of the biotic system, actually appearing to do the exact opposite by destroying parts of it and denigrating what remains. I really cannot see a situation in which Leopold would be in favor of anything resembling this, unless the construction somehow served to keep a population in check at a healthy level or something of the sort.

These philosophies were not designed for use within an urban context, however we see that they can still be applied to this setting, if somewhat unskillfully on my behalf. As a corollary to this, it becomes apparent that Singer’s utilitarianism is at least somewhat more flexible than
the land ethic put forth by Leopold. Due to this elasticity, utilitarianism seems as if it is better suited for cases of conflict in urban areas, and also for interspecific conflict as a whole. Still, as nice as it would be to use utilitarianism to solve these clashes, it simply isn’t practical. The sad reality is that a great deal of humans do not recognize the interests of animals, urban or otherwise, as being equal to their own, and so will always put their needs, no matter how trivial, before others, even if it means their suffering. It is this fact that really solidifies the need for a new ethic with which we can effectively and fairly navigate situations such as these.

Applying Wildlife Protection Laws to Urban Settings

Today, animals enjoy a much greater number of rights and protections that they have in the past. Society’s evolving notions of animals’ rights and our duties to them has undoubtedly played a role in this change, and is clearly reflected in the various pieces of legislature passed over the last half century which guarantee these rights to them. The USDA’s Animal Welfare Act which was originally passed in 1966 and has been amended since then, the Endangered Species Act of 1973 and the myriad state and local anti-cruelty laws have done much to aid our fellow earthlings. These laws were instituted in order to ensure animals in the wild as well as those on factory farms receive at least a bare minimum of rights. Do these laws guarantee these same rights to animals in urban settings? And if so, to what extent? We will now take a closer look at them to see just what they do provide for these oft-overlooked creatures.

The Endangered Species Act, passed by none other than Richard Nixon, is one of the most influential laws pertaining to animals’ rights. This law not only protects those species which it lists as endangered or threatened, but also provides for “the conservation of ecosystems
upon which threatened and endangered species of fish, wildlife, and plants depend.”¹⁶ The act also “prohibits unauthorized taking, possession, sale and transportation or endangered species,”¹⁷ and states that any parties found guilty of violating the law are subject to penalties amounting to $50,000, a year of imprisonment, or both.¹⁸

From this we gather that all animals, whether urban or wild, are equally protected by this act. Or that would be the case, if not for a provision put forth in 1978, which states that an area “can be excluded from critical habitat designation if an economic analysis determines that the benefits of excluding it outweigh the benefits of including it unless failure to, designate the area as critical habitat may lead to extinction of the listed species.”¹⁹ While the final clause is comforting, the initial one is equally alarming. If habitat critical to the survival of a species can be done away with simply so that a profit may be obtained, what does that say about us as a species? If nothing else, it shows that despite our seemingly altruistic intentions, we still put our interests above those of all other species – so much so that we allow our peripheral interests, which is in this case, as in many others, economic gain, to trump their most basic ones, such as the right to life.

Unfortunately, in urban settings where land is at a premium, it seems as if economic interests will win out almost every time. The snail darter, a fish found only in the Little Tennessee River, is all too familiar with this process. The fish was recognized as an endangered species, and as the river was its only known habitat, it was designated crucial to the fish’s continued survival.

Unfortunately for the snail darter, however, Tellico Dam had chosen this site to build a dam. A

¹⁷ Ibid.
court case followed, with the end result being victory for the dam, and seeming damnation for
the snail darter.\footnote{FindLaw | Cases and Codes, FindLaw, http://laws.findlaw.com/us/437/153.html.} As we can see from this case, endangered classification will not always
necessarily protect a species if it stands in the way of economic self-interest, which is a truly
depressing fact.

If a species cannot find safety in the Endangered Species Act, perhaps they can find it
elsewhere, like the Animal Welfare Act. Sadly, this does not seem to be the case either. While
the law does provide a multitude of guidelines related to “minimum standards of care and
treatment [which should be] be provided for certain animals bred for commercial sale, used in
research, transported commercially, or exhibited to the public,” it doesn’t appear to cover much
title7/html/USCODE-2009-title7-chap54.htm.} Its scope essentially seems to be limited to domestic animals such as dogs and
cats. In fact, the act’s notion of what an animal is appears quite narrow, stating

> The term “animal” means any live or dead dog, cat, monkey (nonhuman primate
mammal), guinea pig, hamster, rabbit, or such other warm-blooded animal, as the Secretary may
determine is being used, or is intended for use, for research, testing, experimentation, or exhibition
purposes, or as a pet; but such term excludes (1) birds, rats of the genus Rattus, and mice of the
genus Mus, bred for use in research, (2) horses not used for research purposes, and (3) other farm
animals, such as, but not limited to livestock or poultry, used or intended for use as food or fiber,
or livestock or poultry used or intended for use for improving animal nutrition, breeding,
management, or production efficiency, or for improving the quality of food or fiber.\footnote{Ibid.}
From the looks of things, this act does not do much, if it does anything at all, to help out urban wildlife.

With two of the biggest safeguards for animals lacking or inapplicable, we will now direct our attention to more local laws, more specifically those of New York State. If these laws do not pertain to urban wildlife, then their legal defenses are all but exhausted. Agriculture and Markets Law § 353 which applies to “all animals, including farm animals and wildlife” states that

A person who overdrives, overloads, tortures or cruelly beats or unjustifiably injures, maims, mutilates or kills any animal, whether wild or tame, and whether belonging to himself or to another, or deprives any animal of necessary sustenance, food or drink, or neglects or refuses to furnish it such sustenance or drink, or causes, procures or permits any animal to be overdriven, overloaded, tortured, cruelly beaten, or unjustifiably injured, maimed, mutilated or killed, or to be deprived of necessary food or drink, or who willfully sets on foot, instigates, engages in, or in any way furthers any act of cruelty to any animal, or any act tending to produce such cruelty, is guilty of a misdemeanor.23

Finally, some hope for our furry friends! Even these laws have a bias, though. For instance, if one is found guilty of poisoning a horse, mule or domestic cattle, the crime is classified as a felony, however if the crime is committed against any other animal, it is simply a misdemeanor.24 This bias is also evident elsewhere, as in the following section which describes

the penalties for “interference with or injury to certain domestic animals.” § 361 establishes more protections for horses, mules, dogs and “other domestic animal[s]” but leaves out provisions for all other animals. 25

Much like our current prevailing ethics, our animal welfare laws appear to be lacking for two main reasons. Firstly, the laws reek of anthropocentrism. Perhaps the most important law with for the protection of animals, the Endangered Species Act, has within it a provision which allows for the interests of humans to dominate those of other animals, even at the cost of their precious habitat if it came down to it. The second problem inherent in these laws is the bias for one group of animals over another which can be found in them. The New York State anticruelty laws plainly value domesticated animals over all others, with the Animal Welfare Act exhibiting very similar tendencies. The Endangered Species Act, on the other hand, seems to more easily safeguard those animals which are furthest away from human influence. A few simple amendments is all it would take to transform these laws into ones which truly protect nonhumans, rather than only protecting them when doing so would not inconvenience us.

*Case Study: Bronx Environmental History and the Return of the Beaver*

The Bronx may seem like the last place on Earth where one would discuss the topic of animals’ rights – specifically those of local wildlife – however, that may be the reason why it is also the perfect place to begin our discussion. Now generally regarded as more or less an urban wasteland stripped of any semblance of nature, the Bronx was once a thriving natural ecosystem (as hard as that may be to believe for some). Few may realize or be aware of this fact, but it was actually once the case. The Bronx River in particular, which happens to be New York City’s only

25 Ibid.
freshwater river, \textsuperscript{26} was a remarkably diverse region with a wealth of species inhabiting it and its banks. Plants, animals, and humans alike depended on the river for countless years to provide them with all that they needed to both survive and prosper. In more modern times, however, the river finds itself in a much less flattering state; its waters are not what they once were.

The modern history of the Bronx goes back hundreds of years, to the founding of the British colonies in North America, however it was inhabited long before then. The Lenape, also known as the Delaware, had occupied the area well in advance of the Europeans. These semi-nomadic indigenous people relied on hunting and gathering for sustenance, and also grew a variety of crops such as corn, squash and beans. \textsuperscript{27} The Bronx River, known to them as the “Aquehung” – usually translated as “fast stream flowing above a high bluff” – provided them with fish, as well as a source of transportation. \textsuperscript{28} In all, the Lenape appeared to be a fairly “typical” nomadic Native American people.

Things changed dramatically in the seventeenth century however, with the arrival of European settlers following the voyages of iconic explorers like Giovanni da Verrazzano and Henry Hudson. Dutch settlers were some of the first to establish themselves in this new world, taking root in Manhattan – then known as New Amsterdam – with a smattering of settlements edging further out. Jonas Bronck, a Dutchman, arrived in this new colony in 1639, settling himself in the Bronx on a five hundred acre farm between what is now 151\textsuperscript{st} Street and the Harlem and Bronx Rivers, \textsuperscript{29} with his wife and a number of servants. \textsuperscript{30} Though his stay would be

\textsuperscript{26} Maarten de Kadt, \textit{The Bronx River: An Environmental & Social History} (Charleston: The History Press, 2011), 3.
\textsuperscript{27} Ibid., 14.
\textsuperscript{28} Ibid., 15.
\textsuperscript{29} “Lloyd Ulan’s History of the Bronx River,” \textit{Bronx River Alliance}, http://bronxriver.org/?pg=content&p=abouttheriver&m1=9&m2=58.
\textsuperscript{30} de Kadt, \textit{The Bronx River}, 21.
short-lived, with his death coming but four years later, his legacy still lives on in the name of the river along which he lived.

As time went on, the river grew in importance and became more populated. As more residents began to occupy the area along the river during the 1700s, they brought with them more changes. At this time, sawmills and gristmills were constructed by residents, with the first dam also making its way onto the river in the same century.\textsuperscript{31} The construction of this dam marked the beginning of the river’s reshaping, which would continue well into the twentieth century with the construction of the Cross Bronx Expressway. Industry along the river began to increase during this time, with many inhabitants using the river as a source of power in order to produce various goods including “tobacco (snuff), paint, cotton and cloth, rubber products and gun powder” and also using its power for “grinding grain and cutting wood for growers and harvesters.”\textsuperscript{32} The Old Stone Mill, which was later renamed the Tuckahoe Cotton Factory, and the Lorillard Snuff Mill were just two of the dozen or so mills which were dependent on the river for power.\textsuperscript{33}

The Industrial Revolution brought with it a great increase in population across the entire nation, and the Bronx was no exception. Between the years of 1800 and 1860 the county’s population increased over thirteen fold from 1,755 to an excess of 23,000, and just two years after its incorporation into New York City in 1898 its population had exploded to over two hundred thousand inhabitants.\textsuperscript{34} How was such an increase possible? The primary reason was the advent of the steam engine, and subsequently the railroad. This form of transportation was a great improvement over previous ones, allowing for people to travel greater distances at a much

\textsuperscript{31} “Lloyd Ultan’s History,” Bronx River Alliance.
\textsuperscript{32} de Kadt, The Bronx River, 29.
\textsuperscript{33} Ibid., 33.
\textsuperscript{34} Ibid., 47.
faster and steadier pace. Because of this, the distance between locations both physically and temporally seemed to shrink, making more remote places such as the Bronx a more accessible and viable place to live. The invention of the automobile, the construction of bridges, expressways, and a subway system which linked the borough to the other parts of New York City, as well as a sewer system allowed the Bronx to continue to grow. Today the Bronx has a population totaling over 1,300,000 as of the 2000 census, more than seven times what it was at the beginning of the previous century.

The borough has come a long way since its colonial roots. It is now home to the Bronx Zoo – a world-famous institution – the Bronx Botanical Gardens, several leading universities including Fordham University, as well as Lehman University, the New York Yankees and a rich culture. Its long history has been forgotten by all but a few, but one can catch glimpses into the borough’s past simply by taking a trip down the length of the river.

Like so many rivers in this country, the Bronx River has had, and continues to have, its own share of problems. Fortunately, there are those who feel it is their duty to protect the waterway. Starting in the 1970s, alongside the emergence of the environmental movement following Rachel Carson’s *Silent Spring*, and amidst numerous acts of pro-environmental legislation passed by the president at the time, Richard Nixon, we can see the roots of advocacy groups determined to defend and restore the damaged resources and communities they found themselves now inheriting.

For the most succinct way of assessing the river’s health over the past three hundred years we can look at the different benchmarks established over this time span. The first benchmark was written in 1799 by engineer William Weston who concluded that the water was

35 Ibid.
actually good enough to drink.\textsuperscript{36} The second benchmark put forth by the Bronx Valley Sewer Commission in 1896 was a bit more unpleasant, claiming the river had become an “open sewer” due to “unsanitary and foul-smelling contributions” from locations such as Bronxville.\textsuperscript{37} Needless to say, the water was no longer fit for consumption and its recreational usefulness was now dubious at best. 1980 saw the publication of the third benchmark by Bronx River Restoration. This report documented the discharging of raw sewage into the river at multiple sites in a qualitative manner, once again painting a disparaging image of the river.\textsuperscript{38} From these benchmarks it is clear to see just how much the river had been degraded over time. Habitat destruction, extinctions, and all kinds of pollution were all results of the past 300 years of European influence.

The history of the river’s use goes back to pre-Colombian times, but happily its history of damage and pollution does not – it wasn’t until the Industrial Revolution was in full-swing that the river’s condition started to worsen. The effects of “bleach, gunpowder, tannery, stone, paint and rubber mills…were likely to have caused harm to the river.”\textsuperscript{39} While the early industrial usage did little to damage the river, the production of manufactured goods like paint and rubber were not as benign. The rubber produced by the Old Stone Mill “presented a more serious problem” when examined next to the comparatively “small amount of chemical waste [which] would have been diluted” by the river.\textsuperscript{40} The Bronx River Paint Company was also another early culprit, poisoning the river with the lead-based paint which it produced.\textsuperscript{41} This lead would make its way into the species inhabiting the waters, and progressively accumulate as one moved up of

\textsuperscript{36} Ibid., 28.  
\textsuperscript{37} Ibid., 52.  
\textsuperscript{38} Ibid., 70.  
\textsuperscript{39} Ibid., 41.  
\textsuperscript{40} Ibid., 34.  
\textsuperscript{41} Ibid., 37.
the food chain in a process known as bioaccumulation. This process would leave all animals, but especially the apex predators in the area with elevated levels of lead far beyond their normal amounts. The problem of bioaccumulation persists to this day in a great number of ecosystems. The problem is not limited to lead - other harmful chemicals such as PCBs and other heavy metals also accumulate and can have similar damaging effects. The health risks associated with these include increases in lung cancer, and even death. As a result there are often limits or bans on eating animals within certain populations in order to avoid these health issues. A manufactured gas plant in operation at the end of the nineteenth and beginning of the twentieth century even released “cyanide and other heavy metals” into the river! Nearly a century later some of these contaminants can still be found in the river, causing major concerns for residents and highlighting just how persistent and destructive earlier industrial practices had been.

Population and infrastructure growth resulted in drastic changes to the land. In many areas what was once soil was now asphalt, and even the course of the river was changed. As a result of increased impermeable surface cover, during rainstorms all forms of waste on the ground (including both solid waste and chemicals) can easily be swept into the river, causing pollution and even blockages. The straightening of the river, known as channelization, can make it less adept at handling pollutants, and also increase erosion.

The introduction of the railroad brought with it still more harm to the Bronx ecosystem. Trains billowing smoke were not uncommon in nineteenth century paintings, which depicted these metal monsters roaming the countryside. The construction of the tracks upon which it operated certainly didn’t do the river any favors either. In order to accommodate the tracks, the river had to be straightened. This modification “increased the river’s velocity, decreased its

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mixing qualities and therefore reduced its ability to absorb pollutants.\textsuperscript{43} Later, the construction of the Bronx River Parkway would follow the railroad’s lead and straighten the river even more, further worsening its ability to absorb waste.\textsuperscript{44}

Increasing populations also presented new problems. With the large population of the Bronx after the turn of the twentieth century, human waste was becoming a problem for the river for the first time. Although this excrement is organic in nature and can be washed away and absorbed by the environment, this is only the case up to a certain point. The amount of waste making its way into the river was too great for it to handle. The problem of runoff only exacerbated the problem, as waste from Westchester and other areas in the Bronx River’s watershed flowed down and accumulated.\textsuperscript{45} New York City’s wastewater management system is also responsible for another significant source of pollution on the river. Because of the “combined sewer overflow” system, much untreated wastewater is able to find its way directly into waterways such as the Bronx River when it rains, resulting in elevated levels of fecal coliform.\textsuperscript{46}

It is with this background that we are introduced to the saviors of the river. The 1970s saw a great number of environmental advocacy groups materialize in order to reclaim and protect the United States’ myriad waterways and forests. Although such groups had existed since the turn of the twentieth century (the Sierra Club, for one), they seemed to really come back during this period of environmental awakening. Undoubtedly influenced by the activism which characterized the 1960s, these groups were not afraid to get their hands dirty.

\textsuperscript{43} De Kadt, \textit{The Bronx River}, 45.
\textsuperscript{44} Ibid., 58.
\textsuperscript{45} Ibid., 57.
\textsuperscript{46} Ibid., 106.
The Hudson, the Bronx River’s bigger, older brother, had its share of energetic stakeholders who formed notable activist groups such as Riverkeeper, which worked to maintain and improve the river’s health while simultaneously defending against any and all threats. Despite the Hudson’s tremendous size, they were able to work wonders and win cases in favor of the river against what seemed like impossible odds. Their biggest victory saw them take down Exxon-Mobil – one of the biggest companies in the world! They’ve also helped to clean up the river and block a number of projects which would have been detrimental to its health.

Not to be outdone, the Bronx has also established a number of environmental advocacy organizations. In 1974, Bronx River Restoration was formed, comprised of “local community residents” who wished to clean up their river.47 Their key accomplishments include efforts to clean up the West Farms section of the river, and also leading the creation of the river’s Master Plan in 1980 which “established a vision of what the Bronx River should look and smell like as an urban river from its source at the Kenisco Dam to its mouth at the East River.”48 Bronx River Restoration was followed by the Bronx River Working Group in 1997 and was led by Jenny Hoffner, and a local community leader named Majora Carter. The BRWG sought to reclaim the river by working with other organizations, both local and national. The Group focused on four key areas: ecology, education, greenway and outreach, and stressed community involvement, through which they sought to engage stakeholders and incorporate them as an active part of the river’s cleanup.49

47 Ibid., 70.
48 Ibid., 71.
49 Ibid., 75.
The Bronx River Working Group was only meant to be a short-term project to set the table for a more long-term organization of community leaders who would carry the torch for years to come. In this respect the Group certainly succeeded. After a brief but influential four year existence, it gave way to the Bronx River Alliance, the Bronx River’s premier environmental advocacy group. The Alliance was formed in 2001 and remains active to this day. Their mission is to essentially carry on the work of their predecessors, or in their own words, to “serve as a coordinated voice for the river and work in harmonious partnership to protect, improve and restore the Bronx River corridor and greenway so that they can be healthy ecological, recreational, educational and economic resources for the communities through which the river flows.”

Since its inception, the Bronx River Alliance has removed a nearly immeasurable number of items and debris from the river, including 26 cars and 317 tons of garbage, they have also planted over 84,000 trees, shrubs and grasses, renovated and opened a number of parks, and published a myriad of guides on management and recreation just to name some of their

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accomplishments. Community involvement and support has been crucial to their achievements. The community has helped in a number of ways, from volunteering to help remove an invasive species along the river’s banks, to providing input in the decision-making process of larger-scale projects. Through the combined efforts of the Bronx River Alliance and their predecessors, the Bronx River is looking better than it has in years. Humans aren’t the only ones noticing the improvement of the river either; life is returning to the river in all forms. Beavers, which are on the city of New York’s seal and are the state’s official animal, have made their way back to the river for the first time in 200 years.

Beavers are moderately sized mammals, which until the late eighteenth century had thrived on the North American continent. Weighing up to 65lbs, and measuring up to 35”, these animals have a number of defining characteristics including big incisors, webbed feet, and their trademark tails which can be up to 10” long and about 6” wide. The characteristic which has garnered it the most attention, however, has to be its rich fur. Europeans began trapping beavers and selling their pelts as soon as they arrived on the continent, a practice which continued until the species was essentially extinct east of the Mississippi in 1800. These pelts, which could be made into various articles of clothing, were highly desirable and very valuable. Sometimes pelts were even used as currency, with their worth being equal to 16 guilders.

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51 de Kadt, The Bronx River, 83.
55 Ibid.
Fortunately, populations have rebounded, and beavers now call a great deal of their former range home once again.\textsuperscript{56} While this undoubtedly pleases wildlife conservationists and enthusiasts, not everyone is content with having beaver around, as their behavior can be off-putting at times. Beavers, much like humans, modify their habitat to suit them. This modification includes the construction of dams and lodges, which can be problematic as they can sometimes plug up culverts or cause flooding.\textsuperscript{57} They also feed on leaves, twigs, and most noticeably the bark of trees, which can cause areas to appear unsightly to some.\textsuperscript{58} Between the years of 1994 and 2002, beavers were cited as being the fourth most problematic urban wildlife species in the United States, resulting in a total of 45,958 incidents being reported across the country.\textsuperscript{59} With behaviors such as these, it’s easy to see how conflicts can arise between beaver and man.

Luckily for beavers, they enjoy some protections granted by New York State law. The New York State Environmental Conservation Law, also known as the Fish and Wildlife Law, states that it is illegal to disturb a beaver dam or den without first getting a permit from the DEC,

\textsuperscript{56} Ibid.
\textsuperscript{57} “Beaver,” \textit{Department of Conservation}.
\textsuperscript{58} Ibid.
with the same being true of the removal of beavers themselves. Although not the most comprehensive laws, they at least afford the beavers the right to “life, liberty and the pursuit of happiness,” just as we were granted by our forefathers (though the beavers’ rights are granted with caveats). In this way, the DEC acts as a filter for the various actions which can be taken against beavers, however there should be more to the process than simply granting or denying a permit. Based on our previous discussion, these animals do not seem to be covered by the Animal Welfare Act, although they do fall under the purview of the Endangered Species Act (should the species ever become threatened or endangered), as well as the New York State anticruelty statutes.

Through the combination of these laws, I feel that the beaver population of New York State is protected at least somewhat adequately, but I also feel that more than a permitting process and some laws are needed to navigate the large number of human-beaver conflicts. I am hopeful that our new urban wildlife ethic and some minor modifications to these laws, or perhaps the institution of a few new ones, will be enough to grant beavers the rights that they deserve as fellow members of the community.

Policy Solutions

After exposing the problems inherent in the prevailing environmental ethics of today, as well as those found within the lackluster laws which serve to protect animals both wild and urban alike, and subsequently detailing just a fraction of what humans have done over history to degrade the environment and put other species at risk, we finally arrive at what I hope are the

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answers to these troubles. These solutions can be broken down into three key areas in need of reforms and improvements, with those being: philosophy, legislature and education.

As we have seen, although utilitarianism as stated by Peter Singer and Aldo Leopold’s land ethic can be instrumental in resolving interspecific questions, they still feel inadequate, tending more toward philosophical debate rather than real world problem-solving thanks to their lofty ideals. Activists often “express impatience with professional environmental ethics,” however it is not just them who “doubt the relevance of academic environmental ethics to real world disputes.”\(^{61}\) Therefore instead of these theories which are seen by many to be more than exercises in theory, I advise those put forth by environmental pragmatists such as Andrew Light, Philip McReynolds and Ben Minteer should be implemented. These philosophers have taken the Deweyan model and applied it to the field of environmental ethics, resulting in a very reasonable and practical approach to problem-solving in these areas. Minteer believes that

> this pragmatic articulation of ethics as a process of experimental inquiry…suggests that we should address ethical conflicts such as that between environmental and animal ethics as practical disputes requiring cooperative investigation and a deliberate method of problem solving, rather than abstract philosophical debates over questions of considerability and comparative moral significance.\(^{62}\)

He also states that this ethical inquiry is a “more creative and dynamic process,”\(^{63}\) which seems better suited for urban environments where change is constant. This inquiry of which he speaks refers to Dewey’s approach to conflict resolution, which involves a number of steps. In his model, one must first recognize a situation as problematic before moving on to the next step,


\(^{63}\) Ibid., 110.
which involves the “analysis of the problem context and the creative generation of hypothetical situations” which may “resolve the unsettled situation.” Following this was the appraisal of each solution’s “ability to resolve…the troubled situation at hand,” and then finally judging which course of action was the most effective and executing it. The decisions made are always subject to change, and so must be constantly reassessed and readjusted in order to ensure that they remain the best solution to the problem. This method of conflict resolution puts an “emphasis on…adjust of the negotiation process itself…tolerating different views of good…and democratic discussion.” In essence, environmental pragmatism is more of a tool for conflict resolution than it is a philosophy as such, which makes it ideal for use in situations involving the competing interests of humans and nonhumans. To Minteer, this approach would reconstruct “the animal rights – environmental ethics debate as a series of practical disputes…in specific problematic situations rooted in time and space,” which would move “environmental ethics more squarely into the realm of environmental and social practices” with the result being increased community problem solving and public decision making. This shift in conflict resolution to the community will ensure a more open and flexible resolution to any conflicts which arise, increasing the benefits and satisfaction of those involved. However, this solution only works if we view nonhumans as equal members of our community, a process which can be achieved through Philip McReynolds’ concept of overlapping “horizons of meaning,” which result from our sharing of “similar interpretations of specific situations.” McReynolds argues that when we do this, we enter into community with these nonhumans, and it is in the context of

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64 Ibid., 106.
65 Ibid.
66 Ibid., 112.
67 Ibid., 114.
69 Ibid., 75.
this community which individuals are granted moral standing, \(^\text{70}\) which is necessary for conflict negotiations. \(^\text{71}\) Through the combination of these two theories, we see that animals become a part of our community, and as fellow community members, they then become a part of the Deweyan method of conflict resolution which Minteer has laid out. With nonhumans now viewed as beings of equal moral standing, human interests can no longer trump theirs, leading to a truly just and fair way of navigating conflicts between the two groups once and for all. Furthermore, the flexibility of the negotiations process and continued revision of the decision guarantee that neither group will be at a serious disadvantage as the result of changing conditions.

With a restructuring of our ethics now in place, we may now turn our attention toward the amendment of our existing laws. Fortunately, resolving this issue will be much less taxing intellectually. Firstly, the anthropomorphic provisions in these laws, most notably in the Endangered Species Act, must go. We can no longer sacrifice animals for the sake of economic gain, especially those which are in most need of our help to ensure their continued survival. Secondly, the bias within these laws must come to an end. It is not possible to justify one animal’s life as being worth more than another’s; a horse and a beaver are both deserving of our respect, and so should be subject to the same rights. For this reason I feel that the punishments and protections granted in the New York State anticruelty statutes should be universal, rather than privileging a select few. The Animal Welfare Act should also be amended to include all animals, and not simply those used for commercial purposes, or an equivalent law should be created to guarantee equal or similar rights to those not covered by it.

With these methods of dealing with disputes now in place, we must focus on how to prevent them from happening in the first place. It is here that the subject of education takes on a

\(^{70}\) Ibid., 67.
\(^{71}\) Ibid., 77.
very strong role. As humans and nonhumans are coming into conflict and contact more than ever before, it is important that a more comprehensive understanding of our fellow earthlings is achieved so that if issues do arise, proper steps can be taken to handle them. Many problems stem from miscommunication or misinterpretations of animal behavior. Humans have a tendency to think that animals “want to be friends” or that they would be much happier living with humans rather than being exposed to the hardships of the natural world. In cases such as these attacks or other unexpected consequences may occur. In order to avoid this, the public should be educated on animals and behaviors, at least with regards to those in their immediate vicinity. By better understanding the needs and actions of animals, a great deal of conflicts can be avoided. Also worth noting is that the public is often unaware of which agencies they should report issues to, and also that people “will attempt to find their own solutions to human-wildlife conflicts when they are unable to get professional help.“72 When people take it upon themselves to act instead of reporting to the proper authorities, the results can be catastrophic, and even illegal. It is therefore my opinion that the public should not only be educated about the animals which they may come in contact with, but the organizations which exist to manage these conflicts as well, whether this be through a community workshop or some other means.

There is actually a provision within New York State’s Educational Law which pertains to the instruction in the humane treatment of animals in schools. Section 809 states that

The officer, board or commission authorized or required to prescribe courses of instruction shall cause instruction to be given in every elementary school under state control or supported wholly or partly by public money of the state, in the humane treatment and protection of animals and the importance of the part they play in the economy of nature as well as the necessity of controlling

the proliferation of animals which are subsequently abandoned and caused to suffer extreme
cruelty. Such instruction shall be for such period of time during each school year as the board of
regents may prescribe and may be joined with work in literature, reading, language, nature study
or ethnology. Such weekly instruction may be divided into two or more periods. A school district
shall not be entitled to participate in the public school money on account of any school or the
attendance at any school subject to the provisions of this section, if the instruction required hereby
is not given therein.73

This quotation clearly states that public schools are required to provide such instruction, and if
they do not, then they are to be deprived of funding. This does not seem to be the case, however.
Anecdotal evidence which I have gathered from employees within the Department of Education,
as well as those currently studying to become educators indicates that this is not the case in their
schools, nor have they ever heard of such a provision. If there were a way of enforcing this
provision, then I would certainly be in favor of it as I feel that the children of the State of New
York would greatly benefit from such instruction.

The public are not the only ones in need of education, however. Studies on the subject of
urban wildlife management suggest that the infrastructure for this discipline is lacking, citing
deficiencies in the number of colleges and universities which offer programs pertaining to the
subject.74 These studies also point out that agencies and universities are “relying on conventional
management philosophies and skills to address urban wildlife management issues,” that they are
not putting in enough effort to resolve issues dealing with urban wildlife, and also that they are
actually “oblivious to present and emerging urban wildlife management problems.”75 We can see
that the institutions which we rely on to solve these problems are not without some themselves.

73 “Humane Ed Laws | Heart,” Human Education Advocates Reaching Teachers,
74 Ibid., 43.
75 Ibid., 45.
To remedy this, a greater focus should be placed on urban wildlife management, which will assuredly become more essential as time goes on. This can be done through universities offering more courses on urban wildlife management as well as more degrees on the subject.

Increased community involvement with their surrounding environment is also never a bad thing. Volunteering with groups such as the Bronx River Alliance or other local environmental advocacy groups can help to connect one to their surroundings, and foster a greater appreciation of them. With any luck this increased respect will lead to small behavioral changes such as less littering, or perhaps even larger ones such as increased advocacy for local resources and wildlife. Volunteering on its own often does not garner much enthusiasm, so perhaps a small, annual tax break can be granted to those who take an active part in maintaining their community in order to incentivize it.

These steps all serve to address more general concerns of interspecific conflict, but what about more specific problems, such as our beaver returning to the Bronx River? How can these imminent conflicts be addressed? Happily, organizations such as the DEC have already established guidelines. To protect against the problem of unsightly trees due to beavers feeding on them, their suggested course of action is simply to build a fence of at least 36 inches around any trees deemed to be at risk from such behavior.\(^\text{76}\) This problem can also be solved a bit more creatively by providing ample nourishment for the beaver by supplying it with any trees or limbs of trees accumulated as a result of trimming or construction. In this way the beaver does not damage local resources, or go hungry, and the cost is simply that of transportation rather than the construction and maintenance of fences. The blocking of culverts is solved through the building of culvert guards which protect against any sort of natural debris or beaver activity from plugging them. Finally, the avoidance of flooding can be achieved through the construction of

\(^{76}\) "Nuisance Beaver,"  Department of Conservation.
water level control devices and beaver pond levelers, which serve to “minimize current flow, and reduce the sound of running water,” which are the “most important stimuli that beaver respond to when building or repairing dams.”\textsuperscript{77} In order to maintain healthy beaver populations, the DEC also allows for the trapping of beaver during certain designated seasons. While I do not take issue with this, as it is done in the best interest of beavers and humans alike, I do find a problem with the methods of capture which are permitted. Foothold traps and cables essentially kill the beaver by drowning it,\textsuperscript{78} causing much undue stress to them, or any other animal which finds itself ensnared in such contraptions. This seems needlessly malicious, and should be done away with in favor of more human methods of capture or killing. Relocation should also be the primary response when possible.

\textit{The Hope of the Future}

In this discourse we have touched upon a great number of topics and covered centuries’ worth of thought on topics such as the animal rights movement. From Bentham’s beginnings, to Singer’s modifications and finally to the newly emergent environmental pragmatists, the debate has certainly come a long way. Animals have gone from being little more than machines or resources to be exploited ruthlessly by man, to being fellow members of the moral community, worthy of the same respect and consideration as humankind. This transformation was due to the evolution of thought of society and their concern for the wellbeing of nonhumans, which led to laws such as the Endangered Species Act and other pieces of anticruelty legislation to be passed. These laws, although tremendous leaps forward, still leave much to be desired, although I am

\textsuperscript{78} “Nuisance Beaver,” \textit{Department of Conservation}. 
optimistic that in time they will be amended to more fully protect the other earthly beings which inhabit this planet. With the inadequacies of these early theories and statutes exposed, the door has been opened for more modern and progressive policies to take root. Suggestions for revisions in philosophy, legislature and within the educational system were all done in order to promote greater equity and understanding between humans and other species which have traditionally been viewed as inferior.

Hopefully, these new policies will serve to help complete the transition of nonhumans into full-fledged members of the community and liberate them from their status of second-rate citizens. Such a transition is hardly something new, as other groups such as blacks and women have gone through very similar struggles in the past. These groups, who were also formerly looked down upon, now enjoy the same rights as those who had formerly oppressed them. To even think of restoring either to their former subordinate status and restrict their rights would be met with great public outcry. Why then, should we allow nonhumans to conditions which we would not wish for ourselves? The status of animals must change, and it will – it is only a matter of time before we come to accept them as members of our society wholeheartedly and unconditionally. If this trend continues, which I feel it will, then it is only a matter of time before we find ourselves finally fulfilling Paul Taylor’s dream of biocentric egalitarianism. That day cannot come soon enough.
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