What is Wild?
Adam Perou Hermans

A thesis submitted in partial fulfillment of the requirements for the degree of
Master of Science Communication

Centre for Science Communication, University of Otago, Dunedin,
New Zealand

December 2010
What is Wild?
Abstract

The extinction of species and loss of wilderness are critical issues that demand our immediate attention. Much has been written about these issues. This thesis addresses a related issue, ‘wild’ animals losing their ‘wildness’. Just as we discuss how to keep wilderness wild in order to save it, we should we begin a similar discussion for wild animals. Zoos keep animals. If we want wild animals, we’ll have to be clear what makes them wild.

We tend to think of wildness as a quality, i.e. a characteristic of a wild animal. A review of pertinent literature and common usage of the term reveals that we (at least in the English language) associate four characteristics of wild animals with their wildness: independence, naturalness, wariness, and distance. These characteristics are not all compatible, and this presents a problem when trying to preserve wildness. They are also determined by our perception, not something intrinsic to the animal.

Though taken to describe a characteristic of a kind of animal, wildness is better thought of as a relationship between a human, an animal, and a varying environment. At the center of this relationship is the concept of human control (or lack thereof). Where a person encounters the animal, and with what influence on that animal and that place, determines how that person conceives of the animal’s wildness.

If we are to efficiently design and implement effective conservation programs intended to ‘preserve’ wild animals, we must understand exactly what it is that we are trying to preserve. If wildness comes from a relationship, we must determine what aspects of these relationships to preserve, or change, in order to keep wild animals wild. This thesis hopes to begin the identification and preservation of these aspects, and to assure that we preserve the wildness of wildlife.
Acknowledgments

Thanks to Dr. James Maclaurin for reading this thesis so many times, and asking many hard questions. Without his supervision this would have been a shallow and rambling mess. Thanks also to Ross Johnston for his guidance throughout the Masters course.

Thanks to Yvonne Tam for helping me to sort my thoughts, and her critical support. Thanks, too, to my father, Steve Hermans, for reading the thesis when I thought I was finished and assuring me that I was not. His questions at the final stage helped more than I can write.

Thanks to Simon Cherriman, an ideal bush companion and lover of the wild. He shared with me, many wild encounters and was happy to discuss the wildness of each one.

And thanks to you, dear reader, for your attention. May we both champion wildness together.
Table of Contents

Part I: Introduction 3

1. What is wild? 4
   A. Case Study: The Red Fox 5
   B. Wildness as a Quality 8

Part II: The Varieties of Wildness 12

1. Wildness as Independence 13
   A. Case Study: Aurochs and Tarpan in Oostvaardersplassen 20
   B. The Two Types of Naturalness 25

2. Wildness as Naturalness 27
   A. Natural Species 28
   B. Case Study: The Passenger Pigeon in 19th Century America 33
   C. Natural Individuals 42
   D. Conserving Naturalness 45

3. Wildness as Wariness 47
   A. Case Study: Pumas in Boulder, Colorado 51
   B. Temperament 55

4. Wildness as Distance 60

Part III: Conclusion 66

1. Wildness as a Type of Relationship 67
   A. Case Study: The American Bison 76

2. Wildness and Culture 95

3. Preserving Wild Animals 98

Part IV: Wildness and *A Wedged Tale* 115

Part V: Addendum: Wildness in Other Languages 123

Part VI: References 124
List of Illustrations

All photographs by the author, unless otherwise noted

Pg. iii: An urban long-tailed macaque searches for food in the rubbish, Lopburi, Thailand, 2007

Pg. iv: Wild, curious keas confuse tourists, Fiordland, New Zealand, 2010

Pg. 3: A begging wild red fox, Hokkaido, Japan, 2007

Pg. 12: A peregrine falcon surveys her new habitat, Manhattan, New York, 2008

Pg. 13: A troop of long-tailed macaques lounges in the city, Lopburi, Thailand, 2007

Pg. 20: “Grote grazers”, Oostvaardersplassen, 2004 by Gerard Meijsen
Courtesy of Meijsen under the GNU Free Documentation License

Pg. 27: A dingo trots down a tramping trail, Fraser Island, Queensland, Australia, 2005

Pg. 33: Passenger Pigeon, Ectopistes migratorius by Louis Agassiz Fuertes from Birds of New York.
Albany: University of the State of New York, ~1910-1914.

Pg. 47: An aye-aye hides in a palm plantation, Mananara, Madagascar, 2008

Pg. 51: Fourmile Canyon Lion, Boulder, Colorado, 1990 by Peter Moore
Courtesy of Peter Moore

Pg. 60: An ostrich looks to steal a bite to eat, Mlilwane, Swaziland, 2008

Pg. 66: Feral cherry-headed conures, San Francisco, California, 2010

Pg. 76: [untitled], National Bison Range, Western Montana, by David C.M. Hoffman, 2005
Courtesy of David Hoffman

Pg. 114: Poster for Conservation Week 2009 by New Zealand’s Department of Conservation
Free promotional material

Pg. 115: A mother wedge-tailed eagle looks at our hide, Perth, Western Australia, 2010
Film still from A Wedged Tale

Pg. 122: Simon Cherriman and a feral goat, deep in the Outback, Western Australia, 2010
Part I: Introduction
1. What is wild?

The extinction of species and loss of wilderness are critical issues that demand our immediate attention. Much has been written about those issues. This thesis addresses a related issue, ‘wild’ animals losing their ‘wildness’.

If a species avoids extinction because enough of its members are domesticated, has the species really avoided extinction? What if they are just taken into a form of captivity, be it a zoo, an ecosanctuary, or an off-shore island? Is loss of wildness just a form of evolution to be accepted? Or is it another negative consequence of human dominance of the Earth that we should recognize and attempt to control? I submit that wildness is the essential characteristic of “wild” animals and worthy of preservation.

Conversation has arisen about the loss of wildness among wild lands, i.e. wilderness.¹ This will be discussed further below but briefly there are those that feel we must take care of wild lands and help restore wildness to them, and those that believe restoring wildness through human action is impossible. They think the best way to keep wild lands wild is to leave them alone. Some of the wilderness debate is applicable to animals, but not all of it. Thus a conversation concerning the wildness of wild animals needs to begin as well. Just as we discuss how to keep wilderness wild in order to save it, we should we begin a similar discussion for wild animals. Zoos keep animals. If we want wild animals, we’ll have to be clear what makes them wild.²


² This may, in turn, help argue for wilderness as well. Preserving truly ‘wild’ animals may be just another reason for preserving wilderness. If we find that wilderness is necessary for truly wild animals, and we want to share the planet with them, then we must preserve wilderness.
The Red Fox

Consider the red fox, *Vulpes vulpes*. Despite canid similarities, a fox always seems wild in a way a dog does not. Yet a fox need not live in wilderness, and a fox’s presence (unlike, say, a tiger’s) does not necessarily make a place wild. The red fox is as familiar haunting a deep forest as she is mischievous in the barnyard. Both foxes are free to be foxes, but has the hen-hunting vixen lost her wildness in some way? Foxes now live even in urban areas. Can in the city be ‘in the wild’?

I have encountered a variety of questionably ‘wild’ foxes. Once, while bivouacking on a remote ridge in the White Mountains, I was awoken by a fox licking food from my hand (exhausted, I had fallen asleep while eating). Here, in a wild place, a fox was acting tame.

I’ve found foxes denning on the outskirts of New York City and in Australian paddocks. The former are urban, the later feral. Both seemed to be in a wrong (i.e. unnatural) place for wild foxes.

While climbing a volcano on Hokkaido, I passed an old woman feeding a fox sulphur-boiled eggs. The fox sat patiently an easy toss away from her. It seemed wild — I watched it come from and return to the forest, and it never came too close — but the fox was begging. Wild animals don’t beg.

These foxes are not unique to my experience. Take, for example, the foxes in Werner Herzog’s film, *Grizzly Man*. Despite living on a remote island, deep in the Alaskan wilderness, the local red foxes quickly befriend the film’s protagonist. They frolic on and around his tent and follow him through the meadows like dogs. At one point, a kit he’s named Ghost, runs off with his hat. Ghost lives in one of the world’s most wild places, but in the film he’s acting just like a puppy.

Across the Bering Sea, in Siberia, researchers are domesticating foxes. In 1959, a Russian geneticist, Dr. Dmitry K. Belyaev, began an experiment on an Estonian fox fur
Starting with just 30 male foxes and 100 vixens, Belyaev selected only the tamest five-percent and then bred them, repeating this process for each subsequent generation. His results were so compelling that the selective breeding has continued for over forty generations.

The research is now overseen by Dr. Lyudmila N. Trut of the Siberian Department of the Russian Academy of Sciences at Novosibirsk. Trut still selects each new generation’s foxes for ‘tameability,’ or friendliness, and then breeds them. The selection is simple: most foxes nip, snarl and cower in the corner when a person enters the cage. The ‘friendly’ foxes do none of these things. Instead they perk their ears, curiously investigate the visitor, and may even come up and lick an offered hand.

Other than brief moments for research, the foxes and people do not interact. The taming process has been performed solely by selection, not habituation. Yet, already, the foxes have become as tame as dogs.

At the Russian fox farms, signs of lost ‘wildness’ are apparent. They manifest not just in the foxes’ behaviour but in their physical appearance as well. Instead of silver, dark coats, tame foxes are peppered with erratic white blotches. They have floppy ears, shorter legs, and sometimes even curly tales. Their faces look stunted. These changes reflect neoteny, i.e. the foxes are retaining juvenile characteristics into adulthood.

At no point in the study were selective pressures applied to size or shape, only tameability. The change in form can be tracked to the adrenal glands. Adrenaline from these glands is what inspires an animal to fight or flee when confronted by something like a human entering its cage. The naturally tame foxes’ adrenal glands produce less adrenaline. As each tame group is selected for, the released hormones become less and less, eventually diminishing to the point of stunting the animal’s development.

---

3 The foxes are silver foxes, also *Vulpes vulpes*, just a subspecies.

Neoteny is common in all domestic animals. This is why all sorts (horses, cattle, goats, dogs, pigs) may exhibit a piebald pattern or white spot on the head. Archeologists can identify domestic animal bones in a midden based on their smaller size. This is useful in attempts to determine when domestication began. Belyaev and Trut’s foxes offer an example of what a fully domestic fox may be, but the study also points to the fact that some foxes will naturally be less wild than others.

The red fox is at home in a range of habitats. It can survive in Siberia and Florida, New Jersey and Newfoundland, the Arctic and the Outback. It can also survive in remote wilderness, on farms, and along urban edges. The fox is a familiar figure in folklore across cultures. It is also a pest for farmers, game for hunters, and a resource for trappers. In Russia, it’s now available as a pet. In Australia, it is a notorious threat, decimating the dwindling populations of the country’s cherished marsupials. On the British Isles, it is a beloved symbol — the last wild, native canid.

What do we make of the wildness of all these foxes? Belyaev and Trut’s are visibly domestic, but the rest are less clear. They seem too varied, and too different to fit under just that single term. Some are urban and habituated, others introduced and feral, still others in their historic range, but re-introduced.

Perhaps the foxes’ wildness may be better understood as a continuum. On one end sits the now tame fox at the Russian fur farm. On the other end could be its near ancestor, a wild and free fox deep in the Siberian forest, one who knows not a human. But where do the foxes of Australia fall: introduced, so unnatural, but almost impossible to control or eradicate (like a wild animal)? What of the foxes who live off our refuse and

---


6 Trut 2009, p. 350

slip through our alleyways, or the wilderness foxes quick to befriend? If preserving ‘wildness’ in wild animals is the objective, we must first agree on what we mean by ‘wildness’.

B. Wildness as a Quality

Philosophers, like Henry David Thoreau and Jack Turner describe wildness as a quality, i.e a characteristic of an animal. This idea is consistent across fields. Zoologists and ecologists, artists and writers, historians and ethicists all describe wildness as such. In her book, *Wild: An Elemental Journey*, writer Jay Griffiths claims that wildness can distinguish wildlife from other types of animals:

Tamed creatures are dolt-minded and dumb, insipid and bland. They are coarse in thought and need, only wanting to eat, to [defecate] and to obey. Wild creatures, though, have a quality of fineness: subtler, keener-minded, electric-thoughted, clever and intense, sniffing the scent, sensitive, highly reactive.

For Griffiths, wild creatures have a distinct quality. Stephanie Mills argues that wildness makes wild animals even more ‘real’, in the sense that they are more natural:

Even when attempts at domesticating, or subjugating, wild systems or organisms appear to have succeeded, the results are a little perverse. (Consider the passive gluttony of hatchery salmon, the flavorlessness of store-bought, midwinter tomatoes, and the foot-wetting neurosis of miniature poodles.) In contrast to these anomalies are the qualities of wildlife and wild places: authenticity, indigeneity, specificity, and spontaneity; resilience and health.

---


9 Griffiths 2006, p. 312

These descriptions of the quality of wildness are problematic as they are not the same. Griffith’s quote points to a certain type of behaviour that makes an animal wild, and an independence. For her, wild animals have a strength of will in contrast to those who are broken and ‘wanting... only to obey.’

Mills also equates this quality with a certain type of independent, free behaviour — spontaneity, resilience — but now adds on some conditions as well. Authenticity, indigeneity, specificity all seem to be saying ‘natural’, in the sense of being normal. I will discuss this type of naturalness in Part II, as well the other ways in which the idea is understood.

Wildness has also been measured, e.g. in studies such as one rating the wildness of mice (*Mus musculus*) and another calculating the loss of wildness among key deer (*Odocoileus virginianus clavium*).\(^{11}\) The first example measured wildness as the “difficulty in capturing and holding” the mice.\(^{12}\) The second “evaluated the potential for inadvertent domestication of wildlife by determining the effect of feeding and watering on Key deer density, group size, and distribution.”\(^{13}\)

These quantitative studies, measuring different things but both calling them wildness, show the confusion about the idea. The vague qualitative musings do the same. Wildness seems to be many things to many people. Even if it is one property, it is a very complex one. A review of pertinent literature and common usage of the term reveals that we (at least in the English language) associate four characteristics of wild animals with


\(^{12}\) Wahlsten et al. 2003, p. 71

\(^{13}\) Peterson et al 2005, 939
their wildness: independence, naturalness, wariness, and distance.\textsuperscript{14} I will explain how I identify those four and the limitations of using any one, or even all four, of those qualities as the basis for defining what we need to preserve in order to preserve the wild in our wild animals.

The first characteristic is independence, or autonomy. A wild animal is a free agent. I will discuss how this independence is understood and the potential problems with this understanding, such as feral animals, exotic species, and synanthropes.\textsuperscript{15}

The second characteristic is naturalness. This is not the natural as in non-human or outside our influence — that concept is included within the wildness of independence in the first section. Wildness as naturalness is related to normality: natural is normal, or how it ‘should be.’ I will show how this understanding can be problematic for what we think of as normal is dependent on circumstances and thus not the best base for a concept of wildness. Here I will also note the potential incompatibility of wildness concepts, for example a feral mustang in the American West is independent but not natural.

Both of these sections will hint at our role in an animal’s wildness. Independent means independent of humans. (Animals are dependent on their ecosystems.) Not being dependent on humans is the dominant characteristic of wildness as independence.

“Natural” means what we think the animal should be without our influence. This is what seems normal to us, and we are who decide what normal is. The last two ways of considering wildness — wariness and distance — make our role explicit. Both are based on how wild animals react to us.

The third characteristic concerns wild behaviour, notably wariness. Many wild animals are wary. They seem to be fearful of, and to avoid, humans. I will discuss the

\textsuperscript{14} For a note on wildness in other languages please see the addendum on p.

\textsuperscript{15} David Quammen defines synanthropes as “born wild but inherently predisposed toward associating themselves with humans.” The best examples are rats and pigeons. For more see Quammen’s “Superdove on 46th Street” in \textit{Wild Thoughts from Wild Places}, New York: Scribner, 1998, pp. 109-117
various reasons why a wild animal may not be afraid — naivety, lack of predators, temperament — and how these affect and challenge our understanding of wildness when dependent on such behaviour.

Wariness is essentially about keeping a distance from us. The final, fourth characteristic concerns proximity. Wild animals live away from humans. They keep their ‘distance’. That distance affects our perception of an animal’s wildness. I will address the romanticization of exotic species and explore what it means when an animal is no longer simply ‘in the wild.’ I will note how a wildness based on distance is a continuum and where certain points on this continuum lie.

In Part III, I will explain how wildness is governed by a relationship. As Part II explains, though taken to describe a characteristic of a kind of animal, wildness is better thought of as a relationship between a human, an animal, and a varying environment. At the center of this relationship is the concept of human control (or lack thereof). Where a person encounters the animal, and with what influence, determines how that person conceives of the animal’s wildness. I conclude by considering the implications for human-animal interactions based on defining wildness as this relationship instead of as a characteristic of the animal.
Part II: The Varieties of Wildness
1. Wildness as Independence
The word *wild* is like a gray fox trotting off through the forest, ducking behind bushes, going in and out of sight. Up close, first glance, it is “wild”— then farther into the woods next glance it’s “wyld” and it recedes via Old Norse *villr* and Old Teutonic *wilhijaz* into a faint preTeutonic *ghweltijos* which means, still, wild and maybe wooded (*wald*) and lurks back there with possible connections to *will*, to Latin *silva* (forest, sauvage), and to the Indo-European root *ghwer*, base of Latin *ferus* (feral, fierce), which swings us around to Thoreau’s “awful ferity” shared by virtuous people and lovers. The Oxford English Dictionary has it this way:

Of animals - not tame, undomesticated, unruly...

...Wild is largely defined in our dictionaries by what — from a human standpoint — it is not. It cannot be seen by this approach for what it is. Turn it the other way:

Of animals- free agents, each with its own endowments, living within natural systems.

- Gary Snyder 16

Snyder’s ‘wild’ defines the wild animal as a free agent. This is consistent with the word’s etymology. Both Snyder and Thoreau note that ‘wild’ is the past participle of ‘willed.’17 To follow one’s will, one must be independent.

Freedom is often used to claim wildness; a wild animal is wild because it is free. At Pier 39, in bustling San Francisco Bay, local California sea lions (*Zalophus californianus*) have established a colony right on the docks. In response to what must be a common question from tourists, a prominent sign on the pier reads: “These sea lions are wild; they come and go as they please.”18 The sea lions are wild, the sign states, because

---

16 Snyder, 1990, p. 9
17 Thoreau 1937
18 personal observation
they are free to move and free to choose. It does not matter that the city put out extra docks for them, or that they’ve chosen to live in a busy urban harbour.

The sea lions are considered wild because they decided to arrive on their own, and because they’re free to leave. For the authors of the sign, the sea lions’ ability to come and go from their man-made rest area makes them wild. The authors don’t address that their local sea lions aren’t free to have a more natural habitat.

Freedom and independence are not the same. Mark Woods describes the distinction as such:

The reintroduced wolves in Yellowstone National Park are probably wild, but, because they have been tracked with radio collars and are killed or relocated if they stray outside of certain prescribed areas, they are not free. In contrast, a domesticated dog or cat that is no longer wild but escapes its confinement is now free.¹⁹

Woods’ wolves are wild because they survive independently in Yellowstone, just as the sea lions survive in San Francisco Bay. Humans are affecting these animals, with re-introductions and/or habitat manipulation, but the animals are self-sustaining and thus independent.

We see independence in an animal’s free use of its endowments such as spontaneity, instinct, and adaptability. A wild animal’s spontaneous actions reveal our inability to fully understand or control its behaviour. Such behaviour exemplifies its independence by keeping an animal beyond our understanding and thus predictions or control. A wild animal following its instincts expresses its ability to act on its own. The animal wants and needs something: a nest, a mate, a meal. Without our help, training, or even awareness, the animal pursues and usually attains what it wants. An animal’s adaptability dis-

plays its ability to realize its will, even when confronted with obstacles. Instinct gives an animal the information it needs to survive and breed and adaptability gives it the skills to do. Spontaneity allows the animal to do so in a free manner.

A clarification should be made concerning instinct and free will, for it would initially seem that an animal acting on instinct is not free or spontaneous. Instinct determines and schedules behaviour (e.g. birds migrate for the winter). This may be the case with simpler animals, like insects, most fish, and even many reptiles, but it is interesting to note that we don’t usually identify such creatures as wild or not. This is not just due to mammalian chauvinism. Simple creatures do not display enough autonomy. Some such species do. Octopodes are notorious for escaping from tanks, which seems wild, and there are unusual ‘tame’ komodo dragons at the London Zoo.

The animals we usually think of as wild or not: birds and mammals, are less controlled by their instincts. They may make spontaneous and surprising decisions in response to the same stimuli, e.g. establishing a sea lion colony on urban yachting docks. A wild bird or mammal’s behaviour is also more malleable to our influence, which is why we think of them as more wild or less so.

For such complex animals, instincts are better thought of as constraints. Constraints are common. They are everywhere. Gravity constrains an animal to the ground. A river can constrain a terrestrial animal to one side. A wild animal is free to pursue its instincts, and to deal with them just as it deals with any constraint. Not all individuals deal with the same constraint in the same manner. Instinct does not always require specific behaviour.

Instinct does not prevent interpreting wildness as independence, but there is an issue with adaptability: what if the wild animals adapt to us? When the sea lions began a

---

colony in the harbour, people began asking if they were wild. Most wild sea lions still avoid us, but some now prefer to colonize urban docks.

Such wild animals have been dubbed synanthropes. These animals are born wild and free but choose to associate with humans. Some have just habituated like the sea lions. Other synanthropes are created through selective breeding, accidental breeding, or both. With our help, they have evolved to be better fit for survival in our modified world. Feral pigeons, once bred for racing and messaging, are now bigger, stronger, and more streamlined than their wild ancestral counterparts, rock doves (Columba livia). Urban pigeons use our skyscrapers and bridges as cliffs and outcrops. For them, we have only created a new environment. The pigeons still pursue their instincts: mating, nesting, brooding; but their diet is provided by us and their numbers reflect the support we inadvertently give them.

A similar situation occurs with seagulls. Seagulls have adapted to live off our refuse. They find the refuse themselves, and feed themselves, but they are relying on us to create it. They are independent of our will, but, by utilizing us, dependent on our actions. They thrive by taking advantage of us. Australian ecologist Tim Low calls such animals “winners”, and those that suffer from our impact or influence, “losers.” Low’s terms are a helpful way to think about urban ecology. ‘Winning’ wild animals are free agents, but their status seems something other than wild. Perhaps this is because they are not independent of our influence. They live outside of what we consider natural systems in a way that we find unnatural. I address this further in the next section: Wildness as Naturalness.

21 Quammen 1998, p. 111
22 ibid., p. 110
23 ibid., p. 115
The wild status of synanthropes is further complicated by the fact that, in some cases, a wild animal’s ability to adapt to human culture was an important element in its eventual complete loss of wildness: domestication. Archeologists and anthropologists describe this in terms of a ‘human niche.’

‘Niche’ is an ecological term for the conditions under which an animal is best suited to survive and reproduce.25 These conditions may correspond to a specific place but more often refer to “any set of points where an organism competes effectively with its competitors and predators.”26 A human niche can be understood as “the actions of humans, including regular patterns of habitat manipulation, exploitation, and ‘unconscious selection.’” On purpose or by accident, human actions can, as Bleed explains, “reasonably be viewed as a niche to which organisms could adapt.”27 As a species adapts, it may adjust its appearance, behaviour, or even the niche itself. The concept of a human niche implies that many animals aided directly in their own domestication, probably even creating certain roles in new, human-made conditions and then adapting to them. Bulliet calls this process self-domesticating.28 A good example is the cat (Felis catus). With the invention of agriculture, humans created great stores of grain and, unintentionally, a niche for rodents. The new rodent populations created a niche for cats. Humans appreciated the cats controlling the rodents, and the tamer cats just moved into camp. They probably enjoyed the abundant food and relief from larger predators that the humans granted. Cats differ very little genetically from their ancestors, implying our minimal role in their domestication.29

26 ibid
27 ibid
28 Bulliet 2005, p. 89
29 ibid
Thus, domestication in some cases may have had little to do with direct human will or volition. Instead, it was the result of animals adapting to and/or taking advantage of the conditions we created. Only after their domestication had come far enough along for us to control their movements and breeding did these animals lose their independence, and thus their wildness. Because certain of these animals can return to an independent, wild state (as both feral cats and dogs have done in Australia) once free, control is the essential element in losing wildness as independence. An animal may always be free to choose some things. A cat can choose when to return home. A dog can choose where to defecate. But the more we control that choice, the fewer degrees of freedom and independence the animal has. When this independence is so limited that we are controlling the animal’s basic, instinctual elements (e.g. diet, range, breeding), their wildness is gone.

Thanks to neoteny, we have an idea of when an animal has become domestic but when does a domestic animal become wild? In the Netherlands, this question arose when a new re-wilding program was incorporated into their national parks. Re-wilding is a term for re-introducing animals to wild habitats. When ‘re-wilding’ is used (as opposed to re-introduction), it may refer to re-introducing animals that are not native to the specific environment but are the same species from elsewhere (and/or are closely related to lost ancestors). The Dutch are re-wilding with cows and horses. This ‘re-wilding’ seems to be granting (or offering an opportunity for) wildness as independence.
Case Study: Aurochs and Tarpan in Oostvaardersplassen
In their national parks, the Dutch have chosen to attempt to develop nature rather than just conserve it. To do this, they have taken a three-track approach. Track A aims for natural ecosystems with limited outside control. Animals are introduced to act as ‘ecological replacements’ for extinct herbivores. In doing so they preserve ecosystems and ecological processes. Track B aims for semi-natural areas. Here animals are used as ‘mowers and pruners’ to create certain patterns in the landscapes and thus encourage biodiversity. Track C is the now-typical environment in which nature is linked with agriculture and other common land use. Track C animals are the usual domestic stock.

Track A animals are considered destined for wildness. They go through a process of ‘de-domestication’ as they are released from farms, zoos, and small parks and into the ‘wild’, i.e. the parks. The Dutch have chosen two species in particular for Track A: Konick horses and heck oxen. Konick horses are from Poland and are domesticated only ‘superficially’. Heck oxen are German and the result of a 1920s’ attempt to back-breed the cows to their original wild ancestor, the auroch. The oxen are now surrogate aurochs. The Konicks replace the extinct wild European horse, the tarpan. In the early 1990s, both were released into the Dutch national park Oostvaardersplassen.

All went well until a harsh winter threatened the survival of the new ‘wild’ animals. Many animal protectionists, farmers, and visitors considered the animals as still domesticated and thus in need of help. Many park rangers, veterinarians, and overseeing

---


32 The French are re-wilding their parks with Przewalski horses. From Mongolia, these horses are considered the “last remaining wild horse on earth.” See O’Rourke, Eileen, “The Reintroduction and Reinterpretation of the Wild,” *Journal of Agricultural and Environmental Ethics* 13 (2000): pp. 154-155

33 Klaver et. al. 2002 pp. 5-6
ecologists considered them wild, and needing to be treated and respected as such, i.e. left alone.

The animals were eventually helped, but the managers of the park decided not to help them in the future. In considering this case, Klaver et. al propose using Peter Wenz’s system of positive and negative rights for animals. Positive rights include assistance with basic needs like food, health, and shelter. Negative rights are rights to life, freedom, and territory. Positive rights extend beyond people to domestic animals because we have altered the animals in a way that makes them less capable of survival without our assistance. The further an animal gets from us, i.e. the more independent it is, the less positive rights it has. Wild animals have only negative rights.

Wenz also notes an important distinction. Among people, and between people and domestic animals, the right to life trumps the right to freedom. But between wild animals, and between hunters and wild animals, the right to independence trumps the right to life. This is why we don’t intervene in predator-prey relationships. By determining what rights to give the new aurochs and tarpans, the Dutch were deciding the ungulates’ wildness. The animals were still dependent and thus not wild last time, but they will be next time.

This seems like an appropriate solution. As odd as it may seem that the oxen and horses suddenly became wild, it is only to us that they do so. As we changed our relationship to them, we made the ungulates wild. The animals themselves did not change, only our behaviour towards them. They would now be free and independent. Free to freeze and starve, just like their wild ancestors and unlike their domestic cousins. Note that wildness is determined based on the animals’ relationship to humans. The wild ani-

34 ibid, p. 12
36 O’Rourke 2000, p. 157
mals have freedom from us. They are independent of us, but not of each other, or of their ecosystems. If we are to think of wildness as independence, and if we want to retain wildness, then we need to relinquish control, especially if we have such difficulty limiting our influence. Turner analyzes the difference between influence and control:

Influence is not control and does not preclude autonomy. Autonomy is often confused with radical separation and complete independence. But the autonomy of systems- and, I would argue, human freedom- is strengthened by interconnectedness, influence, elaborate iteration, and feedback. Indeed, such self-organizing systems create the possibility of change without which there is no freedom.

...The important point is that whatever kind of autonomy is in question- human freedom, self-willed land, self-ordering systems, self-organizing systems, auto-poiesis- all are incompatible with external control, not external influence. To take wildness seriously is to take the issue of control seriously. And because the disciplines of applied biology do not take wildness seriously, they are littered with paradoxes: wildlife management, wilderness management, managing for change, managing natural systems, mimicking natural disturbances- what we might call the paradoxes of autonomy. Collections of paradoxes are usually bad news for paradigms.37

More and more books on conservation conclude with a similar idea: wildlife management is more about managing ourselves than the animals.38 We need to leave more space and habitat, and not kill off the predators. We need to limit our influence. Most conservationists do not go as far as Turner. They argue that our over-influence has created a need for greater control. Most conservationists need to control habitat, to monitor and manage it, in order to conserve or restore it— at least if we want to keep the wild animals we still have. If we relinquish control, if we give animals a right to life, then we are also giving

37 Turner 2001, p. 179

them a right to death, and even a right to go extinct. This does not seem like something most of us would agree to.

Consider wildness in relation to the independence of many endangered species. These species — the wildlife many of us cherish — are often the least free of wild animals. Many now depend on us to protect the individuals in order to save the species.

It may be possible to restore or recreate 'natural systems', but these environments, like any other, are not static.\textsuperscript{39} We must continually and constantly maintain the habitat. Even if the ‘wild’ animals are independent in these created natural systems, they depend on our assistance. The created systems often limit even the animals’ basic freedoms, such as of movement. For example, ecosanctuaries constrain terrestrial animals to a caged area.\textsuperscript{40} These fences — keeping wild animals in and out — may be important in places with dire exotic species issues, but even national parks, such as Kruger in South Africa, have been fenced to keep wild ungulates from leaving and spreading (or catching) disease.

Critically endangered animals, such as the kakapo (\textit{Strigops habroptila}) in New Zealand or Gilbert’s potoroo (\textit{Potorous gilberti}) in Australia, have been placed on off-

\begin{footnotesize}
\textsuperscript{39} It has been claimed that we do some things that are more natural than others, for example breast-feeding vs bottle-feeding. Or, as Holmes Rolston writes, imagine you broke your arm:

“A broken arm, reset and healed, is relatively more natural than an artificial limb, though both have been medically manipulated. The arm, decades later, is not a ‘reasonable illusion’ of a pristine arm. Except for hairline bone scars it may be indistinguishable from the arm nature gave. Likewise with a restored forest or range, the historical genesis has been partially interrupted. But henceforth, deliberately put back in place, spontaneous nature takes over as before. Trees blow over in storms, coyotes hunt ground squirrels, lightning causes burns, natural selection resumes.”


The naturalness Rolston describes may be better understood as normality, for humans are also naturally tool users. The healed arm is more normal. I’ll go into normality and naturalness in the next section.

\textsuperscript{40} Ecosanctuaries are areas of good habitat fortified by a pest-exclusion fence. In New Zealand, the wiring is small enough to keep out a mouse; in Australia, it is a bit bigger. Non-native animals within the fenced area are killed and native species are re-introduced. Ecosanctuaries tend to be small (a few hundred hectares) as the cost of building and maintaining the fence is so high.
\end{footnotesize}
shore islands to keep them safe from predators. These animals are free to roam on the islands, but are trapped there by the sea. In neither case were the animals native to their new island homes. They were placed there by conservationists. By becoming caretakers of these species, we force them to rely on us, and, in doing so, sacrifice their independence. If wildness is independence, then we have taken it away.

Exotic pests present another issue. When we refer to wildlife, we tend to mean only the natives, but the exotics, too, inhabit the ‘wild’ as independent, free agents. These species have not only been misplaced, but are often persecuted as well. Yet they survive and thrive despite us. Few wild animals better exert or exhibit their will. If wildness is in independence, then these exotics are very wild. If wildness is naturalness, they are not. Though wild in their independence, exotic species are not natural.

Independence alone is not enough to define wildness. In the following section, I review a concept of wildness that must be accounted for: naturalness. In the conclusion I will consider whether wildness should be used as a functional term in our relations to wild animals given its conflicting definitions.

B. The Two Types of Naturalness

‘In the wild’ has long been a way of saying ‘in Nature’, or natural. Natural can mean independent of us, i.e. if we influence something it’s no longer natural. This sort of wildness is akin to wildness as independence, and can be grouped in this first section.

Alternatively, natural can mean normal. To avoid confusion, I refer to this as “normal-natural.” These two ideas of natural are separate but related. In a sense, we think it is normal for an animal to be independent of our influence. The statement: “the shark has no natural enemies”, assumes that it is normal that a super-predator would have no enemies. Yet the shark does have an enemy: us. We consider our role as a shark’s
predator unnatural in the other sense: what we do is not natural. If we hunt and kill something it is unnatural because we are doing it, and that’s not normal.

Nature is so dynamic, and our influence so pervasive, that applying naturalness in either sense, normality or separation, is difficult. The above section has shown the difficulty of separating our control, and even our influence, from nature. The next will show the difficulty of defining what is normal-natural.
2. Wildness as Naturalness
A. Natural Species

An animal in the native habitat of its species is where it belongs. This is normal-natural. But the native habitats are changing. If humans have altered the habitat but the animal still lives there, is it still normal-natural? If the animal changes in response, is it still normal-natural? An animal can be in its native location, but in an unnatural ecosystem. If the changes are a direct or indirect result of human actions, have the animals lost some of their wildness?

Ecologists use the term: ‘novel ecosystems’, to describe the situation in which “new combinations of species appear within a particular biome due to human activity, environmental change, or impacts of introduced species.” This human activity may be “deliberate or inadvertent.” Novel ecosystems create a conundrum for the normal-naturalness of wild animals. If a species is a native (and continuing) inhabitant of what is now a novel ecosystem, is it still normal-natural? What if the species’ native habitat is a novel ecosystem?

Good examples of a novel ecosystem as a native habitat are the ‘new’ bird species of New Zealand. When the Māori, and later, the Europeans arrived, they altered the land in such a way that many Australian birds established populations in New Zealand. These birds had been blowing over the Tasman Sea for thousands of years and then dying off. The arrival and subsequent influence of humans on the landscape allowed them to survive by creating habitat. Humans cleared the dense Aotearoa bush and made the land more open like Australia. Pukekos (Porphyrio melanotus), harriers (Circus approximans) and magpies (Cracticus tibicen) all arrived in this manner. In all, thirteen species of Aus-

---


tralian blow-ins are now established in New Zealand.44 Today they are considered native New Zealand wildlife and protected as such.45 The wind blowing the birds was not the product of human action, but their ability to survive was. These birds are wild in independence but, in New Zealand, they are not normal-natural. The new landscape may mimic their native habitat, but that is in Australia, not New Zealand.

Novel ecosystems are also defined as “[resulting] when species occur in combinations and relative abundances that have not occurred previously within a given biome.”46 In these ecosystems, animals live in their native, natural habitat, but that habitat is changed as a result of human influence. The best examples of this are trophic cascades and the ecology of fear.47

A trophic cascade occurs when a food web is damaged.48 Top predators do not only control herbivores, but also the next level of predators and thus the predators and/or prey below them as well. If the top predator (or any other substantial predator) is removed — which usually happens by human agency, both directly (hunting) and indirectly (habitat loss, loss of prey) — the predator or prey population below them explodes, resulting in a temporarily out-of-control ecosystem. This can also happen if species other than the top predator disappear.

44 ibid., The other ten birds are: the silveryeye (Zosterops lateralis), Australian swallow (Hirundo rustica), masked lapwings (Vanellus miles), Australian coot (Fulica atra), black-fronted dotterels (Elseyornis melanops), royal spoonbills (Platalea regia), rufous night herons (Nycticorax caledonicus), Australian shelducks (adorna tadornoides), Australasian grebes (Tachybaptus novaehollandiae), and the white-faced heron (Ardea novaehollandiae).


46 Hobbs 2006, p. 1


48 Fraser, Caroline, Rewilding the World: Dispatches From the Conservation Revolution, New York: Metropolitan Books, 2009, p 49
Various animals, notably the keystone species, are essential to a functioning ecosystem. If they are lost, the system can turn to chaos. Ecologists on America’s Pacific Northwest coast noticed this when kelp forests began to disappear. In place of the kelp was a plague of sea urchins. Sea urchins eat kelp. Sea otters (*Enhydra lutris*) eat sea urchins. When the otters’ population declined (initially due to hunting for their pelt), the urchins’ population boomed. Ecologists wondered why the sea otters’ population was so low, even after the otters received protection as an endangered species. They found that it was in part by predation from orcas (*Orcinus Orca*). The orcas had lost their usual prey, seals (again due to people), and in turn had begun eating sea otters; lots of them. Thus an imbalance in the oceanic ecosystem lead to an unnatural system on the nearshore as well.

The ecology of fear describes a similar scenario. The loss of a predator not only allows prey populations to explode, it also changes the prey’s habits and thus habitats. The classic example comes from Yellowstone. When wolves (*Canis lupus*) disappeared from the park, the elk (*Cervus canadensis*) stopped worrying about predation. They began to feed in places previously thought too dangerous, such as river banks. This new behaviour, along with rapid increases in population, destroyed the ecosystem — ruining riparian habitat, eliminating the shade that fish needed to breed, and slowly killing the aspen forests. When wolves were re-introduced, the process was immediately reversed.

This again raises the issue of transition. Something changes enough to upset the equilibrium, and other things change in response. If these changes occur independent of humans, the animals remain normal and wild. If humans cause the change, are the ani-

---


mals now not normal? Isn’t the animals’ reaction to the human-caused change a normal reaction?

The elk were wild, as in independent of humans and their control, the whole time. The elk were just responding to new conditions. Animals naturally react to different environments; this is adaptation. The fact that human agency had unnaturally altered the system changed the elk’s behaviour, but not their independence or autonomy. When the wolves returned (by human re-introduction), the elks reverted to their previous behaviour.

Can an animal be wild without a complete natural ecosystem? If not, there have been many areas without wild animals for thousands of years. During the Pleistocene, vast megafaunal extinctions occurred due to human hunting, a changing climate, or disease. As much as 70% of North America’s large mammals were lost, and up to 95% in Australia. Only Africa, possibly because its animals co-evolved with humans, retained most of its large wildlife. Soulé describes:

the megafaunal extirpation [are] ecological decapitation, since Earth’s major ecological players are likely to have governed the structure and diversity of their ecosystems, just as large mammals still do in parts of Africa where they persist. This means that most places that are called “wild” or wilderness today are ecologically truncated, and much less wild than they were in the past.

A good example of this is North America’s pronghorn (*Antilocapra americana*). They are akin to Yellowstone’s wolf-less elk. Pronghorn are among the fastest animals in

---


the world, reaching speeds of 60 miles an hour (97 km/h) at a sprint. No other animal in North America can come close to these speeds, leaving the pronghorn essentially free of predators. But pronghorns only evolved this speed in response to hunting pressure from an American cheetah (genus *Miracinonyx*), long since extinct. For the past eleven thousand years or so, the pronghorn have been living free of their natural predator, and thus behaving differently.

Our sense of normal-naturalness does not apply over a time scale of thousands of years. We have to choose a certain example of an animal and its ecosystem and call that normal-natural. Normal-naturalness must be based on an animal at a certain point in time because ecosystems are dynamic. The ecosystems change, and animals adapt. Adaptation is a constant process. By requiring a certain, set point in time — a historical benchmark — normal-naturalness is locked into one moment while animals change. In conservation, this benchmark has often been pre-European for the Americas and the Antipodes, or pre-Industrial Revolution. If the nature now doesn’t match the nature then, we don’t find it normal-natural. Yet, if we accept that human influence can be normal, then nature was no more normal then, and when we aim backwards, we risk erasing all that has come since.

---


Case Study: The Passenger Pigeon in 19th Century
The most bizarre example of this may be the passenger pigeon (*Ectopistes migratorius*). In the early 1800s, up to one in four birds in North America were passenger pigeons. Their population may have exceeded three billion birds.\textsuperscript{58} Contemporary accounts speak of unimaginable abundance. John James Audubon remembered watching (as a young boy in 1813) a flock fly past for three whole days, “the air was literally filled with Pigeons; the light of noon-day was obscured as by an eclipse.”\textsuperscript{59}

Pigeons were the symbol of plenty. Haudenosaunee myths describe them as a gift from the Gods. The Indians would knock the roosting pigeons out of trees and hold great feasts — eating a dozen pigeons at once, and treating even their dogs to full squabs.\textsuperscript{60}

The birds were a similar blessing to the colonists. They were prepared all sorts of ways, shared with livestock, and even used as fertiliser. Thousands were caught live in the country and then sent to the city as target practice for urban shooting clubs. Despite the pigeon’s numbers, the reaping of America’s greatest bounty did not last long.

In 1900, the last pigeon was sighted in the wild. In 1913, the world’s last passenger pigeon, Martha, died in a zoo.\textsuperscript{61} The pigeons, once the ultimate symbol of abundance, joined the dodo among the world’s most infamous extinctions. They are America’s most notorious loss, and thus have long been a symbol of the early European Americans’ wanton disregard for their ‘pristine’ surrounding wilderness. The pigeons are a haunting specter for American environmentalism.

Though the passenger pigeons’ destruction is made no less appalling, there is an important caveat to this story. The passenger pigeon population was no more pristine or

---

\textsuperscript{58} Mann, Charles C., *1491: The Americas Before Columbus*, Granta Books; London, 2006, p. 316

\textsuperscript{59} Audubon 1871, p. 115

\textsuperscript{60} Mann 2006, p. 316

natural than the park-like forests the Pilgrims found upon arrival in New England. Passenger pigeons ate maize and mast (acorns, beechnuts, chestnuts). These foods were also the staples of the Eastern Indians’ diet. The two, people and pigeons, competed for food. Pigeons weren’t the only animals to compete with humans. White-tailed deer (*Odocoileus virginianus*), raccoons (*Procyon lotor*), and wild turkeys (*Meleagris gallopavo*) shared the same dietary preferences. The Indians hunted all of these species aggressively, both as a food source and to protect crops. Preserving these creatures around the villages was not a goal. The Indians concentrated on killing wild turkeys before their eggs hatched and hunted pregnant or nursing does. The bones of the competing animals abound in Indian middens. Considering their role as direct competition, and especially their stupendous abundance, pigeon bones should litter Indian middens as well. But this is not the case. Instead, passenger pigeon bones are rare.

This is not because the pigeons were hard to kill (the Seneca clubbed them from the trees), and they were certainly good eating, lauded by Indians and colonists alike. Atlanta archeologist Thomas W. Neumann argues that there is an obvious explanation: the pigeons were not common before the arrival of Europeans. The enormous flocks found by the Pilgrims were ‘outbreak populations’, a clear sign of an ecosystem out of order.

Outbreaks occur when a population, usually at a low density, increases at a sudden and rapid rate due to favorable conditions. These populations are not sustainable at

---

62 Prior to the blight of the early 1900s, in large part due to Indian burning and planting, one in four trees in Eastern American forests was a chestnut. For more see Mann 2006, p. 264

63 Mann 2006, p. 316-318

64 ibid

such a level and will eventually collapse due to lack of food.\textsuperscript{66} It was long thought that the ability to do this was rare, and limited to a few species (such as rodents and locusts) almost always considered pests. Now, with mass, human-induced extinctions, trophic cascades and out-of-order ecosystems, more and more species are occurring at outbreak levels, though none has yet reached the spectacular levels of the passenger pigeons.\textsuperscript{57}

Subsequent work has supported Neumann’s arguments. Researching middens at Cahokia (near St. Louis, in 1000 A.D. the greatest population center in North America north of the Rio Grande), anthropologist William I. Woods and environmental historian Bernd Herrmann found the same thing: few passenger pigeon bones and middens containing “almost every other animal protein source.”\textsuperscript{68} Cahokia is not far from where the three-day flock would later pass over Audubon. In 1000 A.D., passenger pigeons were rare.

The Indians were an integral and intricate part of their ecosystem. They had a direct influence on the surrounding wildlife akin to, if not even more than, we do today. They provided food and habitat, and functioned as a major predator. The ‘virginal’ wilderness early European accounts describe was anything but. It was an ecosystem drastically disrupted.

When the Europeans first arrived in North America they brought diseases new to the continent. The Indians had no defenses and no chance to build them. Their populations crashed. Up to nine out of ten Indians may have died in many villages. With the tremendous loss of their main predator (people), wildlife populations exploded. Much of the continent’s human-augmented food sources remained, so the remaining ecosystems flourished. It was a trophic cascade with humans as the missing species.


\textsuperscript{67} see Stolzenburg 2008

\textsuperscript{68} Mann 2006, p. 315-318
This thriving, super-abundant continent was what the Europeans would explore for the next few hundred years, dazzled by the bounty of game and wildlife. It is their reports that contemporary Americans, especially environmentalists, refer to in lamenting North America’s great losses. Yet, as Charles Mann writes in *1491*, the wilderness Europeans found in the Nineteenth century was their own ‘inadvertent creation.’ It was actually the Indians’ empty garden, with the animals gorging. The pigeons were the ultimate example of ecosystem chaos. As were the legendary vast herds of bison (*Bison bison*).

In the early 1500s, Spanish explorers led by Hernando de Soto explored North America’s Southeast. De Soto kept records of the exploration, including descriptions of great Indian cities, but he never mentions a bison, surely a notable creature when novel. Over a hundred years later, a French crew led by La Salle traveled down the Mississippi River. La Salle notes no people, but great herds of bison all along the way. Like the passenger pigeons, the enormous herds of bison (literally tens of millions) were a response to the disappearance of Indians (increase of food, loss of predator) and the upheaval of the American ecosystem. They were not proof of wild splendor. The confusion comes from the fact that the Europeans only started measuring normal-naturalness (wildness), upon their arrival.

The environment is the context of normal-naturalness. When considering a species, this type of wildness as naturalness can be defined *only in relation to an environment*. Whether an animal is natural, and thus wild, depends on where the animal is, not what it is like. For example, a brush-tailed possum (*Trichosurus vulpecula*) in New Zealand will have the same genetic make-up as a brush-tailed possum in their native Australia, but the possum is not native to New Zealand, and thus not natural.

---

69 ibid, pp. 320, 323
70 ibid, p. 321
The environment affects how the possum behaves. It has no predators in New Zealand. In Australia it is preyed upon by animals like the powerful owl (*Ninox strenua*). New Zealand possums also eat different leaves than in Australia. But their different behaviour is less significant than the possums’ effect on their environment. New Zealand’s native birds and forests are devastated by the novel omnivory. In order to keep their native, normal-natural wild animals and habitat, Kiwis must control, i.e. cull, possums. The possums act as wild, independent animals, but not as wild, normal-natural ones for they’re no longer in their native Australia.

Invasive species cause debate among ecologists. Some believe in a ‘respect for nature’s autonomy.’ They believe it best to leave nature alone. Others strive to preserve the wildness in naturalness. For them, protecting biodiversity is essential.

Those in favor of ‘nature’s autonomy’ believe in protecting processes. For them, these processes depend largely on the absence of our influence and especially our control. Nature autonomists focus on wildness as independence, stressing instinct and spontaneity. Wildness as independence is a matter of degree. It can be diminished, even lost, but it can also be re-acquired.

Alternatively, those who wish to protect biodiversity choose a natural system and a benchmark date, as noted above. Often this date is based on whatever is feasible with the nature remaining. New Zealanders value their native birds, and include those Australian species that have arrived and established ‘naturally’. They do not seek to replace the moa (family *Dinornithidae*) with other ratites, or to incorporate exotic species (except for the ‘natural’ Australian arrivals) in their conservation ethic. Wildness as normal-naturalness is not a matter of degree: either the animal is normal-natural and must be pro-

---

71 Ridder 2007, pp. 8-10
72 Woods 2005, pp. 170-188
ected, or it is not. The risk is that if normal-naturalness is lost (through extinction), it is gone forever.

Exotic animals out of their native habitat can still act wild. This does not matter to conservationists who prize biodiversity. Extermination actions have long been justified by Leopold’s land ethic: “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.”73 But wildness is often not ‘right,’ in the sense that it does not preserve integrity or stability. These ideas are based on a static ecosystem. Nature is not static. When things are not ‘right,’ they eventually adapt or perish. If they adapt, they become naturalized. Naturalization is defined as “the establishment of self-regenerating populations [unsupported by and independent of man] of an introduced species or race in a free-living state in the wild.”74 In this instance an animal seems to have become ‘natural’ by being wild, not wild by being natural. And the wildness comes from their independence.

The best case of this may be the dingo. When the dingo arrived on Australia, as a domestic dog brought over from Asia, it wreaked havoc. The continent, already weakened by the great impact of hunting humans, was unprepared for such a placental predator. The two remaining mammalian predators, thylacines (Thylacinus cynocephalus) and Tasmanian devils (Sarcophilus harrissii), went extinct on the mainland.75 Today, four thousand or so years later, the dingo is now necessary to preserve stability and integrity. When dingoes are removed, feral fox and cat numbers skyrocket (dingoes eat both them and their food). The marsupials that can deal with dingoes, but not with the new ferals,

75 Flannery 1994, p. 115 see also Paddle, Robert, The Last Tasmanian Tiger: The History and Extinction of the Thylacine, Cambridge: Cambridge University Press, 2000, p. 20. Paddle notes that the dingo helped pushed the Thylacine and Devil to extinction but was not the sole cause.
die off.\textsuperscript{76} Once the cause of extinctions, the dingo now prevents them. Australians recognize dingoes as naturalized in the same way as Americans do mustangs. They have been accepted as in some way wild.

Considering the state of wildlife today, perhaps this is the best way to think of wildness. Feral, exotic, and synanthropic animals survive and thrive without and/or despite us. They and their novel ecosystems will eventually adapt to each other. The ferals and exotics will speciate. We’ll have Australian camels and American boars, kiwi chamoix and kiwi trout, European raccoons and raccoon dogs.

There are two big problems with this. One is time. It will take a long while for these animals to appear, and as they do, many others will be lost. For our lifetime, and probably into that of our great-great grandchildren, these changing creatures will be little different and we’ll be getting an increasingly globalized and thus diminished suite of species. The second is one of cause. Speciation and extinction are normal-natural, but the rate and cause of the current extinctions is not. But how does this all relate to wildness?

In conserving biodiversity, conservationists often substitute ‘wild’ for normal-natural. When they blend these two ideas, we risk losing sight of the other sort of wildness, especially wildness as independence. By choosing to think of wild nature in a normal-natural way, we may be missing, or forgetting, the other, autonomous wild nature around us, and we may be sacrificing it in favor of something else.

C. Natural Individuals

An animal can be natural on two levels: within its environment, as discussed above, or as an example of its species. Wildness as naturalness in relation to their environment concerns wild animals as species. Wildness as naturalness when considering individuals is in relation to genetics.

\textsuperscript{76} Lester, Benjamin, “The Dingo Divide”, \textit{Cosmos Online}, 15 November 2006, \url{http://www.cosmosmagazine.com/features/online/850/the-dingo-divide}
This too is a naturalness of normality. It is a wildness in form: is this individual animal a normal example of its species? An animal may be altered by starvation, disease, or parasites, all natural events. They can occur without our influence, and they're remarkably common. Genetic engineering is neither.

A wild animal whose genetic make-up is within range of that of its ancestral population is normal-natural and thus wild. Genetic alteration can occur through hybridization or mutations, and these are also natural events. An animal with human-altered genes is not normal-natural. It is not the result of natural processes. Thus it is not a wild animal in relation to normal-naturalness, but, as feral species prove, the animal could have some wildness as independence. Bulliet notes that:

Under feral conditions, in which animals are deprived of the umbrella of human care and protection from predators, natural selection normally favors a return of “wild” characteristics. The low-adrenaline easy-breeders die young, and the more skittish and competitive survive to reproduce. (The feral camels of Australia provide an instructive comparison because the absence of predators in the outback makes them just as docile as domestic camels.) But feral animals, whether horses, donkeys, pigeons, cats, dogs, or pigs, do not truly become wild. For example, they do not regain uniform wild coloration patterns. And they do not resist a return to conditions of domestic breeding as strongly as wild species.

Citing their artificial coloration as an example, Bulliet does not grant feral animals full wildness because they are not normal-natural. He finds their independence not strong enough either, referencing the ease of returning the feral animals to captivity. In describing the return to ‘wild’ characteristics, Bulliet describes the wildness as wariness that I will address in the next section.

---

78 Bulliet 2005, p. 115
Bulliet’s point in favor of natural selection bringing about ‘wild’ characteristics raises the issue, again, of non-natural selection doing the opposite. Domestication, or any type of artificial selection, apply non-natural pressures such as those from trophy hunters and fishermen which eliminate the strong and large animals instead of the small and weak. Both artificial selection and genetic engineering are humans altering animals at a genetic level. The difference is time and power. Engineering changes genes instantaneously while artificial selection takes generations. Even more, a single genetically-engineered change can be made in a laboratory and then, if released, instantly threaten the tainting of wild populations. In either case, domestication or engineering, the end result is the same: humans are genetically-altering the animal. (The same could be said of a cheetah selecting for a certain type of gazelle.) The problem with genetic engineering is that the end result can be so different, so fast, and so permanent.

One consequence of this is that with enough engineering, or selecting, the new animals would become normal-natural. For example, few urbanites now find feral pigeons foreign. Even fewer people note any difference between the pigeons and their ancestral rock doves. Most urbanites don’t wonder where the pigeons come from; pigeons seem a normal part of the urban environment. But, as Quammen describes, this situation is as much the result of our action as anything else:

Feral pigeons aren’t like other birds. They aren’t even like other pigeons. They fly faster. They eat a more diverse diet. They breed earlier in life, more abundantly throughout it, and repeatedly during the course of the year. They travel long distances, transplanting themselves into new terrain with the robust impertinence of weeds. They have invaded, in particular, the concrete environments that the human species constructs for itself. They succeed in living at high population densities in close proximity to people who despise them.

...They aren’t wild animals and they aren’t domestics. They hover around humanity like a guilty memory, flighty but ineradicable. They are genetically de-
signed for survival in the severe urban landscapes of the late twentieth century, and it’s a fact worth noting that we ourselves helped design them. Feral pigeons reflect a potent amalgam of two evolutionary forces — artificial selection as practiced by human breeders and natural selection as effected by all other forms of circumstance — that may be unique in the history of animals.⁷⁹

Thus, again, effective artificial selection may create a new normal-natural state. People may not be able to distinguish between the original species and the new. This is already occurring with ecosystems. Ecologists lament this, with each new generation simply accepting diminished ecosystems and not knowing what came before and what’s missing. On a grand scale, the same could be said of us today, in relation to our prehistoric ancestors. As Alfred Wallace famously lamented:

[We] live in a zoologically impoverished world, from which all the hugest, and fiercest, and strangest forms have recently disappeared.⁸⁰

It could also be said that many of our wild animals are tainted already, for example the American bison. Only the bison that have been forever isolated or protected, such as those lingering in Yellowstone and parts of Canada, have kept their original Ice Age genes. Genetic research has shown that the rest (many, if not most, of the world’s bison) carry some cattle genes, and that very few pure bison remain.⁸¹ This is because as the herd of 16 million or so fell to only hundreds at the turn of the last century, farmers crossbred the remaining bison with cattle in hopes of increasing their hardiness. Most of these hybridized bison were the founders of the remaining populations across the country. The few genetically-pure bison are the only ‘wild blueprint’ remaining. These pure bison

⁷⁹ Quammen 1998, p. 110


are at risk of being lost altogether by dilution if they mix with the non-pure of their species. If wildness is in individual normality, then wild bison are in a dire state.

D. Conserving Naturalness

For autonomists to let ‘Nature’ rule, normality is essential, both in the animals and in the processes. Interestingly, on this importance of normality, nature autonomists and conservationists are in agreement. Just as conservationists want to preserve normal-natural wildlife for an area (biodiversity), autonomists want to preserve the normal animals and processes. They don’t want either evolution or its products to be tainted. Yet, again, we humans have already altered many species and affected evolution through domestication and breeding long before genetic engineering. Just as an invasive species can display (nativeness aside) wild behaviour, so can a genetically-altered animal. The cattle-tainted bison still roam the prairie at large, as do coydogs.

The altered species may initially be less viable than their wild progenitors, but they may also adapt. And they don’t know that they’re not wild. Indeed, like the dingo, they may have little trouble acting as such. Independent in the bush, these animals may eventually seem just as wild. Again, their wildness, though tainted in their genes, could remain in their behaviour. It would be in relation to us, and due to our knowledge of their genomes, that they were not wild any longer.

The terms ‘wildness’ and ‘naturalness’ have long been at odds in the ecological literature. Both are used as an option for managing nature with the conservationists co-opting ‘naturalness’ in favor of preserving biodiversity and the nature autonomists taking ‘wildness’ in favor of preserving freedom and evolution. Ridder thinks that the groups’ agreement on the issue of normality (both wanting to preserve normal-natural things), hints at the compatibility of these two terms. He writes:

The debate between naturalness and wildness is fundamentally about values. To one side is the desire to conserve biodiversity [conservationists] and to the other
is the desire to minimize the extent of rationally planned human intervention in nature [nature autonomists]. The underlying influence of these values, combined with the framing of the debate using terms as complex and subject to interpretation as naturalness and wildness, greatly magnifies the potential for conflict. These terms are easily confused with one another. Where naturalness describes the absence of rationally planned human intervention, wildness describes behavior that is not rationally planned. The latter is a subset of the former.”

But Ridder seems to confuse the two types of naturalness here. Conserving biodiversity is conserving a normal-naturalness. Exotic and feral species are not counted as biodiversity. And in preserving this normal-naturalness, humans intervene with rational plans, such as by killing exotics and captive-breeding endangered species. When humans intervene, their control or influence may favor normal-naturalness, but it contradicts the other naturalness, the naturalness based on separation from human influence. The two types of naturalness may be related, but they’re different.

Also, what is ‘not rationally planned behaviour?’ How does an animal act wild? A study of animal temperament in relation to ecology and evolution lists possible animal behavioural traits and ‘wildness’ is not among them. The traits described include: bold, docile, tame, unfearful, shy, untame, fearful, exploratory, neophilic, unexploratory, neophobic, active, inactive, social, sociable, asocial, and aggressive. The ‘wild’ foxes selected against in the Russian fox domestication project mentioned above exhibited two of these traits: aggression and fear.

---


Aggression is a classic example of ‘wild’ behaviour: the dangerous sort. “Be careful,” we warn, “it’s a wild animal.” But abused domestic animals can be aggressive, too. Aggression is also an unusual behaviour to experience from a wild animal. Most wild animals (or at least their young), would have to be threatened before they expressed it. Also, wild animals that are aggressive are the first we kill. We’ve been selecting against them for a long time.

The second wild trait selected against in Russia, fear, may be a much better example of what it means to act wild, at least in relation to how we usually experience wild animals. And yet ‘fearful’ is not exactly what we mean when we refer to ‘wild’ behaviour. In the next section I will discuss how an animal’s behaviour, particularly its temperament, create impressions of its wildness. By looking at the causes of such behaviour I will assess whether or not this sort of wildness, a wildness of temperament, is compatible with a wildness of independence, or naturalness, and what role temperament should play in a definition of wildness.
3. Wildness as Wariness
Wild animals are wary. When one encounters an animal in the bush, it flees. Those that don’t seem less wild. They act habituated, if not tame. Wild animals do not like people.

Yet the wildest animals in the classic context — those that have never seen a human — would seem truly tame. Citing the naiveté of animals on human-free islands, e.g. the dodo (*Raphus cucullatus*), paleontologist Tim Flannery proposes that ‘wild’ behaviour — skittishness, wariness, hiding — is a learned response to hunting. Primates are not natural predators. We lack claws, fangs, a certain scent. Thus animals that didn’t evolve with us don’t know to treat us as such. They initially responded to people as they would another antelope, not a cheetah. Reports of such tame, wild animals abound in the writings of early maritime explorers.

Even today, such uninitiated animals exist. A BBC article from September 2009 describes a giant species of rat just discovered in a remote crater in Papua New Guinean. The report begins, “the rat, which has no fear of humans, measures 82cm long, placing it among the largest species of rat known anywhere in the world” [emphasis added]. The rat, rarely or even never before seen, is one of the world’s wildest animals, and yet it is tame.

Flannery cites the increasing ‘domesticity’ of wild animals in national parks as further evidence. Once they forget their fear, animals act very differently around humans. If Flannery’s correct, there’s nothing less wild (as normal-natural) about the

---

85 Flannery 1994, p. 188

86 ibid, pp. 187-194 Flannery references Darwin’s experience on the Galapagos and Péron’s encounters while exploring Australia. Many more accounts exist as well, these include reports on most recently extinct island species, like the dodo, the great auk, or Stellar’s Sea Cow. These, and many more, are chronicled in Flannery’s *A Gap in Nature*, New York: Atlantic Monthly Press: 2001.


88 Flannery 1994, p. 193
behaviour of animals which have undergone research habituation or urban adaptation. Wildness as wariness is not a purely ‘natural’ trait. That said, Bulliet believes this change in human-wild animal relations may lead to confusion:

Human extermination of predator species and restrictions on hunting are generating an unanticipated increase in tameness among species that are learning to co-habit with humans: in America, raccoons, opossums, coyotes, Canada geese, and white-tailed deer, among others. In time, the difference between certain of these species and the species we now label “domestic” may lie solely in our disinclination, at least for the moment, to exploit them for commercial products.  

Bulliet’s statement implies that wariness is essential to a clear conception of wildness, but Bulliet also describes a phenomena he calls ‘tame-in-the-wild.’ He, too, references the tameness of the island animals as an example, but adds that the same is true of many animals without predators. Asian elephants (Elephas maximus), for instance, have great tractability. In India they were not domesticated but captured as adults in the wild (which is much cheaper than raising and feeding) and then trained. With an elephant, this would only be possible with a tendency toward tameness.

The best examples may be the camel family (Camelidae), both in Asia and South America. Bulliet points out that they “lack the horns, fangs, claws, and sharp hooves used for protection by so many animals... [and] can neither run like horses nor leap like impalas.” Instead the camel family’s secret to survival is to thrive in places hostile to potential predators, e.g. deserts and desolate alpine areas. Thus, living with few if any predators, camelids are not prepared to fight and they are reluctant to flee.

---

89 Bulliet 2005, pp. 39-40
90 ibid, p. 93
91 ibid, p. 98
92 ibid
Historically, guanaco (*Lama guanicoe*) are incredibly tame. Even more amazing, Bulliet adds, “no wild one-humped camel [*Camelus dromedarius*] are ever mentioned in the historical record of their native Arabia.”\(^{93}\) This is not for lack of space as the desert is among the “most sparsely populated regions” of the planet.\(^{94}\) Instead, it’s just that no one ever noted a change in the camel’s behaviour, i.e. whether it was ‘wild’ or not. There may be no temperamental or genetic difference between wild and domestic one-humped camels.

The one-humped camel’s native range is unknown, so it is impossible to give them an accurate normal-natural wildness. They are described as long extinct in the wild, except for a feral population of over 100,000 that now ranges across the Outback of Australia.\(^{95, 96}\) If there is no difference between wild and domestic one-humps, then this Australian population’s only issue for wildness as normal-naturalness is its location, and all we know is that Australia is not where they started.

So, for some animals, wary, wild behaviour may never have existed. For others, it was learned and can be forgotten with comfort and habituation. Meanwhile, some species, it would seem, will always be wary. Big cats, and other apex predators, will always have to be wary because we humans would never benignly coexist with them.

Yet, with certain circumstances even that wariness can be un-learned. Such is slowly happening across the Western United States with pumas (*Puma concolor*). The situation was exemplified by Boulder, Colorado in the late 1980s and early 1990s.

---

\(^{93}\) ibid, p. 99  
\(^{94}\) ibid  
Case Study: The Puma in Boulder, Colorado
Boulder sits on the edge of the Front Range of the Rocky Mountains. A university town, it has long been a place for progressive thinking and liberal attitudes. As such, Boulderites have created unusual habitat: a direct eco-tone between vast wild spaces and dense suburbs. In 1967, residents chose to tax themselves so that the city could buy up open land and prevent development. The plan was effective and essentially created a buffer green-zone stretching all around the city and leading to the protected mountains. Residents also banned hunting and any form of population control. The combination of providing habitat and eliminating fear brought many animals, especially mule deer (*Odocoileus hemionus*), right into the urban and suburban areas, where the vegetation is artificially lush. As the deer population boomed, their predator (the puma) followed.

Soon a few Boulderites noticed deer carcasses cached in their yards. Then pets started disappearing. Pumas have long been afraid of dogs; they take off at the slightest bark. This is why hounds are so effective in hunting them. Biologists attribute this fear to the puma’s long rough relationship with wolves. Wolves not only steal their food, but kill their kittens and even adults. Yet wolves were eradicated even more thoroughly than pumas. As pumas have re-colonized much of the West they have returned to a land without their canine enemy. For this new generation of pumas, there is no fear; dogs are a tasty and easy meal. In Boulder, pumas took them off runs and out of pens: leaping in, striking, and carrying the dogs out. A few horrified dog owners even watched a cat attack their dog in front of them, in one instance right on the back porch.

Suffering no retaliation, the pumas that were hunting dogs were also becoming used to people. They would casually cross backyards and suburban streets, scratch long claw marks across garden sheds, and rest in treetops looking into second story.

98 ibid, pp. 98-99
99 ibid, pp. 100-114
windows. One began to den in an abandoned mine just outside of town. Wildlife officials were torn over how to deal with the situation. Some felt that the pumas had to be tranquilized and relocated, that such brazen behaviour would soon result in disaster. Others felt that the pumas were a natural response to the over-populated deer and that the cats must be accepted by the community that had brought about the increase in nearby deer.

Those that wanted the pumas left alone had more authority, and the cats went unmanaged. The Division of Wildlife did not want to take responsibility for a wild animal. With the pumas free to habituate, disaster struck. Reports first came of pumas stalking humans and a few failed attacks, but the Division of Wildlife still did nothing. Then a puma ambushed and killed an eighteen-year old boy running in the hills behind his high school.

The death resulted in an instant change of policy. Amazingly, the community did not respond with a cull on puma populations. Instead, they set new measures for dealing with the cats. Pumas found repeatedly venturing into residential areas are captured and relocated. If they pose a threat they’re killed. Any puma encountered in a residential area is hazed: indirectly, with air horns and bullets shot at the feet, or directly with “rubber bullets, M-80s, and beanbags fired by shotgun.” This has not eliminated encounters, but the frequency has drastically decreased. Boulder is trying to re-teach pumas wariness.

Discussion of the Boulder pumas’ behaviour revealed what part people think they should play in defining a wild animal’s wildness. Sportsmen argued that the puma populations’ size and boldness was a response to a ban on hunting (both of the deer and the

---

100 ibid, pp. 70-71, 239-240
101 ibid, p. 96
102 ibid, p. 224
Boulderites responded that they “wanted their wildlife wild — unmanaged, unmanipulated, unhunted” [italics original]. If wildness is wariness, will hunting diminish wild behaviour? It would seem to do the opposite. ‘Unmanaged and unmanipulated’, correspond to wildness as independence and wildness as normal-naturalness. ‘Unhunted’, as a reason for wildness, suggests that we should not hunt because we are not normal-natural predators and we cannot take a natural place within a foodweb.

When a mother puma was killed stealing chickens, her kittens were taken in and it was found that they’d been feeding on dog. In his book on the story of pumas and Boulder, David Baron writes:

...[the] rescued kittens were raised in captivity on a diet of road-killed deer and elk, provided in such a way that the young [mountain] lions would not associate humans with food, and were eventually set free far from the homes and pets of Boulder County. Human intervention arguably had given the cats a better chance at a wild existence.105

Baron means a wild existence in that the pumas will be more separate, and wary. Throughout the book, he seems to find the Boulder pumas something other than wild. In fact, his interest in the story is how it captures the exact moment when a species makes that shift, from existing only ‘in the wild’ to among us. Many referred to the death of the boy, Scott Lancaster, as, in a way, an acceptable one, i.e. it was a pure. Scott loved nature and it seemed a natural way to go. To this, Baron responds, “[Scott’s] death was as natural as Boulder’s wolfless foothills, its gold-mine lairs, its irrigated lawns and urban

103 ibid, p. 91
104 ibid, p. 68
105 ibid, p. 225
deer.”¹⁰⁶ Yet here Baron may be falling prey to exactly what he notes in the beginning of his book:

[In] a country where people build new homes on undeveloped land, pay to preserve the open space beside it, attract animals into their yards, and — by embracing wilderness and wildlife — alter the very nature of what they presume Nature to be.¹⁰⁷

The normal-natural is always changing. Nature is not what the Boulderites presumed it to be, nor is it as removed as Baron thinks. Scott’s death may not have been normal, but the puma acted as an independent wild animal would. It arrived on its own and it hunted on its own. It adapted to the new habitat and took advantage of it. Its behaviour was wild, if not normal according to our records of pumas a hundred years ago, or around wolves.

Once the pumas entered the urban boundaries, and thus lost their fear, Baron described them differently. They are no longer wild, but ‘urban’ or ‘suburban lions.’ Yet their previous habitat, the Rocky Mountains, are also not normal-natural. They too now lack wolves, harbour unnaturally large populations of deer, and offer gold-mine lairs. The habitats are different but the major difference between the pumas in the mountains and in the city is their lack of fear of people, i.e. their lost wariness.

B. Temperament

Wariness (or prudence on the predator’s part) may be essential to our sense of an animal’s wildness. This seems to be the issue that Bulliet has with the rising tameness of predator-free species. Unafraid, the animals begin to behave like domestics. Wariness helps to keep the sensation of them in ‘the wild’ (even if that wild is otherwise a farm or

¹⁰⁶ ibid, p. 226
¹⁰⁷ ibid, p. 12
backyard). It establishes that the animal is autonomous and outside our control. This separation can be special. As Dillard writes:

    The great hurrah about wild animals is that they exist at all, and the greater hurrah is the actual moment of seeing them. Because they have a nice dignity, and prefer to have nothing to do with me, not even as simple objects of my vision. They show me by their very wariness what a prize it is simply to open my eyes and behold.\textsuperscript{108}

Edward Abbey, too, references wariness as an important trait. For him, it is enough to make a once-domesticate wild:

    I walk past three wild burros. Descendants of lost and abandoned prospector’s stock, they range everywhere in the Panamints, multiplying freely, endangering the survival of the native bighorn sheep by trespassing on the latter’s forage, befouling their springs. But the feral burros have their charm too. They stand about 100 feet from the trail watching me go by. They are quite unafraid, and merely blink their heavy lashes like movie starlets when I halt to stare at them. However they are certainly not tame. Advance toward them and they trot off briskly.\textsuperscript{109}

Abbey references that the burros are introduced (though to an ecosystem in which their equine ancestors once thrived), but he calls them wild based on their wariness. And he seems to enjoy their presence.

    As Abbey’s example shows, wariness is not helpful for determining whether a wild animals is normal-natural. Exotic and feral species may be just as wary as a native, if not more so because of the persecution they often suffer. Wariness \textit{can} indicate inde-

\textsuperscript{108} Dillard 1974, p. 192
\textsuperscript{109} Abbey, Edward, “Death Valley”, \textit{The Journey Home}, New York, Dutton, 1977, p. 75
pendence. An animal independent of humans will quickly flee. One used to them, or used to being fed, will not.

Though wariness can be attributed to a species — tammar wallabies (*Macropus eugenii*) are shy — it can also vary between individuals, with certain tammars, for example, being bolder than others. In this way different individuals of the same species, in the same location and situation, may seem to be at different levels of wildness. Different individuals are born with different dispositions. Boldness and wariness, as shown in the Siberian fox experiments, are partially genetic.\textsuperscript{110} Whether or not an animal is wary may have little to do with its normal-natural wildness. It is normal-natural for an individual to be wary, or tame.

Thus naturalness does not help in defining a wild temperament as individuals vary. Independence can be misleading too. An animal may seem more independent because it is wary, but this does not mean it hasn’t been raiding camps and become wary due to abuse. An animal may appear tame and yet have absolutely no relation to humans. Its very tameness, like those ‘tame-in-the-wild’ animals in remote places, may be the result of being so far removed.

Wariness, alone, is not an adequate indicator of wildness. Not all wild animals are wary. Not all wary animals are wild. A domestic animal can become wary if abused, and a wild animal almost tame if comfortable. Marsupials in Australian ecosanctuaries, free of predators and negative human disturbance, quickly display such relaxed behaviour. There is a difference between tameness due to lack of disturbance and tameness due to feeding. A wild animal that acts tame may have learned that there is little to fear (at least from humans), but it still leads a normal-natural lifestyle, the same whether a human is present or not. Wild animals that beg have learned to be fed by people. When a human arrives, their behaviour changes. They begin to ask for food, to follow the human around,

\textsuperscript{110} Trut et al. 2009, p. 349
to wait and gaze. The power of one’s control over the animals is felt in such situations, and the knowledge that that control came from previous humans’ interactions with these animals detracts from the sense that they are wild.

Yet even animals that are fed still find most of their sustenance on their own, and do not depend on people to survive. In a way, they remain independent. They have to be unless being fed as often as a pet, even if they don’t always act as such. In this way, they are still wild, though it may feel different to the observer.

The point here is that what we look for in wariness as wildness is behaviour of a wild animal in relation to us. If we understand that wildness does not necessarily require wary behaviour, then we may consider more animals wild. Anne Dillard, in her visit to the Galapagos islands, offers sound advice as to how to treat such a relationship:

The wild hawk is tame... I have read that if you take pains, you can walk up and pat it. I never tried. We people don’t walk up and pat each other; enough is enough. The animals’ critical distance and mine tended to coincide, so we could enjoy an easy sociability without threat of violence or unwonted intimacy. The hawk, which is not notably sociable, nevertheless endures even a blundering approach, and is apparently as content to perch on a scrub tree at your shoulder as anyplace else.111

Dillard’s ‘critical distance’ is reflective of her wish to maintain the hawk’s wildness. In that space hangs the mystery, and separation, of the wild animal. That space is the difference between habituation and urban adaptation, and the animals on these traditionally non-human islands like the Galapagos. The habituated and adapted animals are now used to people; the island animals never knew to fear us. On the islands, the space from a wildness as wariness was never created by human hunting. For the urban animals, the space has long and often been crossed, or greatly diminished.

That feeling of lost wildness caused by tameness may also occur when the distance between a person and a wild animal is diminished. A lack of distance may challenge the other ideas of wildness: is this animal still independent of me if it lives so close? Is it normal-natural for a wild animal to live in my backyard? In the next section, I will show how proximity plays a role in wildness and show, again, that wildness is determined by our perception, not something intrinsic to the animal.
4. Wildness as Distance
Wild animals keep their distance from us. The amount of space they keep may indicate their wildness. As Karen Treanor writes:

> Unlike all the other animals which visit our yard, the kangaroos have not become noticeably tamer since meeting us. Possums will take food from my hand, bandicoots will allow a gentle pat and tick removal, magpies come when I whistle, but the giant marsupials maintain their distance.112

Even habituated or urban animals keep some distance. Only the creatures that beg (a behaviour that, by revealing lack of independence, is inconsistent with wildness) may venture to feed from a hand.

In a different way, the distance between a wild animal and a person can be one of familiarity, i.e. a geographic distance. To me (an American), kangaroos (genus *Macropus*) seemed wilder than deer until I arrived in Australia. Exotic species in general are more often depicted as wildlife (in books and calendars, as toys and stickers, etc).113 They’re also more often used to represent the plight of endangered species to garner funding. Such exoticization can be problematic, with attention, awareness, and resources being sent to distant places (with different problems) instead of being used to foster local care and stewardship, and a more realistic relationship with local wildlife. It’s worth noting that the distance is from not only the exotic wildlife, but from the people that live with that wildlife as well.

Also, with increasing urbanization, many local, native species have become essentially exotic. Modern, urban environments distance people from most wild animals. Most urbanites don’t see these animals (or where they live) and think of them as wild animals off ‘in the wild’ somewhere. In doing this, people romanticize the animals’ existence and miss how convoluted this ‘wild’ has become. To urbanites, the animals ‘out

---


113 This is exotic as in foreign and exciting, not as in invasive.
there’ are wildlife. The animals around them (rats, pigeons, house mice) are not wild, just there, and are often considered pests, just as the wild animals ‘out there’ may be pests for the farmers or rural villagers who live alongside them.

Animals develop a relationship with the humans whose space they share, and this changes their status. They may become pests. They may become a resource, or game. They be welcomed, e.g. bird tables may be put out, nestboxes built, or care given to injured or orphaned animals. The welcomed animals may still be wild in their independence, in their freedom to make choices, but they may also become tamer (i.e. less wary).

The American Indians had such a close relationship with the surrounding wildlife, burning the forest and clearing grassland to create pasture for animals they would later hunt. As Standing Bear of the Olgaga Sioux wrote:

We did not think of the great open plains, the beautiful rolling hills, and the winding streams with their tangled growth as “wild.” Only to the white man was nature a “wilderness” land, only to him was the land infested with “wild” animals and “savage” people. To us it was tame.114

The Sioux no more domesticated the grizzly than we have, nor wanted to. By tame, I think Standing Bear meant that, to the Sioux, these animals — wild to white people — were familiar. Familiarity, a lack of distance in space and frequency, makes an animal less mysterious and better known. Familiar are the animals that feed here, congregate there, and roost over that way. Perhaps this is why pigeons always seems less wild. Even when encountering pigeons nesting on a remote cliff, their wildness somehow seems negated. This may also be because their feral nature has created a new normal-natural. For most people it is hard to distinguish a feral pigeon from a pure rock dove.

There are animals that live proximate to people and there are animals — again, big predators — that live in such a manner that they will always seem wild. They remain

---

114 Luther Standing Bear, *Land of the Spotted Eagle*, Boston: Houghton Mifflin, 1933, p. 8
wary and thus keep (and need) a great distance. By appreciating the importance of distance for wild animals, we recognize our taming effect. Wildness as distance is purely based on us and has little to do with the actual animals, except perhaps for a certain species’ penchant/need to be far from people. This caveat is worth noting. If wildness is based on our perception of an animal, these species who have no need or desire to develop any relationship with us (and who we wish no relationship with either), will always be the most wild. And not just because of our perception of them, but their characteristics of avoiding (and not appealing to us) as well.

This aspect of wildness as distance is more of a species-based understanding than individual. If a few individuals are visible, we allow them to function as representatives for the whole species. That species is around. We don’t recognize which individuals don’t mind us, and which stay away.

Wildness as distance can also be thought of as unfamiliarity. The spontaneity and wariness of wild animals allows them to retain an air of mystery despite all our information, research, and encroachment. At the most basic level, a wildness as distance (and wariness) relates to a wildness as visibility. Wild animals are hard to see.

Animals (wild and domestic) have largely disappeared from modern, urban life. Berger notes that this is a defining aspect of modernity. 115 We no longer rely on domestic animals for transportation. In crowded cities and suburbs, we rarely share habitat with wildlife. Factory farms prevent us from even seeing the animals that will become our food. Some animals do remain: synanthropes. These animals are considered ordinary, common, uninteresting. If a wild animal is distant and thus unusual, then the animal is exciting and more likely to be thought of as ‘wild’. Synanthropes are animals that we experience not ‘in the wild’ but in the city. By existing in this limbo state, outside of what we consider their natural environment, to us the animals lose their wildness. (A

---

seagull at the town dump seems less wild than that same seagull seen three hours later bobbing in the ocean.) They are less independent, for they depend on us for their habitat. They are not normal-natural for cities are not normal-natural environments.

A wilderness as distance would be a continuum, with domestics at one end of the scale, as ‘near’ and ‘not wild’; synanthropes and feral species not too far removed. Next come birds that eat at our bird-feeders, then, hawks and eagles, who keep their space but are still visible as they hover high over our homes and roads. Much further along, near the ‘distant wild’ end, are the rare, endangered, and wary species, like tigers (*Panthera tigris*) and pandas (*Ailuropoda melanoleuca*), okapis (*Okapia johnstoni*) and ocelots (*Felis pardalis*). And the wildest animal would be the invisible animal, that which we never see or even discover. Wendell Berry has written a poem to just such a creature:

My daughter: ‘I hope there's an animal somewhere that nobody has ever seen. And I hope nobody ever sees it.’

To the Unseeable Animal

Being, whose flesh dissolves
at our glance, knower
of the secret sums and measures,
you are always here,
dwelling in the oldest sycamores,
visiting the faithful springs
when they are dark and the foxes
have crept to their edges.
I have come upon pools
in streams, places overgrown
with the woods' shadow,
where I knew you had rested,

---

116 This continuum can be applied to all aspects of wildness — independence, naturalness, and wariness—, but the same animals will be at different positions dependent on what aspect is used.
watching the little fish
hang still in the flow;
as I approached they seemed
particles of your clear mind
disappearing among the rocks.
I have waked deep in the woods
in the early morning, sure
that while I slept
your gaze passed over me.
That we do not know you
is your perfection
and our hope. The darkness
keeps us near you.” 117

The ‘unseeable animal’ has a wildness so distant and so independent that we have not even captured it in our awareness. And, again, as with the definitions before, this is a wildness in relation to us. It is the complete distance and separation from humans, that make this animal so wild.

Wildness as distance is consistent with experience and impression but it makes little sense. Somebody in a small Russian village lives near tigers. He may not see them but the tiger leaves tracks in the village and will eat the occasional dog.118 A distant, exotic panda may seem wild but as soon as one arrives and finds an ecosanctuary or captive breeding program, that impression will dissolve. The okapi may pass through banana plantations along jungle villages and the ocelot find her wanderings obstructed by a fence across the US-Mexico border. If an animal is distant, we imagine it must be wild over there, where we do not know it. We are simply unaware of all that would diminish the animal’s wildness.

118 Quammen 2003, pp. 374-375
Part III: Conclusion
1. Wildness as a Relationship

As shown in the beginning of Part II, typically ‘wildness’ describes a characteristic that can be applied to a kind of animal. In exploring the four ways we think of wildness we found that when evaluated, these characteristics were defined in relation to us. A wild animal is independent of us. A wild animal is normal-natural to us. A wild animal is wary of us. A wild animal keeps a certain distance from us.

Wildness is better thought of as a description of the relationship between humans and certain animals.\textsuperscript{119} Wildness describes a specific way in which humans engage with a part of their world.

Where a person encounters an animal, in part, determines how that person perceive that animal. The animal’s wildness is determined by the person’s perception of the animal \textit{in a specific environment}. For example, a person who encounters a red-masked parakeet (\textit{Aratinga erythrogenys}) in its native Ecuadorian rainforest will consider the parakeet wild. If the same person encountered the same parakeet living feral in San Francisco, the person may not consider the parakeet wild. Wildness is not intrinsic to a particular animal. We determine the wildness of an animal from the many factors of our relationship with the animal. Wildness is, indeed, in the eye of we beholders.

At the center of this relationship is our control. Control, or lack thereof, combined with the specific environment, determine whether a person perceives an animal as wild. The control need not be direct (i.e. the person controlling the animal). It may be control that over the environment as well.

Labels we apply to animals define categories that are based, in part, on this relationship. The first labels are either wild or domestic. Among the domestics, pets and livestock come under the context of our culture, and as such, our control. They live

\textsuperscript{119} A few animals can also affect wildness through relationships between themselves. Ants, for example, have domesticated aphids, see Mark Moffett’s \textit{Adventures among Ants}, Berkeley: University of California Press, 2010, p. 189
within our culture, they are products of our culture, and they are now dependent upon our culture. After the domesticates, wild animals are further defined by epithets describing their relation to us:

The wild animals that were once part of our culture, but are no longer: the feral.

The wild animals who use our culture to survive if not thrive, but without our conscious assistance: synanthropes.

The wild animals our cultures have arranged haphazardly around the globe: exotics and invasives.

The wild animals that our cultures contest: pests.

The wild animals whose populations our cultures bolster and whose predators we destroy: game.

The wild animals our culture now does everything it can to protect, even restoring or creating critical habitat and maintaining captive populations: endangered species.¹²⁰

All of these animals come at different levels of control and in different contexts. The animals we are least successful in controlling, pests, are pests because they are in the context of our home, our food, or our desired space. Their wildness is in their ability to thwart us, but is not valued as such.

The wild animals we control more and more, the endangered, are native and normal-natural to a space. Our culture uses them as representatives of ‘wild’ animals.

¹²⁰ And many more wild animals lack any distinctions.
Yet they are controlled by monitoring (collars and ear tags), by limits (a fence or habitat isolated by human encroachment), and by their inability to cope with the changing world. Their wildness is valued, especially in their representation of biodiversity, but their surrounding environment remains essential to this. As Quammen writes:

> Nor do zoos constitute fragments of wildness. In fact, wildness is precisely what’s missing; the infinite intricacies of an ecosystem [are] missing; only the animate bodies of a few animals, some of those animals potentially dangerous to humans (which is not the same as being wild), but stripped of their contexts and their community roles...are present. What we see in a zoo, according to John Berger, are creatures that have been rendered marginal. “The animals, isolated from each other and without interaction between species, have become utterly dependent upon their keepers.” So they are no longer wild. They are no longer complete. Their responses, their behavior, probably even their sensory capacities have changed.121

Quammen sees wildness in independence and normal-naturalness. “Dependent upon their keepers”, the animals are no longer independent, and thus no longer wild. Separated from their natural habitats, and thus behaviour, they are no longer normal-natural. They are not wild.

Captive ‘wild’ animals exist in a sort of limbo. They appear like their wild counterparts, but, in our complete control and out of their environment, they have lost all wildness. Rolston argues, “If caged, a wild animal loses its wildness only when it becomes ‘placid’”; it is at this moment that the animal has sacrificed control.122 Rolston’s statement is false because of Bulliet’s tame-in-the-wild phenomena mentioned earlier. There are some animals that are just always placid. Does this mean they can never be

---

121 Quammen 1998, pp. 87-88
122 Rolston 1990, p. 245
wild? Apparently this is the case with the one-humped camel, for whom we have no history of a ‘wild’ ancestor.

For most people an animal that is under human control is not wild. With feral and exotic species we are aware that we once had control, but lost it. We will always have difficulty granting them a wildness as normal-naturalness for no such thing exists for them. A feral species has no natural environment. They were altered to become a domestic version of their wild ancestors, and thus their normal-natural environment would be something like a barnyard. This is not natural in either variation of the word. A barnyard is normal for a domestic animal, not a feral animal, and a barnyard is under human influence. Thus feral animals, however independent, cannot escape some semblance of control.

Exotic species have a native habitat, but do not live there. If they return to their native habitat then they are no longer exotic. Exotics are, by definition, out of place. Exotic species are often also pests. They tend to be the species we try the hardest to control and have the most trouble doing so; yet at the same time we know that we’ve put them in a situation that makes them uncontrollable. Here we feel a sense of guilt for our lack of control — that we should have control now and should not have in the past. For us, that sense of responsibility takes away from the accountability of the animal’s impact on the environment. The Colorado Division of Wildlife did not want to take responsibility for the pumas because they were independent, wild animals, but Divisions of Wildlife take responsibility for exotic species constantly and do their best to control them. For example, Western Australia’s Department of Environment and Conservation has a vast anti-exotic program called Western Shield. The program is designed to kill red foxes by poisoning them with 1080 (sodium fluoroacetate). The “largest conservation program
ever undertaken in Australia,” Western Shield drops 77,000 baits in each operation. Each bait covers 20 hectares. The costs and breadth of the project are great.

Other creatures, such as game and resource species, remain in their native environment, but it is now an environment we partially control. Their habitat is managed, by predator culls and/or stocking practices, and humans play a role as an unusually effective predator. The management of some populations, such as bison, is so intense that there is little difference between their treatment and that of domestic animals, except perhaps for the habitat being more natural.

Synanthropes share their natural environment with us. They live in the space we create and control. Because we have already claimed their habitat as our own, synanthropes may no longer be considered wild.

Yet this may be a something of a human-centric idea. Many animals adapt to environments created by a different species. Consider the suite of aquatic and amphibian animals that follow a beaver’s (Castor canadensis) creation of a pond. These are basic aspects of ecology: animals adapt to each other, create niches that other animals occupy, and utilize different resources in a shared environment. We fail to perceive of synanthropes as wild because they live in a space we created. Wildness is determined by an animal’s relationship to humans, not other animals. If it is our influence (as opposed to another animal’s), we question the adapting animal’s wildness as independence and normal-naturalness. This may be a continuation of our old idea that we cannot be part of nature. If we have created a niche for another species, then that species can’t be natural and is, on one interpretation, not wild.

Synanthropes are unusual but we do exert a great influence on animals both wild and domestic. The increasing pressure we put on wild species worries ecologists. As Quammen writes:

[This] relentless replacement of wild populations by feral ones, rare species by weedy ones, inconvenient beasts by convenient ones, [is] a lamentably broad trend. Humanity is changing the world’s flora and fauna— not just extinguishing many species but also transforming those that remain. We’re doing it by the force of our ecological sovereignty and by the evolutionary selection (call it natural, call it artificial) that we exercise.

...Consider this troubling but real possibility: that the heavy presence of Homo sapiens across all the world’s landscapes, our irrepressible self-interest, and our well-meaning management decisions may yield a global menagerie of diminished, tractable creatures. Think of “supergrizzlies” in Yellowstone that are too sensible to eat hikers, “superwolves” in Montana that are too prudent to mess with cows, “supertigers” in Nepal that feed dutifully on tethered goats for the edification of ecotourists in blinds, “supergorillas” on the Virunga Volcanoes that carry acquired resistance to whooping cough and prefer a PowerBar to a mouthful of nettle leaves, “superdeer” strolling imperturbably through the suburbs, “supergingko” trees growing from holes in city sidewalks on a diet of carbon monoxide and dog piss, “supermosquitoes” that drink only from hummingbird feeders.

We’re headed toward that, and to me it’s a dreary prospect. If we come to such a point, with the surviving species (few as they may be) merely cultivated reflections of human dominance, human sufferance, human fancy, we’ll have selected away something precious. When the last beasts and the last plants left alive are all just as super as we are, the world will be a crowded and lonely place.124

Quammen writes about wildness often, but he almost always means normal-naturalness. Quammen acknowledges that our selective pressure may be natural. His concern is with the speed and breadth of the change. If we know that the animals changed to adapt to us, the animals no longer seem normal-natural. But to the next generation, these more trac-

---

124 Quammen 1998, pp. 116-117
table versions may be the new normal-natural. Many animals reflect past human influence, such as the bison. The difference is in influence versus control. Human-influenced animals can remain wild, but controlled animals cannot. An animal can still be independent while responding to our influence; this is adaption. Meanwhile, an animal under our control, for example in a captive breeding program, is now dependent. We are not influencing its adaptation but, in a way, determining it.

Animals’ reactions to human influence are often unexpected. “‘Superdeer’ strolling imperturbably through the suburbs” brought pumas right into Boulder. The pumas eventually preyed upon pets and even people. This may not seem normal-natural (for we know pumas as shy), but it certainly seems wild. Large cats are aggressive, independent, and powerful. Man-eaters occupy an extreme end of the wildness spectrum. Their presence alone is often credited with making a place wild:

To get my annual dose of wildlands, I commute each summer to Pine Island, a dreamy tide-washed island in a hidden inlet. It’s very, very wild, as “wild” is measured by the odds of being drowned or eaten by bears.  

Quammen wrote the ‘super-animal’ passage over ten years ago. In more recent work, such as his book on man-eating predators, *Monster of God*, he contemplates coexisting with human-eating animals. More so, he addresses what it means to ask others to do this. *Monster of God* is a critique of wildness as distance, a wildness which allows us to fight for these creatures while not thinking of what coexistence means for those who must bear the burden. Quammen praises the old relationship between brown bears and shepherds in Romania. As a result of their hundreds of years of coexistence, these bears have become ‘too sensible to eat’ people. The Romanians prefer losing a few sheep to living

---

125 Moore, Kathleen Dean, *Pine Island Paradox*, Minneapolis: Milkweed Editions, 2005, p. 133

without the bears. This is, in part, because Romanians enjoy bear hunting (as sport, not eradication).

Romania boasts the largest population of brown bears in Europe, and at phenomenal densities. In the late 1980s, with a scale of habitat roughly equivalent to Yellowstone (about 5 million hectares), Romania hosted 7,780 bears to Yellowstone’s 500.\textsuperscript{127} Romania’s bear population is only at such numbers due to supplemental feeding. Brown bears (\textit{Ursus arctos}) have a history of feeding on rubbish.\textsuperscript{128} Bear-friendly dumps, such as in the village of Răcădău in Romania, help support large populations. But the Romanians have more than just open dumps, they have actual feeding stations as well.

Troughs (complete with hunting blinds) are set up throughout the forest. The bears are served “apples and pears and plums by the bushel, cobs of corn by the cartload, granular pellets of a specially blended bear chow, and occasionally the carcass of an old horse.”\textsuperscript{129} The bears are essentially farmed for hunting, but worries about a risk of ‘domestication’ have not been raised. The bears still remain wild, though too smart to eat humans and happy to eat offered food.

In the same book as the ‘super-animal’ quote, \textit{Wild Thoughts from Wild Places}, Quammen isn’t sure what to make of various, questionably wild creatures. He’s troubled by the feral pigeons, but he celebrates the coyote ‘created’ by Los Angeles:

It’s a creature that will jump over chainlink for a bowl of Alpo. It’s an animal that can learn and remember which storm-sewer channels lead to which golf courses, which duck ponds and swimming pools offer potable water when the hills are dry, which dumpsters behind which supermarkets are likely to be over-

\textsuperscript{127} Quammen 2003, pp. 250-251

\textsuperscript{128} At Yellowstone until the late 1960s, special trash dumps were set up for the explicit purpose of attracting tourists to see bears. This practice stopped not because the bears were becoming domestic, but because they were becoming a threat. see Quammen 2003, pp. 288-291

\textsuperscript{129} Quammen 2003, pp. 233
flowing with old vegetables and delightfully rancid fish. It’s a beast constantly alert for unattended barbecued chicken. It’s a predator that, like some two-legged ones, is at home on Mulholland Drive. It has eaten from the Tree of Forbidden Knowledge, and it recalls fondly the taste of Fifi and Mr. Boots. I confess that I find this neither sad nor inappropriate. Better for the people of Los Angeles to share their city with one slightly corrupted species of Carnivora, I think, than with none at all, and the coyote is ideal for the role. It’s arguably more similar to Homo Sapiens in ecological terms if not anatomical ones, than any other species of animal, including the chimpanzee. And persecution by humans just makes it more similar still.\footnote{Quammen 1998, pp. 97-98}

Note his use of ‘corrupted’, as if this coyote is less than it should or could be i.e. it’s not normal-natural. I agree with Quammen about some things. I do not want to lose our wonderful wild animals. I do not want to lose the bounty of biodiversity. I do not want to go to Australia and see rabbits, goats, and camels instead of bilbies, wallabies, and kangaroos. But I am encouraged by the animals that adapt to us. In them I find a wildness that is disappearing elsewhere. The idea that we need to protect species seems like an odd and novel situation for humanity. If wildness is independence, perhaps we can best protect both wildness and biodiversity by re-thinking conservation to preserve both.

We may foster wildness by improving normal-natural conditions, by repairing our past harms, and then stepping back. Knowing where to start and when to stop will be difficult. If wildness is independence, we don’t yet have a solid example to offer such a hands-off model of conserving wild animals. How to relate to wildness is difficult to determine. The very way in which different people interact with the same wild animal changes how wild that animal seems, while doing little to the animal itself.
Case Study: The American Bison
Consider a bison roaming the American West and its varied relationships with seven different humans.

The Bison and a Sioux

As Standing Bear wrote, to the Sioux the wild animals were ‘tame.’ They shared the same natural environment, the same habitat, the same home. The bison were native, and normal-natural, but this was probably of little importance to the Sioux. Horses were embraced upon arrival. Without historical benchmarks and a strict conservation ethic, such groups tend to appreciate additions to the ecosystem. New species offer a new resource (most often food), and they’re compelling. Many Aboriginal groups in Australia have recognized and welcomed feral species, with the cat even becoming a sacred figure among some.131

The bison were independent of the Sioux, but the Sioux burned the prairie to create good graze for the animals. An element of subtle pastoralism existed. The bison were also wary. As bison biologist Dale F. Lott notes:

[Bison] are not the shyest of wild animals but a standing man would get their attention and probably send them running. The modern species was hunted by humans the whole of its history.132

Before horses, the bison’s wariness was a major problem for the Sioux. But their wariness was relative, and the Sioux understood this.

Bison fear wolves too, but not a lone wolf.133 To hunt, a Sioux would cloak himself in a wolf skin, then crawl towards a bison. The bison responded as if to a wolf, not a

131 Franklin, Adrian, Animal Nation: The True Story of Animals and Australia, Sydney: University of New South Wales, p. 173
133 ibid, pp. 160-161
human, i.e. it kept an eye out but did not flee. By using this method, the hunter could get 

close enough to slay the animal with arrows.

To the Sioux bison were sacred. The animals were also an essential resource. They were dangerous. They were free-ranging and self-sustaining. The bison were a challenge to hunt, but, as Standing Bear pointed out, they were not thought of as wild. They were neighbors.

_The Bison and a Rancher_

To a rancher, the bison have no distance. They live in the same place as he grazes his cattle. To him, the bison may be wild as a normal-natural part of the landscape, but as this landscape is changing (becoming ‘ranch’ instead of ‘wild’), this may mean little. The bison may be independent, but this is not enough to grant them freedom. The wild bison are free to range, but not on his land.

Bison present a risk of transferring disease to cattle, so they are monitored. This responsibility has fallen to the government. A decade ago, bison that left Yellowstone National Park were shot.\(^{134}\) Today, instead of being shot, they are hazed: helicopters manned by state workers and livestock agents chase the bison back into the park. Wild bison, who regularly wander from Yellowstone in search of more food or a safe place to give birth, are now herded back into the official ‘wild’ area. They are controlled like wayward cattle. Recently, in an even more bizarre case, some bison even wandered out of wildness. This event highlights the government’s ownership, and thus control, of the wild animals.

In early 2010, dozens of bison ventured out of Yellowstone and onto a large ranch owned by Ted Turner. In an “unusual custodial contract with the state of Montana”,

\(^{134}\) Soulé 2001, p. 144
Turner has agreed to keep the bison for the next five years as an experimental program. In return, he is granted ownership of a proportion of their offspring. A lawsuit has already been filed stating that the bison belong to the public, and the issue has even inspired a *New York Times* reporter to raise the question of this very thesis:

> But the tangled web of bison life here, and the new chapter of its history beginning on Mr. Turner’s Flying D Ranch raise major questions for environmentalists, ranchers and bison chefs, too — most notably perhaps, what does it mean to be wild? Are bison like the 3,000 or so inside Yellowstone, confined and accustomed to gawking tourists, truly wilder than their ranch-raised cousins?
> And should one group of animals have the right to roam free — with environmentalists and lawyers as allies, ready to file lawsuits — while the other group is just burgers on the hoof?  

So, despite the reporter’s confusion, we can say that the rancher perhaps sees bison as wild, but more so as property. If they are not owned by the rancher himself, they are owned by the government. This means that the government needs to control the animals and keep them in the appropriate context, i.e. the Park. And now it may even mean that they can be bought and traded, with deals being made between the government and the ranchers.

The outrage in Wyoming may be because the bison are headed for a ranch. Wild animal populations have long been traded, moved, and placed under ‘private ownership.’ Today it is in the name of conservation. One hundred years ago it was for acclimatization. This may upset some people as an affront to both wildness as independence and wildness as normal-naturalness, but most accept it.

---


136 Johnson 2010
Boulder is dealing with its pumas in a similar manner. When a puma is a problem, they move it. Florida has a different problem: not enough pumas. As the Florida panther faces extinction, pumas from Texas have been introduced to bolster the population. These pumas may alter the normal-natural genetics of the Florida panther, but that is a lesser evil than the complete loss of the sub-species. This conservation is not only a problem for wildness because the pumas come from somewhere else. The Texas pumas that are making it to Florida are the individuals that can deal with being captured and held in captivity while in transit. The genes they bring into the tiny Florida panther population may be predominately of the tamer temperament sort.

Tameness is only a potential issue for Florida panthers, but it already threatens bison. Bison ranching, inevitably, will render the bison less wary. The rancher has no reason to be concerned about the loss of ‘wild’ behaviour. In fact, he is against it. Lott notes that “more than 90 percent of the bison in North America today are undergoing domestication.” This means that 90% of the species are having their traits selected for (or against) in each new generation. The ranchers want traits like big rumps (more meat) and tractability (easier to handle). They select against the bison that are aggressive, or that have trouble with confinement. In fact, these bison often select themselves out, falling prey to stress diseases or injuries obtained in attempts at escape.

The spectre of only tame bison upsets Lott:

Bison domestication is like hide hunting, except that instead of stripping off the hide and discarding the meat, bison domestication will strip out the genes that make for good domestication and discard the genes that make wild bison wild.

---


Note: In Florida, pumas are called panthers.

138 Lott 2002, p. 195
...Wildness, competitiveness, and self-protectiveness are vital to an animal living on its own, but they’re a big nuisance to a rancher... Self-protective animals will keep humans at a distance, and you can’t ranch animals without getting close to them at least once in a while. 139

Lott connects the elements of wildness. Wariness keeps the animal distant and thus safe and independent. Normal-naturalness is the result of the animal having its full gene pool, i.e. the genetic, behavioural, and morphological diversity of the species. Perhaps we could have both a tame and wild version of bison, as we do with dogs and wolves, but we’d have to treat our wild bison differently.

Not only ranchers cause domestication. When humans intervene to increase a population, normal-natural sex ratios are disrupted. In hopes of increasing populations, rangers bring in more female bison. But, as Lott notes, “while the range will produce more calves, they are likely to be less wild.”140 This is because an increased female/male ratio will allow the males who would not naturally have the opportunity to mate to do so, and thus pass on their genes.141 Lott worries that this will eventually breed out the last of our wild bison. He notes how hard it will be already to save them, and in doing so, how subtly a new normal-natural may arrive:

How to recognize wild buffalo? We have to assume that the most wild are those whose life has been changed least by humans [wildness as independence]. They live on free ranges [independence], they breed in herds composed of about as many males as females [independence and normal-naturalness], and they find their own food summer and winter [independence]. If they have been tested by predators, so much the better [wariness]. Nearly all the bison in North America today, wild and domestic, have recent forebears that lived like, and even

139 ibid, p. 197
140 ibid, p. 198
141 ibid
with, cattle on turn-of-the-century ranches. Though human manipulation, even of
the cattle, was minimal on these ranches, if we could have looked closely enough
then we would likely have seen some evidence, however slight, of artificial selec-
tion acting on the bison. But it’s reasonable to expect that wilder circumstances
have restored most if not all wildness to today’s wild bison.

Domestic bison will look very much like wild bison. That’s why domest-
icating lines are such a subtle threat to wild lines. But their behavior will change
profoundly and rapidly.\textsuperscript{142}

Lott fears a loss of wildness as wariness, i.e. a permanent change in temperament. Even
if the bison are still independent in the park, they may be tainted by breeding with domes-
ticated private herds, or by a history of unnatural male/female ratios. The issue here is
not that a wild animal cannot seem tame, or unwary. They can, and it is normal-natural
for some, even in the wild, to be so. These may be selected against — in breeding or just
in surviving — or they may not, but they can occur as wild animals. The point here is
variability of temperament. A wild animal can be aggressive and fearful just as well as it
can be relaxed. When animals become domesticated, the genes for the variability in tem-
perament are eventually bred out, and we’re left with only tractable bison. Because those
traits which most often benefit the bison in the wild (when surviving independently), are
the same that are detrimental when surviving under care, it is possible that the version we
are left with is also the least ‘wild.’ In this way, bison ranchers present a direct challenge
to the bison’s wildness, either by making the government take control of the wild ani-
imals, or by breeding the bison’s wildness out of them.

\textsuperscript{142} ibid, p. 199-200
The Bison and a Conservationist

For a conservationist, the bison is wild because it is normal-natural. This normal-naturalness is most important. The sacrifice of some independence or the habituation and loss of wariness due to research, matters less. Such losses are necessary to save the wild animal.

For a conservationist, the threat to wildness is a loss of normal-naturalness. Discussing the cattle-bison hybrids mentioned earlier, a conservation magazine declares, “Like their prairie habitat, bison have grown less wild since the days before the West was won” [emphasis added].143 The magazine could also add that some bison are now less wild for they are not in their natural habitat:

If we’re going to keep wild bison wild, we’re going to need to protect the spaces they have, and we should look for some more space — space on the grasslands that shaped them and that they shaped in turn. ...And we should be willing to consider resolving this paradox: Bison bison is the only wild animal in the United States that is not allowed to live as a wild animal — live outside parks and refuges — anywhere in its original range. Some people in Montana are vigorously advocating that wild bison should again be a wildlife species.144

For Lott, the bison will not be wild until they are returned to their normal-natural range. One of the largest remaining bison herds in America lives on the National Bison Range in Montana’s Flathead Valley. The Range was established in the early 1900s explicitly to save them; the land was purchased by Congress. The bison were brought from further east (by entrepreneurial ranchers), and the habitat is Palouse prairie, not Great Plains grassland. The prairie has difficulty supporting the vast herd of bison — which is predator-free and literally fenced in — so culls are conducted and the bison are moved

143 Winger 2008, p. 59
144 Lott 2002, p. 201
about different sections of the Range, like cattle, in order to give the grasses a chance to recover.¹⁴⁵

A conservationist does not find this situation ideal. She did not set up the situation nor can she wield the power necessary to make policy match ecology. Calls for a ‘Great Plains National Park’ are long-running and only increasingly. But what the conservationist fears, and the reasons she’ll give for a change in practice, concern the essentially island populations of bison and the risks of in-breeding. Bison were once a widespread, enormous population. They are now small, scattered and isolated groups; “from widely outbred to severely inbred in one or two generations — the worst possible case of the infamous genetic bottleneck.”¹⁴⁶ The conservationist proposes corridors between the parks to solve this problem.

Interestingly, conservationists do not express concern about the loss of independence of these isolated groups which are restrained by habitat loss, if not fences. This may be because the conservationist feels a sense of responsibility for saving the bison. She realizes that if she demands their freedom, that means she would lose her role as caretaker too. The bison would be free to wander from where they ‘belong’ (unsettled, protected grasslands) and they’d be free to be shot or to starve. The interest of the conservationist is in preserving the species (a bit of biodiversity) even at the cost of losing some of the species wildness. A less wild species is better than none at all. Even in a case where the bison are not normal-natural, in an unusual habitat outside their original range, the conservationist keeps the bison as a relic of biodiversity.

We save species, as Russow has argued, ultimately because of their aesthetic value.¹⁴⁷ What is the aesthetic value of a bison? For a bison expert like Lott, that in-

¹⁴⁵ ibid, pp. 188, 191
¹⁴⁶ ibid, p. 193
cludes wild, aggressive behaviour (especially from the males). Russow wonders if we’d be happy to keep zebras without stripes, if their stripes put them in danger. Tame bison may be easier to manage, but in selecting for them perhaps we risk losing part of what makes the bison what we want a wild bison to be.

The Bison and a Ranger

The ranger has a similar relationship as the conservationist, except one of even more control. She considers the animal wild, and thus worthy of her respect and her career (taking care of wildlife), but her job, as Jack Turner notes, is a paradox if wildness is independence. The ranger is in charge of ‘wildlife management’; she manages and controls the wild animals.148

With the culling, fencing and herding in the National Bison Range, and with the hazing in Yellowstone, it seems that there is little difference between the treatment of wild bison in a National Park and captive bison on a private ranch. One is owned by the public and controlled by the government (in the form of the ranger), and the other is privately-owned and controlled by the bison rancher.

To the ranger, the wildness is in the bison’s normal-naturalness and its residual independence, e.g. its ability to breed on its own. Once an animal enters a captive-breeding program, the ranger must admit a loss of wildness. Either way, to some extent the animal falls under her care, and (with the ranching risk), her responsibility. There is no distance. She is a frequent visitor to the bison’s habitat. Even if the ranger’s control is minimal, she has the authority to enforce it (hazing, culling) whenever need be.

---

The role and experience of rangers has changed over time. Game management is a relatively recent profession in America. Responsibility for the care of wild animals has only come in the past hundred years or so.\textsuperscript{149}

The first few generations of rangers managed bison as a resource. They ran as many as they could on a block of land and they shot and sold the meat of the extra animals.\textsuperscript{150} The rangers did little about over-grazing. They did not create any more naturalness than one would for a herd of cattle. The native grasses were quickly lost and replaced by increasingly exotic weeds. As with cattle or game, the rangers eradicated potentially hazardous species, shooting coyotes (*Canis latrans*), rattlesnakes (family *Viperidae*), and wolves.

In the 1960s, a new generation of ranger arrived. These rangers looked at the ecosystem as a whole and did their best to keep it normal-natural. They systematically fenced the bison out of certain areas so that the native grasses could recover. They stopped shooting coyotes. They attempted to create a more normal-natural ecosystem, similar to that of one hundred years ago, and with a more complete range of species plus one (the bison). The need for fencing shows that this is unsustainable without human help. To achieve a more normal-natural ecosystem, the ranger must exercise control. If wildness is independence, the animals will not be completely wild.

\textsuperscript{149} Game has been managed in Europe for centuries. The animals were usually the property of the rich and royal, and they were managed to be sure some would be present when the owners wanted to hunt. In America, it was not until the great bounty of wildlife started to disappear that game management began. see Snyder, Gary, “Making Love with Animals”, *Earth House Hold: Technical Notes and Queries to Fellow Dharma Revolutionaries*, New York: New Directions, 1967, p. 119

\textsuperscript{150} Lott 2002, p. 190
The Bison and a Tourist

To the tourist the bison is totally wild. The distance is far. The wild animal is in a foreign, natural-looking environment. Whether or not it is native may not matter, depending on the tourist’s awareness of naturally-occurring species. The bison also appears independent and free because they are no obvious impediments to its movements. (For example, I visited the National Bison Range five years ago. I remember seeing fences but at the time did not realize what they meant.)

The bison will appear wary too, for most tourists will be untrusting and sure to keep a safe distance, heeding the warning signs to do so. If one ignores the signs and, made confident by the animals’ relaxed state, approaches, the bison may run off or it may charge and even maul. Either way the bison would express expected wild behaviour — i.e. fear or aggression.

All these impressions of wildness are important. A iconic species like the bison is also wild to the tourist because it represents the American wilderness in such a symbolic way. That wild splendor of the bison is what the tourist has come to see. Bison may be found in zoos and on ranches, but they do not have the power or magic to captivate the tourists the way wild herds do.

The Bison and a Hunter

Most hunters want their prey to be wild. They want it to be far enough away to present a challenge, and nativeness does not matter. Many of the feral and exotic species exist where and the way they do because of hunters. Hunting foreign ungulates is popular in prey-less places like New Zealand. Even in North America, where native game abounds, hunters eagerly pursue European wild boars and Asian pheasants.

Independence is important but need not be total. Game is stocked and many hunters set up feeding stations for their prey. These stations are accompanied by blinds,
for wariness is important to maintain the challenge. Still, there is little worry here. If animals are being hunted, they will be wary. The traditional elements making an animal a challenge — its freedom from and fear of people — are the wildness hunters value. It is that which creates the challenge of the hunt. Their name for wild animals: ‘game’, implies the sport in hunting.

Hunters have had a long relationship with conservation.151 In pursuing game, the hunters learn much about the animals, including what they need and are lacking (like sufficient habitat). Also, hunting fees provide much of the funding needed for conservation and they finance habitat preservation.152 Wise-use practices, such as those championed by Teddy Roosevelt, were among the earliest environmental actions.153 Yet conservation and killing are strange bedfellows, and we tend to ban the hunting of our most cherished species.154

With their history of introducing ferals and over-hunting natives, hunters seem to be an affront to wildness as normal-naturalness. Yet, in some ways, their behaviour encourages a wildness as independence. While conservationists may take animals out of ‘the wild’ to save them, or adjust ‘the wild’ to help restore habitat, hunters just release animals. They’ll take captives or domestics and put them out there (into ‘the wild’) to fend for themselves (and eventually be hunted). Hunters add animals to the wild, native and non-native, and then leave them there to be independent, thus boosting the numbers of wild animals living outside of our control and stewardship. In this way, hunters create

151 The classic example is Aldo Leopold.
154 For example, in Australia, national law protects all native birds, reptiles, amphibians, and mammals, except the dingo. There are exceptions for Aboriginal groups, ‘roo shooters, and farmers dealing with pests. see The National Parks and Wildlife Act 1974 and 2002.
more wild animals. This is not natural nor totally independent, but there is a form of freedom, and wildness may follow as a result. The hunters bestow upon these creatures a wild animals’ rights: to freedom, to territory, and to die.

By choosing to shoot the biggest and the strongest, hunters exert a different selective pressure than may normally occur (redefining fitness perhaps), but, so long as they do not hunt too effectively, they are still allowing a process of evolution to work. The hunters exercise restrained control. They exert influence the same way an effective predator might, but consciously. Also, like a predator, they’re selecting against the traits they desire (i.e. for a predator, slower and weaker prey, for a hunter, larger size, bigger antlers). Hunting laws play a role, too, setting seasons, size limits, rules for different sexes, etc.

In general, contemporary hunters seem willing to accept a level of control on the wild animals they’re hunting. In the United States, federal and state laws regulate hunting. A hunter would need a permit to shoot the bison.155 This permission shows one’s ownership of the wild animal, but it must not deter contemporary hunters or diminish the reward they feel, so long as the animal appear free and wary.156 Government control is not so much accepted as a fact of life. It may help with poaching problems, but it may also challenge wildness.

Bison hunters in the 19th century had a different experience. To them, bison were a resource to be harvested. As the animals were wild, they were owned by no one and thus free to anyone. And no one was responsible for their well-being. From passing trains, people shot the bison with wanton disregard. Trains were even explicitly sched-


uled for the purpose of taking potshots at the herds.157 As appalling as these actions are, they probably had little impact on the overall populations.

The great slaughters, reducing bison from tens of millions to near extinction, were conducted by professional hunters. Using .50 caliber Sharps rifles, the hunters would lie on their stomachs, down wind, and pick off bison one by one. The herd did not flee the shots — it’s thought that they were so used to thunder (the gun shot) and dust devils (the smoke), that they didn’t realize something unusual was going on.158 The hunters wouldn’t take the meat, only the hides; first for cloaks, and later as leather for steam belts. To them, the wild animals were just something to be utilized, like timber or coal. The bison’s wildness as independence made them un-owned, un-protected, and un-regulated.

*The Bison and a Documentary Filmmaker*

For an artist working with the bison, things that ruin the illusion of wildness — e.g. ear tags, radio-collars, shaved marks or clipped holes — will be disruptive, as would be a not normal-natural environment. Naturalness is important, at least in appearance. The animal must appear natural, free, and uncontrolled, for wildness is part of the subject. The artist is trying to convey something of that wild quality. She is interested in the lack of her own control, and is trying to capture that. This is the overwhelming feeling of waiting in a hide. One has absolutely no control over the animal, and often must wait hours in hopes of glimpsing a bit of behaviour.

Distance is important too. The usual distance of an animals makes a rare, intimate moment interesting and exciting, something out-of-the-ordinary. Wariness is less important — the artist wants her job to be easier — but, for a filmmaker at least, natural behav-

---

157 Lott 2002, pp. 175-176
158 ibid, pp. 165-166
avour is needed. Even if habituated, the animal may behave naturally. The artist’s sense of the animal’s wildness may be diminished, but the audience’s need not be.

Dealing with wild animals as an artist is usually given less credibility than working with them as a scientist. In university, one can study animals in Zoology or Ecology, but equivalent disciplines do not exist in the Humanities. This is probably because we learn how to study, understand, and save wild animals through scientific methods. But, as Russow’s aesthetic value argument points out, it’s important to know what it is we want to save, i.e. what it is about the wild animal that we value. This value is what the artist attempts to capture and express. An artist is exactly the sort to focus on a zebra’s stripes or a bull bison’s intractability.

I began wondering what was wild in my work making wildlife films. I expect that this is because, as a filmmaker, wildness was something I was looking for. America’s most prolific wildlife filmmaker, Marty Stouffer, was concerned about the same thing:

In our increasingly crowded, congested, managed world, I sometimes wonder if wildlife is still really wild. With his perfect poise and uplifted tail — a “flag” to warn other deer of danger — this buck shows me the answer.159

I don’t know what that answer means, other than that the deer is still wary and aesthetically appealing, and thus wild enough. Throughout his book on his lifetime of filmmaking, Stouffer discusses the wildness of his subjects. For “Pig Wild!”’, he filmed introduced wild boars (feral animals of a mixed Eurasian wild boar and domestic pig descent) in a game park in a Georgia swamp ten miles south of Savannah. The swamp was private property, and the pigs were raised to be hunted. I suspect that a filmmaker would prefer his wild boars looking wild as well, but Stouffer dismisses the hunters’ aesthetic concerns:

---

On the preserve were some feral pigs that weren’t thought to look like “real wild hogs,” because they had a lot of domestic genes and therefore were chubby and spotted rather than dark and lean. Hunters didn’t care for the spotted ones because they looked ‘tame.’ They preferred those that looked like the European wild boar - this solid, dark coloration supposedly indicated a somehow ‘wilder’ animal, which of course, it doesn’t.\textsuperscript{160}

To the hunters, the boars were more wild if they looked the part. This is a wildness of normal-naturalness. The spotted pigs may be as wild in independence and wariness, but they do not have the complete value of a wild boar for the hunter due to their lack of normal-naturalness in appearance.

This need for a more normal-natural wildness affects the treatment of the pigs. The owners of the reserve select for the wild-looking traits and away from the domestic ones. To do this, they round up young, domestic-looking pigs, and castrate them. Then they release the pigs back into the reserve (to not mate and to now grow more tender).

Stouffer includes the pigs in his \textit{Wild America} series documenting America’s wildlife, as he does other feral species like the mustang. For him, normal-naturalness is not essential to wildness. He makes this clear when he defines wildness:

\begin{quote}
I know that people don’t exactly think of fish as ‘wildlife,’ but they are truly wild creatures — capable of living without human support, adapted and attuned to the requirements of their habitat, and subject to incursions by predators, including — and sometimes primarily — humans.\textsuperscript{161}
\end{quote}

For Stouffer, independence is enough.

\begin{footnotes}
\item[160] ibid, p.221
\item[161] ibid, p. 332
\end{footnotes}
It seems enough for filmmaker Judy Irving as well, based on her title *The Wild Parrots of Telegraph Hill*. (The ‘parrots’ are feral.\textsuperscript{162} ) Irving addresses the question of her subjects’ wildness in the first five minutes of the film. A dharma bum named Mark Bittner is squatting on the lush Telegraph Hill, right in the heart of San Francisco. In the first scene he appears with a full grizzled beard and long silver ponytail, clad in a salmon pink shirt, and ensconced in a flock of cherry-headed conures. Some perch on his head and chew his glasses, others nibble seed from his hand while they crowd the branches around him. A curious crowd has gathered on the adjacent sidewalk. One man, bespectacled, clean-cut, and well-dressed, emerges from the crowd and begins challenging Bittner:

Man: “How long have you owned these?”
Bittner: "Uh, I don't own any actually, they're all wild."
Man: “Do they ever go into your house?”
Bittner: "I take the sick ones into my house but they won't go in voluntarily."
Man: “What type of parrots are they?”
Bittner: "Cherry-headed conures"
Man: “If you stopped feeding them, would they, like, move, and go somewhere else...
Bittner: "No, nah, they wouldn't have any problem at all. They eat a lot of fruit, and they eat like little nuts, and they eat... they eat pinecones... Most of their day is spent eating and playing."
Man: “So they'd be all right. If you weren't feeding them, if you weren't taking care of 'em, they could exist, by themselves, in the wild.”
Bittner: “Exactly. Yep.”
Man: “Ok, got it, ok... Do you get paid? Does the city pay you to take care of them like this?”
Bittner: “No, no.” [giggling] The city, ah, ignores, well no actually the cities been very

\textsuperscript{162} Interestingly in the wild these ‘parrots’ are known as red-masked parakeets (*Aratinga erythrogenys*), but in aviculture (bird-breeding) they are cherry-headed conures. As the wild parrots of Telegraph Hill are probably escaped pets, I will call them conures.
helpful, but supportive in a kind of clerical way.”

Man: “You're like the St. Francis of Telegraph Hill, huh?”

Bittner: [giggles]

Man: “Do you have names for 'em?”

Bittner: “Yeah I have names for them. Most of them have names at least.”

Man: “Oh, they're not very wild if you have names for 'em, I mean if you don't mind me sayin'. You feed em out of your hands, and you have names for them, and they come up to you like they're, you know, your pets.”

Bittner: “No actually see originally they were somebody's pets, some of them were somebody's pets. They were originally wild birds that were caught down in the wild, shipped up here to be sold as pets, they were pets, and they were, you know, deliberately released or escaped. All these others that you're seeing here were born in the city. They're actually wild, wild birds. They're their own birds, just like the robins or the scrub jays or any others around here. They're wild.”

Man: “Yeah, but, you don't take care of the other robins, or scrub jays, or whatever.”

Bittner: “That's true, I don't.”

Man: “You only take care of the parrots...”

Bittner: “...just the parrots...”

Man: [nods] “...okay, well, whatever. good luck”

Bittner: “… okay... thank you.”

At first, the pestering man accepts Bittner’s statement that the conures are wild because they can feed themselves. If they feed themselves, they are wild in their independence. But then, thinking some more, the man decides otherwise because the birds have names, and are thus somehow less independent, or perhaps because names are not normal-natural for a wild animal. He likes even less that the conures are habituated, and thus not wary, even if it’s only to Bittner.
Bittner defends with the independence claim. He points out that some were born in the city, breeding independently and now becoming native (and perhaps slowly a new normal-natural). More so, he references the birds’ autonomy: “They’re their own birds.”

The film elucidates the issue of wildness verbally with this first scene and it continues as a meditation on the conure’s wildness. The conures are shown breeding and feeding (both in exotic, introduced trees). They’re self-supporting, thanks to this unnatural cityscape. At one point the parrots are preyed on by local hawks, exhibiting a wild animal’s right to die. A photograph shows one in the grasp of predation, pinned against a chimney by a red-tailed hawk. Irving’s documentary presents the conures, and their situation, as a novel, but perfectly valid, form of wildness.

That fact that filmmakers like Irving and Stouffer address the question of ‘what is wild’ explicitly shows the importance of wildness to artists, and thus the importance of including artists in the conversation as to how we best deal with, and preserve, our wild animals.

All of the above examples, and the whole discussion to this point, are based on the relationship between a person and an animal. Why not a person and a person?

2. Wildness and Culture

“Man ceased to be a wild animal only when he had built his first wall.”
-Yevgeny Zamyatin

We use the term wild to describe a person’s behaviour but we do not consider ourselves — or even exotic, ‘primitive’ people — wildlife. We, or they, may act in a wild manner, but we all remain human beings. Even a feral child remains human not animal, and their

---

163 Zamyatin, Yevgeny, We, New York, Vintage Classics, 2007, pp. 90-91
wildness is mitigated by ‘feral.’ O’Rourke argues that this split stems from a Cartesian 
duality of human: animal, which isn’t helpful as the distinction, post-Darwin, no longer 
make sense.\textsuperscript{164} We are animals, specifically mammals, and we evolved in Nature just like 
everything else. What distinguishes us from wild animals, according to Rolston, is \textit{culture}:

> If I am hiking across the Lamar valley, the birds and their nests are natural; but if I 
come across an abandoned boot, this is unnatural. Expanding this into a meta-
> phor, the whole of civilization is mind and hand producing artifacts in contrast to 
> the products of wild and spontaneous nature. Wild animals...do not form cumula-
> tive transmissible cultures, elaborating such artifacts over generations.\textsuperscript{165}

So we are not wild animals because we are part of our culture. Domestic animals, 
too, are part of our culture. An ‘artifact elaborated over generations’ they have been 
adapted to our needs and lifestyles, so much so that they are now dependent upon our cul-
ture to support them. As a part of our culture, domestic animals are not wild animals. 
This culture-based distinction could be useful to identify which animals are not part of 
human culture and are therefore ‘wild’. But some wild animals have cultures, too.\textsuperscript{166}

\textsuperscript{164} O’Rourke 2000, p. 146. Prior to the idea of evolution, humans were distinguished from animals by the 
fact that they were made in the “image of God”.

\textsuperscript{165} Rolston III, Holmes, “Natural and Unnatural; Wild and Cultural,” \textit{Western North American Naturalist} 61 
(2001), p. 267

\textsuperscript{166} There are many examples but a good overview comes in De Waal, Frans, \textit{The Ape and the Sushi Master: 
There are various cases, but the most obvious are among the primates and cetaceans. For example one group of chimpanzees (*Pan troglodytes*) may have learned to crack nuts open by using two different rocks like a mortar and pestle. Meanwhile, another troop a few forests over may not know this trick, but they have their own unique invention. They’ve learned to hunt bush babies deep in tree hollows by sharpening a stick and using it like a spear. These skills are not simply figured out by individuals (they do not appear in other cultures) but are instead learned over generations and then transmitted by teaching to, or at least observing by, each new progeny.

Thus, as De Wall notes, animal cultures are not only transmissible, but cumulative as well. Nut cracking by chimpanzees is “most likely the endpoint of a long and steady perfection of skills.” What makes human culture different is the extent of our cumulative knowledge. By building new ideas upon previous ones our culture increases exponentially. It is not just our culture that makes us distinct, but the strength, vitality, and pervasiveness of it.

Our culture affects not just our relationship to wild animals, but also the way we understand the environment. As referenced throughout this thesis, few wild animals live ‘in the wild.’ Our cultures, or at least their residue, have spread too far. Take this example, a description of the first few fatalities of California condors returned to the wild from captivity. One chick died from “ingestion of a dozen bottle caps and shards of glass”,

---

167 In an amusing case, wild dolphins have begun performing a trick — tail-walking — previously only seen in captivity. Apparently it was taught to them by Billie, a wild female who fell sick after being trapped in a marina lock. Billie was taken to a dolphinarium to recover, and then released back into the wild. She must have learned the trick while in captivity and then taken it back out to her wild pod. For more, see: Black, Richard, “Wild dolphins tail-walk on water,” *BBC News: Science and Environment* 19 August 2008: [http://news.bbc.co.uk/2/hi/science/nature/7570097.stm](http://news.bbc.co.uk/2/hi/science/nature/7570097.stm)

168 De Waal 2001, pp. 29-30

169 ibid.
and, of the four adults, “one died from drinking antifreeze” and three more from colliding with power lines.170

Our cultures may now coat much of the planet, but they have had an impact for thousands of years. Wild animals have coexisted throughout. They do not need a wilderness to be wild, and in fact can even confer a degree of wildness upon a land. They do so by seeming wild to us, in contrast to our culture, and it is this that we find so compelling.

3. Preserving Wild Animals

I began this thesis with the question: What is wild? This is an important question. If we are to efficiently design and implement effective conservation programs intended to ‘preserve’ wild animals, we must understand exactly what it is that we are trying to preserve.

Wildness comes not just from within the animals but from our relationship with them. What aspects of these relationships must we preserve, or change, to keep wild animals wild? I have argued that wildness can be understood in four different ways: as independence, naturalness, wariness, and distance. Each of these ways will offer different answers to this question. Consider the following three claims and their implications:

A. Wild animals can confer wildness to a place.

Most would agree that to have wild places, we must have wild animals. If we want wild places, especially wilderness, then this is important. We need to preserve the populations that are already in these wild places. For less wild places, we may need to add more animals to ‘re-wild’ the environment. Our decisions about which animals to preserve and include in these ‘wild places’, and allow to be (or invite) elsewhere, will be based, in part, on what we think of as ‘wild’. Usually the desirable species are only the animals we con-

These are the wildlife that conservationists currently protect and return.

Returning wild species is not new. Re-introductions are increasing, and, along with the introduction of surrogate species to match ecological roles, have been dubbed ‘re-wilding.’ This term implies the above claim, i.e. that wild animals bring wildness with them.

Re-wilding is becoming more and more popular in conservation. Caroline Fraser’s recent book, *Rewilding the World: Dispatches From the Conservation Revolution*, describes the global nature of this phenomena. Countries that have suffered great wildlife losses, like Australia and New Zealand, employ it in ecosanctuaries and national parks in attempts to replenish their wildlife. As mentioned earlier, the Dutch are replacing extinct ancient herbivores with related domestics. On the Arabian peninsula, despite much difficulty, the Arabian oryx is being returned. African countries are trading and spreading species between them, such as with the Great Limpopo Peace Park linking Mozambique and Zimbabwe’s heavily-poached national parks to the wealth of South Africa’s Kruger.

In the Northeast United States, “elk, caribou, deer, beaver, wood rat, fisher, pine marten, lynx, wild turkey, peregrine falcon, osprey, bald eagle, atlantic salmon, shad, beach tiger beetle, American burying beetle,” have all been re-introduced (at different

---

171 There have been some exceptions, such as the warm reception of horses in both Australia (as brumbies) and the American West (as mustangs), and the vehement protest to their culling. In America, mustangs are protected under the “Wild Free-Roaming Horse and Burro Act of 1971.” Australia’s brumbies are protected by the Heritage Working Party, see Franklin 2006, pp. 11, 21-22

172 Fraser 2009


174 Fraser 2009, p. 145
levels of success). White-tailed deer re-introductions have been so successful that their populations are higher today than pre-European normal-natural levels. If Americans want to return bison to their native habitat, that will require re-wilding as well.

Trombulak and Royar identify three reasons for re-wilding:

First, a given species may perform an important role in determining community structure, and its reintroduction may perhaps improve the ecological health of the region... Second, a species may provide a specific resource to the human communities in that region... Third, a species may contribute to the essential wild character of a landscape, enhancing the aesthetic, spiritual, and recreational value of a region. The howl of a wolf, the sight of a bull moose wading through a swamp, or the imprint of mountain lion tracks in the snow dramatically transform the feeling of a landscape in ways that transcend the ecological or utilitarian value of the species.

If the point of re-wilding is to add wildness, then there are problems with each of these reasons. For the first, we have the issue of ambiguous benchmarks: we have to know what point of time we are aiming for and then we have to restrain dynamic nature to a static point while we fix it. As Woods notes, we could recreate nature to a past point, and then let it evolve unhindered from there. But as ecosystems change, when we aim at returning them to a past point we risk harming adjustments and adaptations that have occurred since then. Where that point is placed will determine which wild species are natural and which are novel. Trombulak and Royar are aware of these difficulties:


176 Unless a corridor was created so that the bison could recolonization themselves (as wolves have done across parts of the United States). Recolonization is when an animal re-introduces itself, without direct human assistance. See Trombulak and Royar 2001, p. 158

177 Trombulak and Royar 2001, p.160

178 Woods 2005, p. 180
Acknowledging the distinction between introduction and reintroduction immediately raises practical questions when we think about the steps necessary to reestablish a sense of wildness in a place. Should it make a difference how long an extirpated species has been absent from a community or why it disappeared when we decide whether it would be an exotic or native species? This question has practical importance in determining whether a species should be removed from an area as an exotic or allowed to remain as a reintroduced native. For example, horses roamed the Western US, until about 12,000 years ago, when they, along with numerous other species of large mammals, went extinct. Their extinction is thought by many paleontologists to have been caused by overhunting by Paleo-Indians newly arrived in North America. Horses remained absent from North America until feral herds became established from those that escaped from the Spanish explorers in the early 1500s. Are horses an introduced species because those here today were established from stocks brought from Europe, and the species had been absent from North America for more than 10,000 years? Or are they reintroduced because the species was once native to the region? There are no clear answers to these questions; it depends on how one chooses to define native and exotic.

Native and exotic depends on the moment in time we choose. For example, the nine-banded armadillo (Dasypus novemcinctus) has vastly and independently expanded its range in the past two hundred years. In 1850, it was not found north of Texas. Today, they roam as far north as Nebraska and even southern Illinois.179

There are many reasons why the armadillo has been able to expand its range, but they are all the result of recent changes in land use by European Americans. Indian hunting and burning has been suppressed if not eliminated, thus creating habitat for, and relieving pressure on, the armadillos. Also, most of their major predators were killed off by ranchers. The armadillos’ expansion, like the thirteen Australian birds now living in New

Zealand, is an independent (thus wild?) process, but it comes as the result of human, especially recent, European change. If we set our benchmark as Pre-European it would follow that the armadillos were not normal-natural (north of Texas) either.

Another issue with normal-naturalness is that species are no more static than ecosystems. We can only approximate replacing them. We may have no choice but to use surrogates, as the Dutch are doing, or the Americans by placing Texas cougars in Florida and California condors in Arizona. Trombulak and Royar note this problem as well:

...[Species] themselves are not genetically uniform entities in either space or time. Individuals are not identical and, therefore, largely interchangeable across their range. Rather, individuals from populations in one part of the species’ range may vary genetically — and therefore perhaps morphologically and behaviorally — from those from populations elsewhere. Similarly, species continually evolve, so that the genetic identity of a single population at one time may different from that of the same population at another time. From a philosophical perspective, then, exact restoration of species simply may not be possible. This is both because the unique genetic identity of the population that was extirpated may no longer be present elsewhere, and because the genetic identity that would have evolved in the population over time had the extirpation not occurred cannot be known.180

Despite these issues, Trombulak and Royar support re-wilding as a means of restoring ecosystems. Whether re-wilding restores an ecosystem or not, more wild animals may make a place wilder in independence (though not necessarily more sustainable, normal-natural or biodiverse). Without a clear concept of wildness, or normal-naturalness, we

180 Trombulak and Royar 2001, pp. 157, 159
won’t know which species we can re-wild with in order to add wildness and/or to replenish biodiversity.181

Trombulak and Royar’s second benefit — that re-wilding adds wildlife as a resource — does not necessarily increase wildness either. “Resource” wildlife means managing. i.e. treating the animals like game: re-stocking, protecting from predators, applying our artificial selective pressures. If we do this, we won’t be allowing the animals either a wildness as independence or as normal-naturalness. As such, the wildlife will only be able to confer wildness to the land based on their presence and perhaps their wariness.

A re-wilded animal’s presence alone is enough to warrant Trombulak and Royar’s third benefit: “enhancing the aesthetic, spiritual, and recreational value of a region.” To provide this enhancement, the re-wilded animal must contributes to the “essential wild character” of the land. Russow’s point about the aesthetic value of the species is crucial here.182 My encounters with feral and exotic creatures in Australia and New Zealand have left me more confused than invigorated by their wildness. The animals are wild in their independence, but it’s not the sort of wildness that improves the character of the unique Antipodean ecosystems. These animals were placed here for the same reasons — aesthetic, spiritual, and recreational value — but a hundred years ago, when the perceived value was for the wild to be more like Europe. Conserving biodiversity has replaced acclimatization but we are still wielding great manipulative control.

Eileen O’Rourke questions this third benefit. In discussing the re-wilding of horses and vultures in the Cévennes National Park in southeast France, she writes:

---

181 The extension of this is the Pleistocene re-wilding debate, where a group of ecologists lead by Josh Donlan proposed returning North America back to the Pleistocene by introducing African animals like elephants, cheetahs, camels, etc. to replace their extinct American ancestors. For more, see Donlan et al., “Pleistocene Rewilding: An Optimistic Agenda for Twenty-First Century Conservation,” The American Naturalist 168 (2006): pp. 660-681

182 Russow 1981
...[In] the past, wildness was that which emerged from a place, i.e., the forest, where as today it is that whose presence in a place confers naturalness, a highly sought after commodity, on that place. Within this context it is not surprising to find that today certain emblematic wild animals, the ambassadors of wildness and wilderness, are transformed into romantic figures of mythological nature. There has been an upsurge in the reintroduction of large wild animals, especially those with the added attraction of an ancient ancestry, such as, elk, highland cattle, prehistoric horses, bison, moufflon, etc., within European national parks and nature reserves. The heightened interest in these charismatic wild animals cannot be explained solely in terms of conserving biological diversity. Their visitor drawing power and their ability to animate the landscape is no doubt an important factor in their re-introduction.\textsuperscript{183}

To O’Rourke, such re-wilding does not replace wildness. This Cévennes re-wilding may be hinting at an historical normal-naturalness, but the horses are from Mongolia and the vultures from Spain, and they’re being brought over by biologists, not finding their way themselves. Worse, the re-wilding clashes with a wildness of independence:

We are left with the dilemma of ‘wild animal,’ under human control, without ‘wild habitats,’ but whose presence confers the highly sought after image of naturalness on the landscape where they are presently contained.\textsuperscript{184}

O’Rourke calls this wildness “another form of domestication, one that has a deliberately cultivated image,” and believes the purpose to be “the valorization of the local landscape.”\textsuperscript{185} We may want to use wild animals to give value to places, but if so, it may

\textsuperscript{183} O’Rourke 2000, p. 149
\textsuperscript{184} O’Rourke 2000, p. 157
\textsuperscript{185} ibid, p. 154
be best not to focus on a wildness as normal-naturalness. Lacking a clear grasp of normal-naturalness, we have nothing to ground or define the value.

It is possible that animals which are not normal-natural, but have a wildness as independence, can give value too. In his search for wildness in the crowded and long-inhabited British Isles, Robert McFarlane writes:

> Then in the 1840s Scottish snow hares were introduced to the [English] Peak District, in order to diversify the shooting bag on the grouse moors. They survived without flourishing: perhaps 200 hares now live across the many miles of high moorland plateaux that spread between the cities of Manchester, Sheffield and Derby. This is the paradox of their presence in the Peak: they have become for many people, including me, a signal of wildness, but their presence here is entirely a consequence of human management. Even in the Cairngorms, their true fastness, they are under threat from climate change, and severe culls by gamekeepers who believe they are the secondary carriers of a tick-borne grouse disease.  

By their independence, feral and exotic animals may provide the ‘signal of wildness’ for some people as the hares do for MacFarlane. But feral and exotic species — through competition, displacement and/or predation — diminish the normal-naturalness of other species. They often reduce the range and number of wild species as well, liming all those we may encounter and thus experience wildness with. Wildness as distance becomes important here. If we fail to control invasive species which are successful everywhere (rats, starlings, pigeons), we risk losing this wildness. We won’t see new animals when we travel to new places. Wild animals will become the same everywhere. We will have fewer species overall. This leads us to our next statement.

---

B. We are losing our wild animals.

Different conceptions of wildness offer divergent solutions to the problem of loss of wild animals. For wildness as independence the solution is simple: release more animals. Hunters do it with stocking. Conservationists do it with re-wilding. So long as we release more than we lose, this works (but wildness as independence does not help with knowing what species to release).

For wildness as normal-naturalness, we are confronted by the risk of extinctions. Our response is conservation biology and conserving biodiversity. As noted earlier, zoos conserve biodiversity but are not suitable for wild animals. Zoos are an extreme case, where a wild animal’s autonomy is completely lost. Conservation has not yet reached this point (except in captive-breeding programs and these are temporary) but the difficulty in conserving biodiversity is so great that our national parks and conservation practices more and more reflect zoos. Valuing wildness as normal-naturalness is akin to our current focus on biodiversity. Conserving this wildness is not enough, for in doing so we risk losing the other aspects of wildness, especially independence.

Birch and Turner both describe conservation biology as all about control. Capturing, isolating, and monitoring, conservation biology is an endless search for more information so that we can increase control, with the justification that, with more control, we can better save the animals. Control, as Turner notes, is different from influence. It impedes upon wildness as independence in a way that influence does not. But, it’s also important to remember Woods’ point that independence and freedom are different. Some tools of conservation biology, e.g. a radio collar, limit an animal’s freedom but still allow the animal to be wild. Conservation biologists now allow animals to determine their own

---


188 Turner 1996, p. 113
space by tracking them with radio collars and then defining conservation priority based on these spaces.\textsuperscript{189}

Still, Turners’ concerns need to be kept in mind, especially his observation that are our wilderness areas are reflecting museums. He argues, perhaps we can preserve animals this way, but not their wildness:

By preserving things — acreage, species, and natural processes — we believed we could control and preserve a quality. Alas, collections of acreage, species, and processes, however large and diverse, no more preserve wildness than large and diverse collections of sacred objects preserve the sacred. The wild and the sacred are simply not the kinds of things that can be collected. Historical forms of access and expression can be preserved, but one cannot put a quality in a museum.

...Museum objects may be useful, entertaining, and informative...but their subjects have lost their own organizing principles and are accurately described as relics — things left behind after destruction or decay of the original and preserved as objects of veneration.\textsuperscript{190}

For Turner, when an animal loses its independence, it loses its wildness. I don’t want to sacrifice our biodiversity, but I don’t want to ignore our animals’ wildness either. This leads to the last, less-often heard claim.

C. \textit{We are losing our wild animals’ wildness}.

If we save species because of their aesthetic value, and wildness is part of that value, then we have a big problem, for the very act of saving a species diminishes its wildness. Losing wildness as wariness is what Quamman and Bulliet fear: that wild ani-

\textsuperscript{189} Fraser 2009, p. 41
\textsuperscript{190} ibid, pp. 108, 109
mals are becoming tame.¹⁹¹ Even worse would be Lott’s fears: that when we domesticate animals they lose their ability to even express wildness.

Is loss of wariness for some species inevitable? Should we accept that wild animals will become more tame, and enjoy their docility? Does it signal that we are living more in harmony with the natural world? If we don’t accept this, if we want our wild animals wary, the solution is straightforward: shoot at them, like with the pumas at Boulder.

Feral animals disprove Lott’s worry of domestication erasing potential wildness. As both Bulliet and Lott himself state, a return to ‘the wild’ will again select for wild traits.¹⁹² This occurred with our current ‘wild’ bison when they were released from the ranches that saved them after the Great Slaughter:

Nearly all the bison in North America today, wild and domestic, have recent forebears that lived like, and even with, cattle on turn-of-the-century ranches. Though human manipulation, even of the cattle, was minimal on these ranches, if we could have looked closely enough then we would likely have seen some evidence, however slight, of artificial selection acting on bison. But it’s reasonable to expect that wilder circumstances have restored most if not all the wildness to today’s wild bison.¹⁹³

Losing wildness as normal-naturalness is another problem. This could mean that we are losing the normal-naturalness of wildlife populations through the loss of natural ecosystems or that we are losing the normal-naturalness of individuals through genetic-engineering. As shown earlier, both types of normal-naturalness have been changing (because of us and other reasons) forever, and always will. Trying to stop it creates the same

¹⁹¹ see p. 49 and 72 of this thesis
¹⁹² Bulliet 2005 p. 115
¹⁹³ Lott 2002, p. 199
problem Turner notes with his museum comment, we’d be stopping the independence of wildness and replacing it with some sort of artifact of what once was wild.

Trying to solve just this problem (of normal-naturalness loss) can also lead to practices abusive of animals wild in only their independence. In places like Australia, wildness as normal-naturalness is now tied to the national identity. Franklin calls its eco-nationalism. Native marsupials are fiercely defended against feral creatures, who in turn are treated as alien invaders. The rights of wild species vary drastically between native and non-native. Most of Australia’s native marsupials are extremely vulnerable. They garner much protective funding, inspire eco-sanctuaries, and receive help like extensive fox-baiting and captive breeding programs. All are protected. Their wildness as independence is of little concern due to their need for protection.

Meanwhile, the non-native wild animals are shot, poisoned, and trapped. The goal is eventual eradication. Franklin notes that Australia has four types of animals. Two are in public favour: native-wild (kangaroos, koalas, wombats) and domestic-domestic (cattle, sheep, dogs), and the other two are not:

[though the] two ambiguous categories [were] former favourites (wild-domestic [cats, goats, camels]) and introduced-wild (such as rabbits, foxes and trout). The ambiguity of the latter groups was not resolved positively through either naturalisation (the way of the American mustang) or exoticism (the way of the grey squirrel or parakeet in the UK)... [Instead, they are] condemned, in various ways, to category annihilation or to individual campaigns of species-cleansing.195

In 2001, when brumbies (feral horses) were culled at Guy Fawkes River National Park — as is usual practice for wild-domestic species when protecting fragile Australian ecosystems — public outrage ensued. Franklin suspects that this is because horses are

194 Franklin 2006, pp. 19, 21-22

195 ibid, p. 16
still in the domestic-domestic realm, and Australians could not accept their being killed, even for the sake of protecting native-wild species. The culling was stopped as the horses were recognized for their ‘heritage value’ and thus protected from then on. Heritage value relates to Australian identity; the reasons for protecting the horses did not include their wildness. Australians’ penchant for eco-sanctuaries and their brutal treatment of feral species show that wildness as independence is not a priority. More importantly, it shows that wildness conflicts with other conservation values.

If our wild animals lose their independence, they are no longer truly ‘wild’. Independence is most like the wildness ‘quality’ that I began the thesis with. The other aspects of wildness are easier to locate — a sort of behaviour (wariness) or a type of animal (normal-natural) — but the quality is harder to define. In discussions of wilderness, much has been written about the relation of wildness to land. Many conclude that in saving wild lands, we should realize that they exist all over, not just as wilderness.

In “Preserving Wildness”, poet and farmer Wendell Berry notes that the “free-holds of wildness” are the margins between kinds of land and between different types of land use:

[The margins]... lanes, streamsides, wooded fencerows... are hospitable to the wild lives of plants and animals and to the wild play of children. They enact, within the bounds of human domesticity itself, a human courtesy to the wild that is one of the best safeguards of designated tracts of true wilderness.

To this I would add: ‘and of wild animals.’ Echoing Berry, philosopher Thomas H. Birch notes that wilderness should be just the “largest and most pure” of all sorts of wild places

---

196 Franklin 2006, p. 22
197 Berry, Home Economics, 1987, p. 151
continuing down to urban flower boxes, i.e. a continuum as in the wildness as distance. 198  
The wilderness will feed wildness to the rest, like a watershed.

Writers in search of wildness find it in unusual places too. Robert MacFarlane finds it in the marginal hedgerows and roadside ditches. 199 Birch, MacFarlane, Griffiths, and Cronon all offer the image of a weed pushing through a crack in the pavement as proof wildness. 200 A historian, Cronon challenges the idea of wilderness and recommends finding wildness instead in the garden, or anywhere. 201 Cronon is inspired by Gary Snyder, who finds wildness everywhere, even in the very cells of our bodies. 202

I find these ideas a useful way of restoring wildness, and getting past the illusion from a wildness as distance, i.e. things are wilder ‘over there.’ The same way the above authors find wild places can be used to find wild animals. Synanthropes are the weeds pushing through the crack in the pavement. Ferals and exotics are those fence rows and ditches, existing somewhere in-between, but still exhibiting wildness. Pure, normal-natural wild animals (those we count as biodiversity) are like wilderness, perhaps partially a myth, perhaps the most invigorating example of what a wild animal can be.

Pushing through the pavement is not possible for all plants, and adapting to urban environments is not possible for all wild animals. New Zealand’s Department of Conservation’s “It Could Happen...” poster, depicting kiwis feeding by a park bench in Auckland gives an odd impression of their hopes for the future of kiwis. 203 Instead, we should appreciate weeds but give other plants the space to grow. We should give wild animals

198 Birch 1998, p. 13  
199 Macfarlane 2008, pp/ 225-227  
202 Snyder 1990  
203 see p. 114 of this thesis
more places to be wild. Wildness will preserve itself, and maybe, as Thoreau famously noted, the world.204

To let it do so, we must maintain the independence of wild animals. Wildness as independence is not the complete avoidance of our influence. Their independence may also be thought of as autonomy. As Hettinger writes:

Respecting the autonomy of others does not mean avoiding interaction with or influence on them. What respect for autonomy requires is that one not dominate or control the other. Thus nature’s autonomy need not be compromised by human involvement as long as this involvement is not domineering, just as a person’s autonomy need not be compromised by the involvement of others so long as they avoid dominating and controlling that person.205

We can interact with wild animals, and even influence them. So long as we respect their autonomy, they will still remain wild. It’s just for us to notice that they’re expressing it. Tim Low’s message of our role in nature, and the responsibility this gives us, is clear:

For a start, we should acknowledge the extent to which animals and plants, including endangered ones, are now bound to us. Our cities and our farms are important ecosystems. We should do more to accommodate the species that are now obliged to live among us.206

Low doesn’t fear that wildness is lost, just that we don’t know what to make of it. His solution, akin to the Americans talking about wild lands, is to first become aware of wild animals of all sorts. Then appreciate and encourage them.

204 Thoreau 1937
206 Low 2002, pp. 307-308
This sounds good to me. Wariness may diminish but if so we’ll start seeing our wild animals more often. With normal-natural variability, some animals will end up wary, and others will seem tame. Normal-naturalness will change but this is evolution at work. New animals will appear, and old animals will change. The prospect of armadillos and the arrival of coyotes on the American East coast is thrilling. Even better, is that these animals come on their own.

---

207 Coyotes have spread East with the disappearance of wolves, and the Eastern subspecies is now significantly different. The animals are much larger and the skulls are noticeably broader than their Western counterparts. For more see Larivière, Serge and Michael Crête, “The Size of Eastern Coyotes (Canis latrans): a comment”, *Journal of Mammalogy* 74 (1993): pp. 1072-1074.
To get involved visit conservationweek.org.nz
Kia Mahia te Mahi 13-20 September 2009
GET INVOLVED & WHO KNOWS
Part IV: Wildness and A Wedged Tale
Wildness is a subtext throughout *A Wedged Tale*. I made sure that wildness was addressed and considered in both in the film itself and in the filmmaking. As *A Wedged Tale* is first and foremost a wildlife film, this was not hard to do.

1. Wild Wedge-Tailed Eagles

My filmmaking partner, Simon Cherriman, loves wedge-tailed eagles (*Aquila audax*). Joining him, I had little choice of subject matter. Fortunately, wedgies are an exemplary species for considering the new, confusing forms of wildness.

Simon and I were able to address much of this 21st century wildness in the film. The first few scenes establish that wedgies nest right on the outskirts of Perth. Their distance from us is little, though this would probably surprise most people in the city.

Despite their urbanization, the eagles are still wary enough to require Simon building a hide in order to be close. Despite his efforts, the mother flushes as the hide’s not good enough.

The eagles’ wariness also creates a level of risk: disturbance may keep them off their nest. It may even cause the eagles to abandon their clutch. This wariness is a factor in the film — as we see all that Simon goes through to deal with it — but it was an even greater factor in the filmmaking. We had to be both careful and respectful of the sensitivity of the birds. Habituation was not an option with a clutch at stake. We held off filming for a month (from the egg laying to hatching), just to prevent any risk of clutch failure.

Wedgie wariness is so intense that filming them can be all but impossible. A perched bird will spot you from over a kilometer away (Simon is skilled at finding wedgie specks through his binoculars so this is about how far off we usually began). The eagle takes off as soon as you head in her direction. Often we would hear raven (*Corvus coronoides*) or twenty-eights’ (a subspecies of ringneck parrot, *Barnardius zonarius semi-*)
torquatus) alarm calls, but either never see the bird or only spot her once she’d become a tiny dot in the sky.

Such wariness creates a problem when trying to shoot enough footage for a film. One solution was to use captive birds, but neither Simon nor I wanted to film non-wild wildlife for a wildlife film. The other option concerned individual temperament.

Just as with the foxes in the Russian experiment, there are eagles that are less wary than others. One eagle in particular, “the Paruna female”, was curious enough to stay perched long after when most birds would fly. Of course, she never let us get close enough for a portrait, but she gave us many of the shots we needed. In one afternoon with her we garnered more footage than we had over months with countless other eagles. We met another unusually relaxed young male in the Outback. In my experience as a wildlife filmmaker, these tamer individuals are what allow wildlife films to be made.

Our film addresses wildness as naturalness as well. We do this by showing that wedgies’ do not distinguish between native and feral prey. For an eagle, eating rabbits is now as normal-natural as eating kangaroos. This fact (concerning feral goats) leads to the crucial scene at the end of the film, which will be addressed below.

An apex predator, wedgies are also independent. They have long suffered persecution for suspected predation on lambs, encouraging both their wariness and independence. However, ornithologists suspect that wedgie numbers may be unusually high now, due to the abundance of food, i.e. rabbits, available.

In the film, we play on the idea of a wild wedgie’s independence. By setting up a road-killed kangaroo, Simon shows how he can influence a wild animal. Yet he does so with limited control and in a natural way. The fact that Simon had to build a hide to take advantage of the set-up carcass demonstrates the continued wildness of the wedgie. Despite it’s meal having been served — killed by a truck and offered by Simon — the bird

---

208 Thus these birds are disproportionately represented in the film.
still decides when it wants to eat and how to do so. The bird’s independence prevents Simon from getting his footage unless he hides and waits.

2. Respecting Wildness in Wildlife Filmmaking

Hides are an ideal way of respecting wildness while wildlife filmmaking. The idea of a hide — that you are invisible — means that you are taking away any control, and hopefully even influence, that you will have on a wild animal. More importantly, it also means that you will experience what such a relationship (no control or even influence) with a wild animal would be like.

I made a mandate before we began filming: “If we’re making a wildlife film, then every animal must be wild.” Simon agreed. I hoped this rule would maintain at least some wildness as distance, even as the telephoto lenses did their best to diminish it. I also hoped that it would have us representing wildlife as wild life. Most of all, it would make sure that we experienced wild animals as such.

I wanted to be sure that we not only worked just with wild animals, but also respected them as such. This was not simple. We were never sure what was appropriate and what was not. We moved sleeping geckos and set up bearded dragons. We made our presence clear to macropods to get them looking and hopping. At one point, Simon even picked up an echidna and moved it into better light. We discussed wildness each time, and how we were affecting it.

One big question (considering our mandate) was whether or not to film in eco-sanctuaries. They are the best (and often among the last), places to encounter many native Australian species. The ease of filming in them far exceeds that of anywhere else. Simon also happens to work at a local one, Karakamia. He has been a guide and ranger there for the past five years and had easy access. We were torn.
There are reasons for and against the wildness of ecosanctuary animals. The obvious cases against are those mentioned in the thesis. Ecosanctuaries are essentially giant cages. For terrestrial mammals, they restrict movement. They do not offer enough space for a sustainable breeding populations. The populations are thus controlled, and usually introduced. The habitat is maintained with feral predator culls and flora restoration.

The main reason for the animals’ wildness is that they are native, and thus natural. If we wanted to make a film about Southwest Australia, and we wanted to film native wildlife (like a woylie), an ecosanctuary was the best place to do so.

The animals are also not as dependent as those completely captive. Though pre-feeding occurs so that guides will have animals available to show visiting tourists, the animals feed themselves. They are also still vulnerable to predation. Exotic predators are killed and kept out but not the natives. The fences doesn’t stop owls, carpet pythons, and, of course, eagles from taking the marsupials and their young.

In the end, we weren’t allowed to film in Karakamia because the owners (the Australian Wildlife Conservancy), didn’t give us permission. They own the animals and would not grant us rights to use their images. In a way, this seemed to establish the animals’ wildness clearly. We were allowed to film at Barna Mia, an ecosanctuary in Dryandra, but we did not approve of the experience and chose to use none of the footage we took there.

Simon and the Goat

At the end of *A Wedged Tale*, Simon catches a feral goat. He then ties it up as bait for an eagle. His goal throughout the movie has been to film a wedgie catching its prey, and at this point he’s become desperate enough to set it up.

The feral goat is not normal-natural to Australia and is thus a questionably wild animal. They cause big problems for the fragile Australian environment. As Simon says
in the film: “Conservationists hate them. Farmers shoot them.” Conservationists shoot them too, including some of Simon’s friends. This is no problem for Simon. As an Australian ecologist, he sees no problem killing goats. But this moment in the film (and the filmmaking) gives him trouble.

Thus far in the movie, Simon has been someone with an unabashed love of all wild animals. With the feral goat, he is, for the first time, ambivalent about the value of a wild animal. He shows a scorn for the goats based on what they are doing to the ecosystem, but concern, even care, for the individual animal.

In both the film and reality, Simon was certain that it was wrong to use the goat as bait. He was adamant that we release it immediately and that his true feelings were clear in the film. Simon’s inability to treat the feral goat as Aussie ecologists and ranches usually do intrigued me (when the station owner found out that we had caught a goat and not killed it, he was annoyed).

In a cut that did not make the film, I interviewed Simon asking why he would not kill this goat. He was unable to give a clear answer, but it seemed like there was an issue of authority. Simon kills rats and even exotic birds. I watched him catch and kill an Indian ringneck who had been visiting his backyard bird table. His mother had liked the bird until she found it was invasive. In his home, Simon feels the right to police the space, and to determine what species are allowed and which are not.

He feels the same way when working for AWC (the Australian Wildlife Conservancy) or DEC (the Department of Conservation). Both are responsible for looking after large tracts of land, and Simon feels that, when invested with their authority, he has a right to kill feral animals. He also seems more comfortable with the idea of shooting goats, and killing efficiently, as opposed to leaving them tied up for eagles.

I suspect that Simon was not comfortable killing this goat because we had no authority out there. We were in the vast Outback, and our impact and influence felt
minimal. It felt more like a clash of individuals (us killing this one animal) than a control of a species in an ecosystem. The wild feel of the place gave Simon a sense of humility, something much harder to find in one’s yard or even an ecosanctuary. I also think that Simon felt that making a film, i.e. making art, did not justify certain actions, like killing a goat.

I appreciate that one may not want to show such things on film. In making art, one has the luxury to choose what they will do and how they will do it. But I wasn’t sure that it made sense that we could not kill the goat (though I did not want to either). Goats, especially feral ones, are killed often. They’re killed for meat, they’re killed for biodiversity, they’re killed for cattle... Simon accepted all these deaths (he said he’d eat a goat, I ate a Madras goat curry not longer after), but could not accept one for a film.

I am not sure why this is, or if this is right, but I like that film, and art in general, can raise these questions and ethical issues that are otherwise easier to justify and pass over. Simon was certainly troubled by this experience with a feral animal. From our conservations following the experience, I can tell that, for him, the goat has left its ‘feral, must-die’ position and entered some sort of limbo wildness state. Maybe when Simon captured the goat, he had in an odd sort of way, domesticated it. That made him suddenly feel responsible; he now had different obligations to it than he would to a wild goat.

I am not sure what we should do about all this, but I think that art can help with thinking about wildness, determining what we think about animals that exhibit it, and how we should relate to them.
**Part V: Addendum: Wildness in Other Languages**

This thesis as discussed wildness only in relation to English. Wildness means different things in other languages. Snyder notes that, “‘wild’ in the Far East means uncontrollable, objectionable, crude, sexually unrestrained, violent; actually ritually polluting.”\(^{209}\) He notes:

The word for wild in Chinese, *ye* (Japanese *ya*), which basically means “open country,” has a wide set of meanings: in various combinations the term becomes illicit connection, desert country, an illegitimate child (open-country child), prostitute (open-country flower), and such. In an interesting case, *ye-man zi-yu* (“open-country southern-tribal-person-freedom”) means “wild license.” In another context “open-country story” becomes “fiction and fictitious romance.” Other associations are usually with the rustic and uncouth. In a way *ye* is taken to mean “nature at its worst.”

Meanwhile, Nabhan describes that, for the O’odhman of the Sonoran desert, wildness is *doajkam*, a word “etymologically tied to terms for health, wholeness, liveliness.”\(^{210}\) Gillison describes ‘wild’ among the Gimi of Papua New Guinea’s Eastern Highlands as *kore*. When applied to plants or animals, *kore* means “imbued with ancestors or spirits.”\(^{211}\) To the Gimi, “things in the wild exist in their original, eternal and in that sense perfect form.”\(^{212}\) Discussing it only in English is a shortcoming but the English language is so dominant and widespread, that these thoughts should still be strong enough to apply to the global conservation of wild animals.

---


Part VI: References


Moore, Kathleen Dean, *Pine Island Paradox*, Minneapolis: Milkweed Editions, 2005


-126-


http://www.zsl.org/zsl-london-zoo/news/zsl-london-zoos-dragons-ten_529_NS.html