

GEIST
WOLF ESSAY
PART 3 OF 3





LET'S GET REAL!

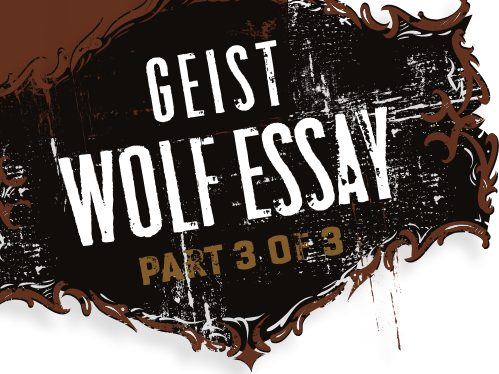
BEYOND WOLF ADVOCACY, TOWARD REALISTIC POLICIES FOR CARNIVORE CONSERVATION

Investigations into the death of Kenton Carnegie unearthed matters that are deeply troubling (see “Death by Wolves” in the Winter 2008 issue of *Fair Chase*). Under the guise of scientific authority, political advocates declared that black bears, not wolves, had killed Kenton Carnegie. By reporting these claims in prestigious publications such as *National Geographic* and *National Wildlife*, they mislead the public into believing their version of the story. Never mind that the facts clearly showed otherwise, and that the official inquiry declared wolves to be the cause of Kenton Carnegie’s death. Advocacy won the day, resulting in widespread belief that bears killed Kenton Carnegie and that wolves are harmless.

The North American myth of harmless wolves is deadly! This belief has killed at least three persons in North America alone in the last decade including two bright, well-educated young people. Witness the instances of children under parental care sticking fingers towards captive wolves in the innocent belief that wolves pose no threat. I must confess that I, too, embraced the myth throughout my academic career and four years into retirement—based on years of experience with painfully shy Canadian wilderness wolves. It took a misbehaving pack on Vancouver Island,¹ and a review of historical matters, to teach me differently.²

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MYTH OF THE BENIGN WOLF

Advocacy behind the “benign wolf” myth is extremely powerful. It almost seems that the better educated people are, the more likely they are to believe and fall victim to this myth. Such was the case with Kenton Carnegie, and also 24-year-old Trisha Wyman, a wildlife biologist killed on April 18, 1996, by a captive wolf pack in Ontario. After that event, I spoke in length with Dr. Erich Klinghammer of Wolf Park. Called in as an expert witness to examine the case, he discovered that there was surprise at Wyman’s death. After all, wolves were not supposed to attack people!

Wyman had visited the park previously to study wolves and was given the dream job of looking after and interpreting the animals. She lasted three days before falling victim to her charges. A similar fate befell a lady who kept wolf hybrids as pets.³ On July 17, 2006, this captive pack of nine wolf hybrids killed their owner, Sandra L. Piovesan of Salem Township, Pennsylvania. The *Pittsburgh Post-Gazette* reported that Piovesan treated her wolves like children, and said as much when neighbors asked about them. “They (the wolf-hybrids) give me unqualified love,” Piovesan was quoted as saying. She fed the animals road kills that sometimes caused the neighborhood to smell bad. She said that she liked the wolf-dogs because they were pretty. The notion of the “harmless” wolf, while unstated, was implicit.

The view that wolves do not attack people except in cases of rabies is so strongly held today that even an exploratory attack on two camp personnel at Camp North Landing, Saskatchewan, was not recognized as a threat.⁴ Currently, reintroduced wolves in the western U.S. are showing signs of targeting people; however, their intentions continue to be misinterpreted. The widespread view of the “harmless wolf” may have prevented North American wolf specialists from developing an understanding of the circumstances when wolves are dangerous to people and when they are not. In North America, unlike in some European and Asiatic countries, the circumstances

when wolves pose a danger to humans are rare but not absent.

The examples above are but part of a greater force that advocates predator protection based on emotions and sensationalism rather than fact. Various organizations do battle on behalf of seals, whales, wolves, mountain lions, grizzly bears, and other charismatic species. They engage the media with sensational stories, using showmanship and enlisting pop culture stars to capture the public’s imagination—all predicated on claims of a science basis. In the case of gray wolves, the political objective is to spread the species throughout its historic range including “in multi-use landscapes surrounding houses, farms, villages, and cities.”⁵ Central to this goal and associated legislation is the myth of the “harmless wolf,” repeated so often that it transformed long ago into a politically correct “truth.” Moreover, this myth is apparently upheld in the science community and has given rise to a popular counter-claim; namely, that all information pertaining to dangerous wolves is an outgrowth of the misleading fairy tale about Little Red Riding Hood. Further, this fairy tale is claimed to reflect ancient, primordial, and irrational fear of wolves and gross misinformation about their behavior.

The Coroner’s inquest following the Kenton Carnegie tragedy in Saskatchewan did not touch on policy matters, which is unfortunate. It only answered the narrow question of which animal killed Kenton Carnegie, to which the answer clearly is wolves. Change the question slightly to what caused Kenton Carnegie’s death and the answer is: the myth that wolves do not attack people. The inquest did not address this myth, its origins, or the scholarly deficits that generated such beliefs. Neither did the inquest ask what circumstances caused the wolves to habituate to humans, other than the availability of camp refuse. It did not inquire about the scarcity of natural prey and its causes, or about escalating livestock losses in the area. The inquest did not consider that in British Columbia, thanks to legislation quite different from that in Saskatchewan, the tragedy would very likely not have happened. In British Columbia, any licensed hunter may take three wolves in a long season, and this readily removes habituating wolves. Saskatchewan, in contrast, has no general season and wolves may be taken only by trappers and by people suffering wolf depredation, provided they get prior permission.

During the inquest, I detailed these facts to the media, but my letters were ignored. However, there is more to the matter than became available to the public through

the inquest. The policies that led to Kenton’s death escaped critical examination as my attempts to surface these concerns were suppressed by the news media.

How can beliefs about “harmless wolves” persist in spite of centuries of recorded experience to the contrary in Russia,⁶ Finland,⁷ France,⁸ Sweden,⁹ Germany,¹⁰ India,¹¹ Afghanistan,¹² Korea,¹³ Japan,¹⁴ central Asia,¹⁵ Turkey,¹⁶ Iran,¹⁷ or Greenland?¹⁸ Peter Freuchen, an explorer of Greenland, reported in *Arctic Adventure* that he lost a companion to wolves (p. 23, pp. 329, 332). Freuchen had his own harrowing experiences with wolves trying to break into his cabin (pp. 16-19). He shot a wolf stalking his children (pp. 347-348), and was unable to provision his outpost by dog sled because every attempt was halted by wolf attacks. Freuchen shared an observation made by a long-time resident and hunter in Greenland: where there are wolves, there are no people and vice versa! And while details in Hazaribagh, Northern India, may be different,¹⁹ the causes of wolf predation on humans are much the same. The stage is set by prey scarcity, few opportunities to kill livestock, and *de facto* protection of wolves. Next comes the systematic targeting of people as prey, mainly children.

To understand the stubborn persistence of the “harmless wolf,” we need to explore the myth’s origins and then examine the nature of the contradicting evidence.

TRACING THE MYTH’S ORIGINS

The origin of the “harmless wolf” myth can be traced to a highly respected Canadian biologist, Dr. Doug Clark. He investigated the killing of people by wolves in Europe and concluded in an unpublished paper, “The Beast of Gèvaudan,” that while such attacks were real, rabid wolves caused them all. Clark’s exoneration of healthy wolves was based on his experience with Canada’s wilderness wolves; in that respect, Clark’s experience is much the same as my own.²⁰ And yet he erred. Apparently he was unaware of the behavioral distinction between rabid and non-rabid wolf attacks. This is puzzling because others including scientists, historians, and even laypersons did differentiate between the attacks of rabid and non-rabid wolves²¹ based on examination of the same material.

Clark failed to notice that in the days before modern medicine, there were survivors of wolf attacks who could not have been bitten by rabid wolves. Rabid wolves are lethal.²² Consider that historically, the most frightening aspect of being bitten by a rabid wolf was the victim’s “mad” state²³

and near-certain death within about six months. Rabid wolves attacked swiftly with great ferocity, biting multiple victims as well as livestock and non-animate objects. Their bite was aimed at the victim's face and head. Rabid wolves do not stalk, sneak, hunt, or drag the victim away for consumption. Contrast this with the reported cases in which victims have managed to escape after being attacked, subdued, and even dragged away by wolves. From these attacks, clearly perpetrated by non-rabid wolves,²⁴ a pattern of selectivity emerged in which wolves targeted primarily children. Rabid wolves exhibited no such selectivity.²⁵ As well, adult humans could escape most attacks by single wolves, but never that of a pack. Subsequent historians such as Moriceau found that in France about one-third of the attacks were by non-rabid wolves. The same proportion was reported by biologists such as Linnell et al.²⁶

Alas, the fairy tale by the brothers Grimm, *Little Red Riding Hood*, is not based on myths, ignorance, or a misunderstanding of wolves. Rather, it is based on very real and terrible experiences with wolves throughout the centuries.²⁷ Excepting historic Japan, where unarmed peasants cultivated and revered wild wolves as a defense against crop-raiding deer and wild pigs, I have not found instances where unchecked wolf packs lived peacefully alongside people. Even in Japan, tolerance ended when wolves became infected with rabies and inflicted this dreaded disease on humans. Wolves were then persecuted and exterminated by 1905.²⁸

Clark's conclusions were picked up by North American wolf biologists.²⁹ Why did so few biologists³⁰ bother to investigate the historical material relating to wolf attacks? Possible reasons include language and cultural barriers, premature insights based on young captive wolves, or failure to see that such investigations require a background in the scholarship of historians rather than the sciences. Undoubtedly these biologists were influenced by the lack of human casualties attributed to wolves—unlike the numerous cases of human deaths caused by bears and cougars in North America. An explanation for this is that wolves, like coyotes, take a long time to target humans as alternative prey.

Individuals that do so become conspicuous and are quickly eliminated by arms-bearing North Americans. Bears and cougars have no such conspicuous targeting behavior.

Native people seem much less enamored of the myth of harmless wolves than are urban environmentalists. As to the claimed lack of evidence that wolves prey on people, a native hunter gave the following response: "Evidence? Wolves eat the evidence!" Such was the case with Kenton Carnegie. Wolves had devoured not only his body, but also some of his clothing until interrupted by the search parties.

The myth of the harmless wolf gained traction globally following the publication of a very popular book by famous Canadian author, Farley Mowat, in which wolves were depicted as harmless, lovable mouse-eaters. While Canadian biologists did not fall for this prank,³¹ the literati did—and are still falling for it. It's interesting that Mowat's book was embraced by the

The Russian scientist Pavlov disclosed this matter in a book on wolves.³² Translated into Norwegian, his work was denounced by the Soviets and the responsible ministry was ordered to destroy the translation. It was subsequently published in Swedish.³³ An English translation lingered unpublished because no publisher wanted to touch it; yet, it has recently been published.³⁴

THE NATURE OF THE EVIDENCE

A second reason the "harmless wolf" myth persists is that accounts of wolf attacks are observational in nature rather than consisting of scientific data. Witness accounts are usually recorded second-hand by the police, priests, doctors, and county clerks. Second-hand records are often subjective, however. Moreover, while church and municipal records are a good source of reported wolf attacks on people, few such records survived the frequent and destructive wars in Europe. The limitations of such records

and first-hand accounts do not do justice to the subject. There is also suspicion that some reports, especially in newspapers, may have been padded or are somehow not trustworthy.³⁵ The truth of those assertions is not for scientists to decide, but for historians.

The expertise of historian scholarship is required to locate, verify, clarify, and place into perspective the records of wolf predation on humans. For instance, planner Johnny Loe and scientist Elvin Röske³⁶ reported a total of 607 humans killed by wolves in 15 countries. The French rural historian Jean-Marc Moriceau documented more than 3,000 fatalities in France alone.³⁷ Scientists reporting in Linnell et al. (2002)³⁸ did well, but failed to match Moriceau's scholarship. Scientists, no matter how sincere or competent in their respective fields, are not qualified to deliver

historical scholarship. What scientists can do competently is to winnow historical research for patterns and trends that relate to what is known about wolf biology—while recognizing that our understanding of wolf biology, too, is changing.

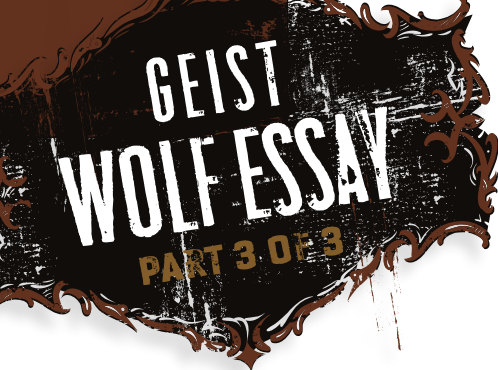
North American wolf biologists have

ESSENTIAL ELEMENTS FOR A COMPREHENSIVE POLICY FOR CARNIVORE CONSERVATION

- 1. The notion of conserving wolves in multi-use landscapes surrounding houses, farms, villages, and cities is untenable and needs to be replaced with a more realistic policy.**
- 2. A Continental Carnivore Conservation Strategy should be negotiated between Canada and the United States within the context of a Terrestrial Wildlife Conservation Treaty.**
- 3. We need to take seriously the matter of zoning, determining where large predators will be conserved and where not.**
- 4. There is a great public good that hunters give to society at large, which I call the "freedom of the woods," and this needs to be recognized and encouraged in policies.**
- 5. Any model of carnivore conservation must take a large-scale perspective that includes areas where large predators may dwell unmolested by humans.**

For Dr. Geist's footnotes, references, and explanations of his policy proposals, log into the Associates Web Community at WWW.BOONE-CROCKETT.ORG

Soviet Union's communist party, which had a history of systematically suppressing information about man-killing wolves. Since coming to power, the party had used "scientific" propaganda to convince that wolves were harmless, probably in order to forestall the call for arms by the public.



not sought the assistance of historians, in part, because of language and cultural barriers. Early on, their views were shaped by working with young captive wolves and by an abiding respect for Clark's authority. Had biologists done systematic investigation of foreign historical material, they would hardly have concluded that the fairytale of *Little Red Riding Hood* was based on ignorance, misunderstanding, malice or an exaggerated fear of wolves! In places where prey are scarce, livestock unavailable, and people unarmed, wolves focus on humans—then as now—with frightening consequences. No sovereign would have accepted the high costs, economic losses, or meager results of wolf control in centuries past were it not for telling reasons.³⁹

CAN WOLVES AND PEOPLE COEXIST?

During the inquiry into Kenton Carnegie's death, biologist Mark McNay testified that aggressive encounters with wolves in North America are on the increase with current wolf recovery.⁴⁰ The historical and current evidence indicates that people and wolves can coexist where the wolf population remains at low levels and all habituating animals are removed. These circumstances effectively maintain a buffer of wild prey and livestock between wolves and humans. However, the notion now enshrined in law in North America and Europe, that wolves can coexist with people *in multi-use landscapes surrounding houses, farms, villages and cities*,⁴¹ is not tenable. Under such conditions, territorial wolves and people will come into contact. Once they have habituated, even well-fed wolves will test people by approaching them, nipping at their clothing, and licking exposed skin. A clumsy first attack may leave victims injured but alive, but serious attacks soon follow. While a healthy man with determination may succeed in fighting off or even choking a lone wolf,⁴² a lone person cannot defeat a pack. And all this assumes the absence of rabies.

When wolves begin to patiently observe humans, it signals that they are

targeting humans as prey. Such wolves may be short of natural prey, or they may be well-fed on garbage and already habituated to humans. Patient observation means that wolves have begun to familiarize themselves with humans and that an attack is likely to follow. The same pattern has been described in urban coyotes that learn to target children. In both cases, the animals need to be taken out.

In British Columbia any licensed hunter can remove habituating wolves, and this provides a safety valve. Healthy, free-living wolves are virtually non-huntable.⁴³ The animals most likely to be killed by hunters are disadvantaged by age, condition,

COMPREHENSIVE POLICIES

All wildlife conservation policies should aim to sustain native, unadulterated genetic stocks in environments that support the continuation of adaptive processes.

Wildlife conservation policies also need to engender tolerance, acceptance, and public support; without this, wildlife cannot thrive.

or rejection by their pack. Consequently, even liberal hunting laws need not threaten wolf abundance.

NEEDED: COMPREHENSIVE POLICIES

All wildlife conservation policies should aim to sustain native, unadulterated genetic stocks in environments that support the continuation of adaptive processes. Wildlife conservation policies also need to engender tolerance, acceptance, and public support; without this, wildlife cannot thrive. History teaches that political support accrues to species that are either used by a large segment of the population, or revered as an icon. In North America, wolves maintained at very low levels do not pose a threat to livestock, pets, or humans; moreover, they become romantic icons. At high densities, however, wolves may severely reduce or destroy wildlife populations. This has been demonstrated by the Japanese experience and other historic accounts, by rigorous studies,⁴⁴ and by my personal experience. Large predators in North America kill more game than do hunters⁴⁵ by an order of magnitude. I've come to understand that unregulated predator populations threaten the very institution of public ownership of wildlife.

Wildlife in North America has a long history as a treasured resource that generates substantial wealth and employment. It has been vigorously defended by its owners, the citizens of the U.S. and Canada. As

the public's interest in wildlife diminishes, I see conditions developing for the transfer of wildlife resources and habitats to private ownership. Already in some states and provinces we're seeing the privatization of deer and other big game. In the future, the public may have no more say over private bears and wolves than it has currently over private deer. Our goals must aim to maintain genetically pure stocks of predators in native landscapes, sustain game abundance for public use, and provide for public safety.

We need a comprehensive policy for carnivore conservation. The ideal policy will be a prescription for diverse and abundant game populations, viable populations of native predators, and high levels of hunter participation. This approach would safeguard the North American Model of Wildlife Conservation by insuring that a large fraction of the population is actively engaged in the policies, politics, and pastimes that enable a secure future for wildlife. In managing

wildlife, one is reminded of the French proverb that says, to have a beautiful park, one needs a very sharp axe and a heart of stone!

I'll close by listing what I believe to be essential elements in a comprehensive policy for carnivore conservation. While space allows only a listing of these components, I invite you to visit the Club's web site where my references are listed to share my thinking on each one.

1. The notion of conserving wolves in multi-use landscapes surrounding houses, farms, villages, and cities is untenable and needs to be replaced with a more realistic policy.
2. A Continental Carnivore Conservation Strategy should be negotiated between Canada and the United States within the context of a Terrestrial Wildlife Conservation Treaty.
3. We need to take seriously the matter of zoning, determining where large predators will be conserved and where not.
4. There is a great public good that hunters give to society at large, which I call the "freedom of the woods," and this needs to be recognized and encouraged in policies.
5. Any model of carnivore conservation must take a large-scale perspective that includes areas where large predators may dwell unmolested by humans. ■

Dr. Geist's footnotes, references, and explanations of his policy proposals follow.

Footnotes, references, and explanations of proposed policies for “Let’s Get Real: Beyond wolf advocacy, toward realistic policies for carnivore conservation” by Valerius Geist, Ph.D.

Explanation of Proposed Policies

1. If predator conservation is a serious issue, then the policy of conserving wolves in multi-use landscapes surrounding houses, farms, villages and cities is untenable. It must lead to the generic extinction of wolves via interbreeding with domestic dogs, changing wolves into feral dogs. Lone wolves trying to find company and thus fraternizing with dogs produce this problem. In North America there is also fraternization with coyotes and the mixing of wolf and coyote genes—and all the conservation and legal problems this entails.⁴⁶

2. Predator conservation requires a well thought-out Continental Carnivore Conservation Strategy negotiated between Canada and the United States within the context of a Terrestrial Wildlife Conservation Treaty. While the primary purpose of such a treaty would be to enshrine the North American Model of Wildlife Conservation in treaty law, another objective would be to negotiate a continental Endangered Species agreement. Continentally, or globally, wolves were never an endangered species, and the use of the current legislation as a basis of wolf reintroduction violates the very spirit of that legislation. There’s nothing wrong with wolf reintroductions, but not under an endangered species act! We need to apply our very limited resources to species truly in danger and not squander them on a common, resilient predator with a history of remarkable recoveries. This is not merely a matter of money, but also of squandering good will and credibility. Moreover, current reintroductions need to be viewed primarily as precious experiments whose lessons we need to document and learn from. My review of matters pertaining to the Kenton Carnegie tragedy points to serious deficits in scholarship pertaining to wolves. There has been far too little integration of available information. The bitter complaints of rural people affected by wolf-reintroductions, for instance, are based on perfectly valid fears grounded in reality. Their concerns need attention—and solutions. A historical review of wolves and humans shows that nobody has yet succeeded living in peace with packs of wolves, unless there was a buffer of game, livestock and pets between wolves and humans, and the wolves were conditioned to shun people. Nor have we paid attention to the experiences of native people with wolves, who pointed out, correctly, that wolves eat, disperse and bury the evidence—be it wolf-killed sheep, calves or humans. Note similar findings for livestock taken by wolves.⁴⁷ Wolf packs attacking dogs pulling sleds were not uncommon in the north or in Greenland. The premises of the reintroductions were faulty, a matter that today clarifies vital conceptions we have about wildlife populations and predation. Above all, we urgently need to find ways to insure that scholarship is disinterested and freed of political and bureaucratic advocacy.

3. We need to take seriously the matter of zoning, determining where large predators will and won’t be conserved. This is an old, but important conception, most recently realized in the Wyoming wolf management scheme. More fundamentally, we need to discuss the whole matter of so-called ecosystem rehabilitation. During this process of re-establishing regional biodiversity there are three major steps, the return of herbivores, followed by the return of carnivores, followed by the return of parasites and diseases dependent on the preceding processes. We have experienced the heady return of large herbivores and game as well as the biodiversity clinging to their coattails⁴⁸. Do we really need the diseases and parasites potentially dangerous to public health and agriculture? If not, then zoning is the answer. We have to take seriously means and ways of coexistence where we can very fruitfully look to history. If we can agree on zoning for large predators, then we can take advantage of the lessons of history—North American history in particular: where there has been a high ratio of prey to predators, wolves are shy, avoid humans and are the very image of romantically idealized wolves. As long as there is an abundance of prey surrounding wolves, they stick to such and avoid humans and their livestock. As long as there is a buffer of game and livestock between wolves and humans, they do not target humans as alternative prey.

4. There is a great Public Good that hunters give to society at large, which I may call here the “freedom of the woods.” It is based on the fact that an armed person acts quite differently from an unarmed one when meeting predators, and we have reason to believe that the predators notice the difference via sight, sound and smell. A confident person is quite intimidating to carnivores, while a fearful one merely encourages predators to confront people. Therefore, unarmed people in the backcountry encourage misbehaviour in predators to the detriment of predators. Secondly, and of great importance, is that inefficient hunting of predators conditions the animals negatively so that they avoid humans. Subsequently, hikers, campers, and picnickers can go into the woods in safety as carnivores stay away from humans. The Achilles heel of carnivores is being stalked systematically, just as they prey on smaller or weaker members of their own species. Carnivores are cannibalistic; and grizzly bears and wolves are no exception. Consequently, being stalked is very likely a terrifying experience to bears or wolves. Hunted carnivores negatively conditioned will coexist splendidly with humans. That’s the big lesson from our history where we lived together with carnivores in North America (or in Siberia). Where large carnivores are de facto protected, where they may multiply unimpeded, livestock, pets and eventually humans become their victims—let alone game animals.⁴⁹

5. We require large-scale carnivore conservation areas including areas where large predators may dwell unmolested by humans. This is an essential condition of any model of carnivore conservation. There must be places, large places, where they may live without interference by humans. Wherever we impose human use on lands where carnivores live, the security of humans invariably takes priority.⁵⁰ Ironically, the only human entry into such carnivore reserves would be by armed persons to avoid any positive conditioning that would lead to predators approaching humans. I suggest that we consider the process of making our national parks core areas of carnivore conservation and switch tourism and recreation outdoor uses on large wild areas where humans are protected by the “freedom of the woods.” Yes, that’s a mighty big change from our present mentality, but it comes close to what the South Africans are doing where the national parks are for nature preservation and tourism is controlled so as to interfere as little as possible. We do need large wild recreation areas for wholesome outdoor activities and large carnivores can live there splendidly at low population levels while being negatively conditioned to humans. The sheer size of such recreational and multiuse areas would insure viable carnivore populations.

Footnotes and References

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- 3 A captive pack of nine wolf hybrids, kept as pets, killed its owner, Sandra L. Piovesan, of Salem Township, Pennsylvania, on July 17th 2006. Linda Wilson Fuoco and Chico Harlan, *Pittsburgh Post-Gazette* wrote that Ms. Piovesan treated her wolves like children, and said as much when neighbors asked about them. Ms. Piovesan said that “they (the wolf-hybrids) give me unqualified love”. She fed the animals’ road kill that sometimes caused the nearby neighborhood to smell. She said that she liked the wolf-dogs because they were pretty. While the notion of the “harmless” wolf is here not explicit, it is implicit. At risk are, clearly, the well-educated, caring persons who place their trust in science.
- 4 See Teague 2008 *ibid*.
- 5 Quoted from C. D. C. Linnell et al. 2002, *The Fear of Wolves*, Norse Institutt for Naturforskning. NINA Oppdragsmelding 731, Trondheim, Norway. ISBN 82-426-1292-7.
- 6 See Will N. Graves 2007 (edited by V. Geist) *Wolves in Russia*, Detselig, Calgary. Mikhail P. Pavlov, 1982. “The Wolf in Game Management,” 2nd edition 1990; Publisher: Agropromizdat, Moscow.
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- 12 Roy Stewart (2004). In his book about travels in Afghanistan “The Places in Between” (p. 123, Harcourt Books). On the Internet newkerala.com Kabul 18 Feb 2005: It was reported that hungry wolves were driven by freezing cold in the mountains to invade Afghanistan’s villages and have killed and devoured four people in the last two weeks. This was reported by the official Bakhter News Agency (BNA). Heavy snowfall is driving wolves from the mountains toward villages and in addition to four people being killed by wolves 22 have been bitten in Paktia Province which borders Pakistan.
- 13 The Korean experience is summarized by Robert Neff in *Devils in the Darkness*, 2007/05/23, copyright 2007 Ohmy News. http://english.ohmynews.com/articleview/article_view.asp?menu=c10400&no=362934&rel_no=1&isPrint=print
- 14 Brett L. Walker. 2005. *The Lost Wolves of Japan*. Published by University of Washington Press
- 15 For instance: “On the arid steppes of western Uzbekistan, some 20 villagers have been reported injured by wolves in five months. Two of them—in the Muinak District—died in early February as a result of their wounds.” *Radio Free Europe*, March 15th 2005, Central Asia, in a story entitled *Cohabitation of Wolves, Humans Proves Difficult*.
- 16 Also on the Internet on timberwolfinformation.org/info/archieve/newspapers on 2/27/05 from Ankara Turkey it was reported that a 10-year-old boy named Onur Bahar was killed by a wolf in a field near his house on the outskirts of Talas. The wolf went for the boy’s throat and tore off his left arm.
- 17 An Iranian colleague reported that in rural areas of Iran, villagers were disarmed and lived in great fear of wolves. Possession of weapons during the Shah’s regime was severely punished by the secret police.
- 18 Freuchen, P. 1935. *Arctic Adventure*. Farrar & Rinehart, New York. Peter Freuchen lost a companion to wolves (pp. 23, 329, 332), shot a wolf stalking his children (pp. 347-348), had harrowing experiences with wolves trying to enter his cabin (pp. 16-19). His writings support an observation made to me by a longtime resident and hunter in Greenland: where there are wolves, there are no people and vice versa!
- 19 Rajpurohit, K. S. 1999. Child lifting: Wolves in Hazaribagh, India. *Ambio*, Vpl. 28. No. 2. pp. 162-166. March issue
- 20 Rutter, Russell J. and Douglas H. Pimlott 1968. *The World of the Wolf*. J. B. Lippincott C., Philadelphia & New York. David L.

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 - 22 See Brett L. Walker. 2005, who the terrible experience in Japan with rabid wolves that, ultimately, led to their extermination.
 - 23 Brett L. Walker. 2005, *ibid*; Will N. Graves 2007, *ibid*.
 - 24 Between 1580-1830, 3,069 people were killed by wolves in France; of these, 1,857 were killed by non-rabid wolves. See Moriceau 2007 *ibid*.
 - 25 For an account of how rabid wolves act, see Chapter 6, *Wolf Attacks on Humans* by Will Graves (2007) (edited by V. Geist) *Wolves in Russia*, Detselig, Calgary. pp 87-103.
 - 26 Moriceau 2007 *ibid*; Linnell et al. 2002 *ibid*.
 - 27 Hans Friedrich von Flemming addressed his encyclopedic work "Der Vollkommene Teutsche Jäger" (The fully experienced German hunter) to his Mighty Sovereign and Master, Friedrich Augusto, King of Poland in 1719, followed by a second volume in 1724. This massive two-volume work on wildlife and its management was published in Leipzig, Saxony, Germany. Flemming's account reveals in what fear wolves were held and to what lengths authorities went trying to eliminate such.
 - 28 See Walker. 2005. *ibid*.
 - 29 In his review of wolf attacks on humans the Russian academician Mikhail P. Pavlov, singles out three North American scientists who advanced the view that wolves were harmless. They were "D. Mech, D. Pimlott and R. Peterson..." see p. 176 in W. N. Graves 2007 *Wolves in Russia*. Detselig, Calgary.
 - 30 C. D. C. Linnell et al. 2002 *ibid*.
 - 31 Banfield, A. W. F. 1964. Review of F. Mowat's *Never Cry Wolf*. *Canadian Field naturalist*. 78:52-54; Pimlott, D. H. 1966. Review of F. Mowat's "Never Cry Wolf," *J. Wildlife Management*. 30:236-237.
 - 32 See Appendix A. Pavlov's chapter in Will N. Graves 2007 *Russian Wolves*. *Anxiety through the Ages*. Detselig, Calgary, Alberta, Canada.
 - 33 Elis Pålsson 2003 *Vargens Näringssök och Människan*. ISBN 91-631-3651-1, Älmhult.
 - 34 Appendix A. Pavlov's chapter in Will N. Graves 2007. *ibid*.
 - 35 See A. Bryan Williams 1932. *Auf Hochwild in Canada* (German translation). P. 249. Williams relates how in 1923 a trapper, which newspapers reported killed and devoured by wolves, returned hale and hearty to civilization laden with furs.
 - 36 Johnny Loe and Elvin Røskraft 2004, *ibid*.
 - 37 Moriceau 2007 *ibid*.
 - 38 Linnell et al. 2002 *ibid*.
 - 39 Hans Friedrich von Flemming in 1749. *Der Vollkommene Teutsche Jäger*, Leipzig.
 - 40 See also Mark E. McNay 2002. Wolf-human interactions in Alaska and Canada: review of the case history. *Wildlife Society Bulletin* 30(3):831-843, and **Mark E. McNay 2002 A case history of wolf-human encounters in Alaska and Canada. Alaska Dept. of Fish and Game, Wildlife Technical Bulletin 13.**
 - 41 C. D. C. Linnell et al. 2002 *The Fear of Wolves*, Norse Institutt for Naturforskning. NINA Oppdragsmelding 731, Trondheim, Norway.
 - 42 Walker. 2005; Graves 2007; Pavlov 1983. *ibid*
 - 43 This is based not only on my own experience living for decades in wolf country, but also the prominent Canadian hunter-naturalist-administrator A. Bryan Williams PP. 250-254 *ibid*.
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 - 45 Kay, C.E. 2006. Are predators killing your hunting opportunities? *Mule Deer Foundation Magazine* No.4:8-12.
 - 46 See L. David Mech, Luigi Boitani (eds) 2003. *Wolves: Behavior, Ecology, and Conservation*. University of Chicago Press, Chicago, ISBN 0226516962, 97802265169
 - 47 Mark Collinge 2008. Relative risks of predation on livestock posed by individual wolves, black bears, mountain lions and coyotes in Idaho. Pp. 14-16 in *The Outdoorsman* Jan-March 2008. Presented at the 23rd Vertebrate Pest Conference in San Diego during the third week in March 2008
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