



# STAR TREK AND HISTORY

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# Chapter 15

## Who's the Devil?

### Species Extinction and Environmentalist Thought in *Star Trek*

*Dolly Jørgensen*

**Spock:** To hunt a species to extinction is not logical.

**Dr. Gillian Taylor:** Whoever said the human race was logical?

—*Star Trek IV: The Voyage Home*

In *Star Trek IV: The Voyage Home*, the inhabitants of twenty-third-century Earth learn all too well the price of their illogical behavior. By hunting the humpback whale to extinction in the twenty-first century, humankind had sealed its own fate. The humpbacks had been in communication with aliens in the twentieth century, but they had no descendants to reply to an alien probe visiting the planet two centuries later. Earth seemed to be on the verge of destruction, as the seemingly omnipotent probe demanded a reply. Luckily, the *Enterprise* crew saved the Earth inhabitants from a watery grave with the help of time travel, a biologist, nuclear fuel from a naval vessel, plexiglas, and two twentieth-century whales.

Sometimes we think of science fiction as presenting escapist, made-up fantasy worlds. From its beginnings in the 1960s until the present, however, *Star Trek* has commented on contemporary social issues, establishing itself as part of a larger discourse on the state of the world.<sup>1</sup> Contemporary environmental concerns are a major theme in *Star Trek*. In this chapter, we show how the portrayal of animal species' extinction in the television shows and movies traces gradual changes in environmentalist thinking over the last forty-five years.

Although species extinction could include the mass destruction of worlds and the extinction of peoples, like the loss of the Vulcans in the 2009 movie *Star Trek* or the civil war that wiped out the population of Cheron (*TOS*, "Let That Be Your

Last Battlefield”), the focus here is on creatures equivalent to animals rather than civilizations that are considered equivalent to humans. By limiting the discussion to creatures considered to be animals, we can place species extinction within the prevailing environmentalist thought of the twentieth century.

*Star Trek* has presented species extinction as a complex problem, one that has evolved over the course of the series’ history. In the 1960s, a growing environmental movement stressed the need to save species from extinction, yet there was a tension between species extinction and human needs. In the 1980s, the rising rate of species extinction coupled with our knowledge gaps about the roles of species in the web of life created the sense of ecological crisis. Environmentalists around the world began to concentrate on so-called charismatic species, such as whales, because attractive and compelling species could motivate large membership in conservationist groups. In the 1990s, the prevailing sentiment was that humans needed to take active roles in conservation, including relocating individual animals to preserve the species under threat. These changes in environmentalist thought have made their way into various incarnations of *Star Trek*.

# Live and Let Live

Although not the first episode filmed for *Star Trek*, “The Man Trap” was the episode network executives selected to launch the series on television on September 8, 1966. In the episode, the crew encounters a creature from the planet M-113, which begins to kill members of the crew of the *Enterprise* in order to obtain salt from their blood. It is the last of its kind. Although at the beginning of the episode, the ancient inhabitants of M-113 are called a “civilization” in the captain’s comments, the alien is never treated as being equivalent to humans. When the archeologist Robert Crater admits that he knew about the creature, he likens it to the buffalo (technically the animal is the American bison, *Bison bison*):

**Crater:** She was the last of her kind.

**Kirk:** The last of her kind?

**Crater:** The last of its kind. Earth history, remember? Like the passenger pigeon or buffalo.

. . .

**Spock:** The Earth buffalo. What about it?

**Crater:** Once there were millions of them; prairies black with them. One herd covered three whole states, and when they moved, they were like thunder.

**Spock:** And now they’re gone. Is that what you mean?

**Crater:** Like the creatures here. Once there were millions of them. Now there’s one left.

The dialogue implies that the bison had been wiped out like the passenger pigeon, which became extinct in 1914 even though billions of pigeons existed in North America when the Europeans arrived. The bison was almost hunted to extinction in the late nineteenth century by commercial hunters who slaughtered millions for the skins. Privately owned herds and protected herds in Western national parks largely saved the animal from eradication.<sup>2</sup> The near demise of the bison became a widely acknowledged environmental misstep by the turn of the century, and efforts to save the bison were lauded in popular magazines.<sup>3</sup> Although the bison was not a threatened species by the 1960s, it had become iconic as a symbol of near extinction. The writers of *Star Trek*, projecting two centuries into the future, thus decided that bison could still become extinct by the twenty-third century.

Extinction has been called “the great theme of 20th century conservation.”<sup>4</sup> By the 1960s, endangered and threatened species had become a hot topic. In 1961,

sixteen of the world's leading conservationists signed the Morges Manifesto, which became the foundational document for the World Wildlife Fund (now known as the WWF). The manifesto poignantly blamed modern civilization for the loss of animals worldwide: "All over the world today vast numbers of fine and harmless wild creatures are losing their lives, or their homes, in an orgy of thoughtless and needless destruction. In the name of advancing civilization they are being shot or trapped out of existence on land taken to be exploited. . . . In this [sic] senseless orgy the nineteen-sixties promise to beat all past records for wiping out the world's wild life."<sup>5</sup> The WWF, with its focus on saving wildlife from extinction, grew into the world's leading conservation organization, with nearly five million members across the globe by the time of its fifty-year anniversary.<sup>6</sup>

The WWF attempted to keep species threatened with extinction in the public consciousness. There were plans to construct a World Wildlife Federation Pavilion for Expo '67 in Montreal, which served as the Canadian centennial celebration and the World's Fair in 1967. The pavilion was planned with three sections, the first to highlight extinct animals such as the dodo, the second to display presently endangered species such as the whooping crane, and the third to show species saved from extinction, including the American bison.<sup>7</sup> Although the pavilion was not built, the plans demonstrate the interest people had in endangered species and the identification of the bison as a species under the former threat of extinction.

Legislators in the United States likewise had become intensely interested in protecting endangered species by the 1960s, although interest in protecting game like migratory birds stretches back to the late nineteenth century. The Land and Water Conservation Fund Act of 1965 offered the first formal recognition of endangered species by allowing Congress to purchase land "for the preservation of species of fish or wildlife that are threatened with extinction."<sup>8</sup> In 1966, Congress passed the Endangered Species Preservation Act, the first federal endangered species legislation, which stated bluntly, "One of the unfortunate consequences of growth and development in the United States has been the extermination of some native species of fish and wildlife."<sup>9</sup> These legislative moves demonstrate that endangered species were clearly on the national agenda in the 1960s.<sup>10</sup> The allusion to the fate of the bison in "The Man Trap" fits within this broader social concern about endangered species.

At the same time, however, there is a tension in "The Man Trap" between the endangered species and harm to humans. Professor Crater defends the creature's actions as a survival mechanism for an almost extinct species. "They needed salt to stay alive. There was no more salt. It's the last one. The buffalo. There is no difference." Kirk retorts that there is one difference: "Your creature is killing my

people” (*TOS*, “The Man Trap”). Saving animals from extinction is fine, as long as the human price is not too high. In the end, Spock pleads with McCoy to shoot the creature as it attempts to kill Kirk by feeding on his body salt. McCoy fires and saves Kirk.

This anthropocentric view of what is worth saving fit with the prevailing sentiments about endangered species during the 1960s. Endangered and threatened species were not seen as valuable in and of themselves, but rather because of their “educational, historical, recreational, and scientific value” to humans, a concept we now call “ecosystem services.”<sup>11</sup> The balance between animal and human welfare came under scrutiny in the 1970s when conservationists fought a legal battle over the listing of the snail darter as an endangered species, which delayed the construction of a hydroelectric power dam in Tennessee. In the end, the snail darter, like the “man trap” creature of planet M-113, was sacrificed for human welfare.<sup>12</sup>

There is a twinge of remorse in the last scene of the episode when Spock asks the captain if something is wrong, and Kirk replies, “I was thinking about the buffalo, Mister Spock” (*TOS*, “The Man Trap”). But there is also an implied contrast between the justification for the extermination of the M-113 creature, which was threatening the ship’s crew, and the bison, which had been slaughtered for rampant commercial gain. This contrast between direct threat and commercial gain would appear as a common thread in *Star Trek*’s portrayal of endangered species.

Later in the first season, “The Devil in the Dark” presents what could be the same story—an unseen creature is killing miners on Janus VI, a strategic mining planet that produces vital pergium, a radioactive element, and other costly minerals, and it must be hunted. Yet the story twists to reveal that the miners have in fact been killing the soon-to-hatch children of the Horta, leaving the race on the verge of extinction. Captain Kirk turns into a protector of the Horta, recognizing that the creature is only protecting itself. Science and reason factor into the decision to allow the Horta to live—permitting the Horta to exist, in fact, benefits humans.

In the episode, Spock first suggests that the creature may be the last of its kind when he and the captain encounter a maze of tunnels that couldn’t have been made by an average animal:

**Kirk:** Then we’re dealing with more than one creature, despite your tricorder readings, or we have a creature with an extremely long life span.

**Spock:** Or it is the last of a race of creatures which made these tunnels. If so, if it is the only survivor of a dead race, to kill it would be a crime against science.

**Kirk:** Mister Spock, our mission is to protect this colony, to get the pergium moving again. This is not a zoological expedition. Maintain a constant reading on the creature. If we have to, we'll use our phasers to cut our own tunnels. We'll try to surround it. I'm sorry, Mister Spock, but I'm afraid the creature must die.

**Spock:** I see no alternative myself, Captain. It merely seems a pity.

Spock's sentiment is not a moral or ethical argument against extinction, but rather a scientific one. Spock believes the creature would be useful as an object of study because it is the first silicon-based life-form the Federation has ever encountered. This anthropocentric take on extinction reflects both Spock's scientific orientation and the common 1960s environmentalist approach of focusing on the human benefit of killing animals.

Although Kirk insists that the creature must be killed regardless of being the last of its kind, when he comes face-to-face with it, he changes his mind. Because the creature does not immediately attack him, Kirk decides to forgo his plan and to try to figure out what is motivating the creature. Spock proposes to do a Vulcan mind meld with the alien life-form. During the joining, he cries out in the Horta's voice, "Murder. Of thousands. Devils! Eternity ends. The chamber of the ages. The altar of tomorrow. Murderers. Stop them! Kill! Strike back! Monsters! . . . It is the end of life. Eternity stops. Go out into the tunnel. To the chamber of the ages. Cry for the children" (*TOS*, "The Devil in the Dark").

Through the mind meld Spock learns that the silicon nodules that the miners have been destroying are Horta eggs. The miners are in fact the devils in the dark, not the Horta. As Spock later explains to the miners, "There have been many generations of Horta on this planet. Every fifty thousand years, the entire race dies, all but one, like this one, but the eggs live. She cares for them, protects them. And when they hatch, she is the mother to them, thousands of them. This creature here is the mother of her race" (*TOS*, "The Devil in the Dark").

The Horta's actions are then justified, because "she fought back in the only way she knew how, as any mother would fight when her children are in danger," as Kirk explains it (*TOS*, "The Devil in the Dark"). According to William Shatner, this twist of turning the Horta from a killer to a sympathetic creature made the episode "intelligent and highly compelling."<sup>13</sup>

Yet the resolution of the Horta's potential extinction does not come from Kirk's moral argument alone—the miners could still have decided that it was preferable for the Horta species to die out in order to protect their mining interests. But Kirk offers up a solution that benefits the miners:

Gentlemen, the Horta moves through rock the way we move through air, and it leaves tunnels. The greatest natural miners in the universe. It seems to me

we could make an agreement, reach a *modus vivendi*. They tunnel. You collect and process, and your process operation would be a thousand times more profitable. (*TOS*, “The Devil in the Dark”)

Kirk’s suggestion is right on target—the head of the mining operation reports at the end of the episode that the Horta children are tunneling out enormous quantities of minerals, and both sides are content. In this episode, the endangered species was transformed from a threat to a benefit, and thus it was saved from certain doom.

The conflict between conservation and development was a central concern of the twentieth century. The environmentalist movement of the 1960s was a response to the human degradation of nature, but it could not ignore human needs. Unlike in “The Man Trap” when the last individual of a species is killed, the Horta survives because a balance is struck between what is good for nature and what is good for humans.



# What We Don't Know Can Hurt Us

“The Devil in the Dark” revealed that what we don't know *can* hurt us. The miners did not understand that the silicon nodules were the Horta eggs; by destroying them, they incurred the wrath of the Horta mother and nearly missed out on harnessing the power of thousands of little miners working on their behalf. Creatures and humans could have a symbiotic relationship. This would become the major theme of the fourth motion picture in the *Star Trek* series, *The Voyage Home*.

In *The Voyage Home*, Earth is under siege from an alien probe, and after some quick analysis, Spock deciphers the probe's signal as the song of a humpback whale (*Megaptera novaeangliae*). Unfortunately, humpback whales were hunted to extinction in the twenty-first century, so the crew of the *Enterprise* has to make a trip back in time to find a whale and return it to the twenty-third century.

The environmentalist theme of *The Voyage Home* was no accident. Leonard Nimoy, who directed the film, was reading the Pulitzer Prize-winning book *Biophilia* by the ecologist Edward O. Wilson at the time that script ideas for the movie were being developed. In *Biophilia*, Wilson argued that humans have “the innate tendency to focus on life and lifelike processes.”<sup>14</sup> Wilson believed that humans want to be around nature because they are intimately linked with nature; in fact, all species are linked together in webs that could crumble if even one species is removed. According to Nimoy, this idea caught his attention:

In his work, Wilson talks about the vast numbers of species becoming extinct, and predicted that by the 1990s, Earth would lose as many as 10,000 species per year. That's *one* species per *hour*! Most disturbingly, many of these lost species would never have been catalogued; we would never have the chance to know what they were or what function they performed in the cycle of nature. They would simply vanish without leaving behind a record of their existence.

The grim future painted by *Biophilia* haunted my thoughts.<sup>15</sup>

The notion that species can be extirpated without us ever knowing their role or purpose was key for Nimoy. In a conversation Nimoy had with a friend about *Biophilia* and endangered species, the humpback whale came up as an example. Because scientists are unsure about the function of whale song, Nimoy decided on a plotline for the movie that focused on how what we don't know—the function of the whale song—can hurt us, because we've caused the whales' extinction and now we're in danger.<sup>16</sup>

The choice of the whale as the species under threat was fitting for a movie filmed and released in 1986, because of the history of the antiwhaling movement.

The International Whaling Commission (IWC), a voluntary international organization founded in 1946 to review and revise whaling standards worldwide, had instituted a ban on all commercial hunting of humpback whales and blue whales (*Balaenoptera musculus*) in 1966.<sup>17</sup> The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), an international agreement that took effect in 1975 to limit international trade in wild plants and animals, listed several species of whale, including humpback, blue, and grey whales, as endangered species.<sup>18</sup> Two vocal environmentalist protest organizations specifically targeted what they considered illegal whaling activities in the late 1970s and early 1980s. Greenpeace launched its antiwhaling campaign in 1975, which included harassing whaling ships at sea, especially in Icelandic waters, and the militant organization Sea Shepherd began targeting whaling ships in 1978, including ramming ships at sea and sinking ships in port.<sup>19</sup> Antiwhaling sentiment was growing fierce by 1980.

Very few governments objected to protecting large whales, but the IWC entered a sea of controversy in 1982 when it moved to extend the protection. That year, backed by numerous nonwhaling country members, the IWC implemented a moratorium on all commercial whaling worldwide, regardless of the species, scheduled to begin in late 1985. Several countries active in whaling of smaller whale types, including Japan, Norway, and Iceland, voted against the measure and continued hunting whales.

The action of *The Voyage Home* occurs within this context. When the *Enterprise* crew (who are manning a Klingon Bird-of-Prey) travels back in time to 1985 to search for a humpback whale, they stumble upon the Cetacean Institute in San Francisco. On a guided tour of the facility, Dr. Gillian Taylor introduces Captain Kirk and Mr. Spock to the plight of whales in the twentieth century:

Since the dawn of time, men have harvested whales for a variety of purposes, most of which can be achieved synthetically at this point. One hundred years ago, using hand-thrown harpoons, man did plenty of damage, but that is nothing compared to what he has achieved in this century. This is mankind's legacy, whales hunted to the brink of extinction. Virtually gone is the blue whale, the largest creature ever to inhabit the Earth. Despite all attempts at banning whaling, there are still countries and pirates currently engaged in the slaughter of these inoffensive creatures. Where the humpback whale once numbered in the hundreds of thousands, today there are less than ten thousand specimens alive and those that are taken are no longer fully grown. In addition, many of the females are killed, while still bearing unborn calves. (*Star Trek IV: The Voyage Home*)

During her talk, graphic video footage of a whale hunt and bloody slaughter is

shown to the guests. Dr. Taylor's monologue reflects clearly the antiwhaling sentiment and the controversies over the continuation of whaling practices as of 1985.

When the ship is ready to take on its oceanic passengers, Dr. Taylor discovers that the institute's humpback whales, George and Gracie, have been released into the Pacific. The crew hurries to track the whales and discovers a whaling ship is nearby. As our heroes speed toward the whales, the whaling ship is closing in. The whalers "are largely bearded; they are Northern Europeans, maybe Swedes, Icelanders or Russians, all famous as Humpback hunters."<sup>20</sup> The whalers get ready for the kill; they load their harpoon, and when the whales breach, they fire it. Sulu manages to fly the Bird-of-Prey in between the harpoon and the whale, forcing the harpoon to fall harmlessly into the water. The whole sequence mimics a common antiwhaling practice used by Greenpeace of moving people in Zodiac inflatable boats between a whaling ship and its prey.<sup>21</sup>

*The Voyage Home* reflects several 1980s ideas about extinction. The twenty-third-century interlopers in the twentieth century know that humpback whales will be hunted to extinction, and this will have a price. Kirk poignantly comments near the end of the movie when gazing at George and Gracie on board the ship: "It's ironic. When man was killing these creatures, he was destroying his own future." The line picks up on *Biophilia's* emphasis on a web of life facing the challenges of globally rising extinction rates. It also taps into contemporary antiwhaling fervor and the concerns about the future of whales. Many have called *Star Trek IV* one of the greatest environmental movies of all time.

# Intervening to Right Past Wrongs

In the 1990s *Star Trek* reached out to a new generation with an all-new cast, and they embraced new ideas about extinction and the human role in preventing it. Older environmentalist concepts of preventing animal extinction for the benefit of humans gave way to the notions of preventing extinction for the sake of the animals themselves. Humans were called upon to intervene and to right past wrongs.

*The Next Generation* episode “New Ground,” which aired in 1992, included a subplot about extinct and soon-to-be extinct animals. As part of a school outing, a group of students visiting the Biolab onboard the *Enterprise-D* are told about a mission to relocate the endangered Corvan gilvo. The teacher is talking about the white rhinoceros (*Ceratotherium simum*), which became extinct in the twenty-second century, when the show’s viewers join the class:

As the value of their horns increased, the number of white rhinos in the wild kept falling, until they finally became extinct about two centuries ago. Now, I’d like to show you a pair of animals we’re trying to save from extinction. Would you follow me? They’re from Corvan Two, where their homes in the rainforests are being threatened by industrial pollutants. They’re called Corvan gilvos. They’re a little shy. The eating habits of gilvos are very similar to those of Earth’s draco lizards, which died out over three hundred years ago. There are only fourteen gilvos left on Corvan Two. We’re transplanting these two to the protected planet Brentalia, where they should thrive (*TNG*, “New Ground”).

In this monologue, the teacher cites two examples of extinct species: the white rhino, from overhunting, and the draco lizard, from the loss of its rain forest habitat. Neither of these animals was extinct in 1992, but both were under mounting pressure of extinction by humans. The white rhino has been on the CITES Appendix I list, which bans all commercial trade in the animal or products made from the animal, since 1977.<sup>22</sup> According to the World Conservation Union (IUCN), an estimated 17,480 white rhinos remained in the wild as of 2008. Poaching in order to acquire the rhino’s horn, which is used in Chinese medicine and as ornate Middle Eastern decoration, is the main threat to the species.<sup>23</sup> Draco lizards are a family of lizards with membranes that allow them to glide among the treetops; they are known as flying dragons. They live in rain forests in southeastern Asia, and although the IUCN does not consider them threatened, their habitat loss may be considerable.<sup>24</sup> It was not a big stretch to think that these types of animals might become extinct by the twenty-second century.

In “New Ground,” there are only fourteen of the fictional gilvos left, so the *Enterprise* is transporting a pair of them to a planet with “protected” status, presumably like a national park where industrial development is limited or banned. This kind of movement of threatened or endangered species was a growing practice in the late 1980s and 1990s. Concerns about local extinctions of animals in areas where they previously lived prompted scientists in the 1970s and 1980s to start reintroducing animals from stock that still existed elsewhere. High-profile reintroductions of some attractive and compelling species, including the Arabian oryx in Oman, golden lion tamarinds in Brazil, and peregrine falcons in North America, served as conservation media events, showcasing the handling, transport, and release of the animals to better the environment.<sup>25</sup> In addition to putting species back into areas where they had been extirpated, some animals were relocated to new areas in order to conserve them.

The growing practice of introducing and reintroducing animals prompted some concerns in the scientific community. In 1987, the IUCN issued a position statement to set the standards for the movement of species because “translocations [the practice of relocating species] are powerful tools for the management of the natural and man made environment which, properly used, can bring great benefits to natural biological systems and to man but like other powerful tools they have the potential to cause enormous damage if misused.”<sup>26</sup> The IUCN also created a Re-introduction Specialist Group in 1988 to draft the guidelines for wildlife reintroduction projects and to disseminate information to scientists around the world about reintroduction experiences.<sup>27</sup> These guidelines permit the introduction of species from one location to another for conservation “only as a last resort when no opportunities for re-introduction into the original site or range exist.”<sup>28</sup> The gilvos of Corvan would qualify for such drastic measures since their numbers had dwindled and their habitat had become uninhabitable.

The episode portrays the mission to conserve the gilvo as a serious responsibility. When fire threatens to consume the Biolab housing the creatures, Worf’s son, Alexander, who has been injured, pleads with Riker to save them. The potential consequence of losing a whole species weighs heavily on the boy. Just in the nick of time, Riker carries the gilvos to safety while Worf saves Alexander. Humans must intervene to save endangered species; letting them die is unthinkable.

Not all extinction is serious, however. Saving a species from extinction found a lighter treatment in the *Deep Space Nine* episode “Trials and Tribble-ations” in 1996. In this episode, which includes time travel to the twenty-third century and a meeting between the *Deep Space Nine* and *Star Trek* crews, we learn about the plight of the tribbles. In the original series episode “The Trouble with Tribbles,”

the tribbles on Space Station K7 showed their affection by purring for all humanoids, except Klingons, at whom they hissed. The Klingons returned the sentiment. Some years later, the crew of the *Enterprise* found that Cyrano Jones, a two-bit trader, has sold some tribbles on a Klingon planet, which prompted the Klingons to genetically engineer a tribble predator called a glommer (*TOS: Animated Series*, “More Tribbles, More Troubles”). In the “Trials and Tribble-ations” episode, we find out that in the late twenty-third century, Klingons hunted down the tribbles and even destroyed their home world in order to eradicate the species. Upon hearing about the intentional slaughter, one of the *Deep Space Nine* crew, Odo, remarks, “Another glorious chapter in Klingon history. Tell me, do they still sing songs of the Great Tribble Hunt?” (*DS9*, “Trials and Tribble-ations”) Although the Klingons had worked diligently to rid the universe of the tribble, the time-traveling *Deep Space Nine* crew ends up bringing back a tribble to the twenty-fourth century, thus unintentionally reintroducing it. In this series of episodes spanning across multiple *Star Trek* shows, tribbles are seen as an ecological menace, but their reintroduction is depicted in a lighthearted, comical fashion.

# The *Enterprise's* Evolving Environmental Mission

During the last decades of the twentieth century, the environmentalist movement came of age. As it developed into a mass movement, it gradually changed its arguments and strategies for persuading the public that endangered species are worth saving. Although depicting a universe two hundred years (and more) into the future, the environmentalism exhibited in *Star Trek* reflects these changes. The 1960s series portrayed humans as a threat to animal species, but not without cause. In both “The Man Trap” and “The Devil in the Dark,” human welfare came first and foremost. The extinction of the creature of M-113 was justified because of the threat it posed to the *Enterprise* crew, whereas the Horta’s survival actually benefited the Federation.

By the 1980s, concerns about the unnecessary killing of animals took center stage. Environmentalists were heavily protesting whale hunts, which they saw as immoral slaughter, while the biologist Edward Wilson was warning against rapidly rising extinction rates and its unknown consequences. The plot of *Star Trek IV: The Voyage Home* brought these two concerns together, lamenting the destructive power of humans in the twentieth and twenty-first centuries. The decade of the 1990s brought stress on humans as agents of positive change. The Federation actively intervened to save the Corvan gilvo from extinction, relocating the species to a new, safe habitat in “New Ground.” Although unintentional, the crew of *Deep Space Nine* likewise saved the tribble from extinction by relocating one to the future. An environmental ethos centered on the animals and their welfare took over from a more human-focused one as *Star Trek* developed.

*Star Trek* is far from an escapist show—the people behind it actively used the story lines as an arena for exploring contemporary political and social issues, helping to bring some of these to the forefront of the mainstream media; thus, contemporary environmental concerns made their way into storytelling around the twenty-third century. How the *Enterprise* and its crew interacted with newly discovered creatures on faraway planets and how humans had affected Earth’s animals back home were vital elements of *Star Trek's* evolving environmental message. Humans might be the devils destroying life, but they might also be its saviors. The *Enterprise's* mission “to seek out new life forms and new civilizations” might aptly have been augmented with the phrase “and to preserve the old ones.”

## Notes

1. Daniel Bernardi, “*Star Trek* in the 1960s: Liberal-Humanism and the Production of Race,” *Science Fiction Studies* 24, no. 2 (1997): 209–225.
2. Andrew Isenberg, *The Destruction of the Bison: An Environmental History, 1750–1920* (Cambridge: Cambridge University Press, 2000).
3. For example, “The Vanishing Herd,” *Popular Mechanics*, January 1931, 115–116.
4. William Mark Adams, *Against Extinction: The Story of Conservation* (London: Earthscan, 2004), 25.
5. Morges Manifesto, scan available online at <http://assets.panda.org/downloads/morgesmanifesto.pdf>.
6. World Wildlife Fund, “50<sup>th</sup> Anniversary—Celebrating 50 Years and Looking to the Future,” <http://www.worldwildlife.org/sites/anniversary/index.html>.
7. Bruno Paul Stenson, “The World Wildlife Federation Pavilion,” [http://expo67.ncf.ca/world\\_wildlife\\_federation\\_p1.html](http://expo67.ncf.ca/world_wildlife_federation_p1.html).
8. Land and Water Conservation Fund Act, Public Law 88–578, 78 *U.S. Statutes at Large*, 897.
9. Endangered Species Preservation Act, Public Law 89–669, 80 *U.S. Statutes at Large*, 926.
10. J. Michael Scott, Dale D. Goble, and Frank W. Davis, eds., *The Endangered Species Act at Thirty: Conserving Biodiversity in Human-Dominated Landscapes* (Washington, DC: Island Press, 2006).
11. Endangered Species Preservation Act.
12. Although the Tellico Dam was exempted from the Endangered Species Act and the dam was built, the snail darter was later introduced successfully to another river and was saved from extinction. For a history of the snail darter, see Shannon C. Petersen, *Acting for Endangered Species: The Statutory Ark* (Lawrence: University of Kansas Press, 2002).
13. William Shatner with Chris Kreski, *Star Trek Memories* (New York: HarperCollins, 1993), 163.
14. Edward O. Wilson, *Biophilia* (Cambridge, MA: Harvard University Press, 1984).
15. Leonard Nimoy, *I Am Spock* (London: Century, 1995), 250.
16. See *ibid.*, 250–252, for a discussion of *Biophilia* and the plot development.
17. The protection was phased in for different parts of the world, but by 1966 it was global. For a discussion of humpbacks, see James H. Johnson and Allen A.



Wolman, “The Humpback Whale, *Megaptera novaeangliae*,” *Marine Fisheries Review* 46 (1984): 30–37.

18. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), “Annotated CITES Appendices and Reservations” (2008), [www.cites.org/eng/resources/pub/checklist08/Checklist.pdf](http://www.cites.org/eng/resources/pub/checklist08/Checklist.pdf).

19. Greenpeace, “History of Greenpeace Campaign to Save the Whales,” <http://www.greenpeace.org/international/en/campaigns/oceans/whaling/campaign/history/>; Sea Shepherd Conservation Society, “The History of Sea Shepherd Conservation Society and Whaling,” <http://www.seashepherd.org/whales/sea-shepherd-history.html>.

20. *Star Trek IV* shooting script, March 11, 1986, [http://www.scifiscripts.com/scripts/Trek/Star\\_Trek\\_IV.htm](http://www.scifiscripts.com/scripts/Trek/Star_Trek_IV.htm).

21. See the description of Greenpeace’s action against the Russian ship *Dalniy Vostok* in David Day, *The Whale War* (London: Routledge & Kegan Paul, 1987).

22. CITES, “Annotated CITES Appendices and Reservations.”

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# Star Trek and History

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