San Nicolas Island, with its rugged, windswept landscape lies 60 miles off the coast of California. Part of the Channel Islands, San Nicolas is currently owned by the U.S. Navy and utilized for military activities. Although the island serves an important role for human activities, San Nicolas is also an important island ecosystem and a nesting area for a variety of seabirds and shorebirds, including western gulls, Brandt’s cormorants, and federally threatened western snowy plovers.

Before the permanent settlement of the island, seabirds nested and reared their young with the occasional preying of eggs or chicks by the native island fox. The natural predator-prey balance continued, with seabird populations remaining stable. In more recent times, nesting seabirds that utilize offshore nesting areas in the Channel Islands have faced an increasing array of impacts from human activities, including the dumping of toxins into the marine environment and the alteration of the natural habitat on many of these islands from the introduction of species, including cats, black rats, sheep, rabbits, and goats.

As the result of a series of settlement agreements with Montrose Chemical Corporation and other responsible parties, a Trustee Council, comprised of Federal and State agencies, developed a comprehensive plan to identify projects to benefit wildlife injured by the past releases of DDT and PCBs into the ocean off the coast of southern California. The Trustee Council created the Montrose Settlements Restoration Program (MSRP) to oversee and implement these projects.

As seabirds were some of the species impacted by DDT and PCB contamination, one of the restoration projects identified by the Trustee Council in 2005 was the removal of the feral cats from San Nicolas Island to improve their nesting success rate.

Most likely the cats were first brought to the island in the early 1950s by members of the military for companionship and for use in keeping down the mouse population near human habitation areas, but were left behind when personnel returned to the mainland. Efficient hunters, generations of offspring of the original cats have lived in a feral state,
preying upon seabird eggs, chicks, and even adults. The feral cats also compete with the island fox - a state listed threatened species - for native deer mice, which is one of the primary food sources for the fox. The cats also prey upon the federally threatened island night lizard.

Although the U.S. Navy has undertaken periodic efforts since the 1980s to remove feral cats from the Island as part of its ongoing commitment to environmental stewardship, there was not enough funding or staffing to implement a comprehensive removal and monitoring program. Any cats that remained on the Island continued reproducing, leaving the Navy faced with a never-ending problem as the seabirds and other native wildlife continued being impacted. Prior to the initiation of the MSRP’s seabird restoration project, between 100 and 200 cats were estimated to live on San Nicolas Island. Once all of the cats are removed from the island, scientists anticipate an increase in nesting success for seabirds and shorebirds, and a reduction in predation on island night lizards.

When approached by the MSRP Trustee Council about the prospect of implementing a comprehensive program to remove all of the feral cats, the U.S. Navy was supportive and signed on as a cooperating partner in this project. A draft Environmental Assessment (EA) was prepared that outlined a range of alternatives for accomplishing the project. The draft EA was released for public review and comment in May 2008.

Island Conservation (IC) and the Institute for Wildlife Studies (IWS) were selected by the Fish and Wildlife Service to implement this challenging project. IC is a non-profit organization focused on restoring threatened island ecosystems and preventing extinctions by removing invasive species from islands. IC works globally to raise awareness about the impact of invasive species on islands and to develop strong partnerships to implement restoration projects that have lasting benefits to wildlife. The IWS is a non-profit organization that undertakes long-term studies to increase understanding of species’ biology that can assist in developing strategies to ensure their conservation. They have been conducting long-term studies and recovery efforts for bald eagles and island foxes on the Channel Islands.

**Public Response**
The draft EA outlined a multi-faceted approach to remove the cats, including trapping using specially modified padded leghold live traps, specialized dogs to track cat scent, and limited hunting. Based on the challenges of working with feral cats, the importance of removing the cats from the Island, and the fact that shelters throughout the United States are already overburdened with unwanted cats and kittens, the draft EA proposed that adult feral cats caught on San Nicolas Island be euthanized.

Release of the draft EA prompted concerned animal lovers as well as natural resource experts to respond with an array of comments. More than 5,000 handwritten and electronic comments were submitted to the Fish and Wildlife Service. Thoughts and suggestions laid out in the comments ran the gamut from extreme negative views of the project to very supportive of the project. The draft EA’s
The proposed plan took into account numerous factors, including difficulties in finding a facility to take on adult feral cats, the safety of specialists on the island who would have to remove feral cats from the traps, the potential for disease transmissions to cats, other animals, and possibly humans; the U.S. Navy’s prohibition on the implementation of Trap-Neuter-Release (TNR) on lands it owns or manages; and the importance of being able to complete the project in a reasonable timeframe.

Although anticipating adult feral cats would be euthanized on the island, there was consensus that healthy kittens could be made available for adoption, and arrangements were made with a local animal shelter on the mainland to take in any healthy kittens that were found on the Island.

The Humane Society of the United States (The HSUS) was one of several animal welfare groups that submitted substantial comments on the draft EA. Although not supportive of euthanizing the adult cats, and disagreeing with the methods of capturing the cats, The HSUS extended an open invitation to meet and discuss possible alternatives. The Trustee Council contacted The HSUS and several other national animal welfare groups to further explore the possibility of finding a common ground.

A Partnership is Formed
Beginning in the fall of 2008, members of the MSRP Trustee Council met with several members of The HSUS to discuss alternatives to the project that would accomplish the goal of removing all feral cats from the Island, and address The HSUS’s concerns that the cats not be euthanized. Although TNR is favored by numerous animal welfare groups, including The HSUS, this was not an option on San Nicolas Island for several reasons – in addition to the Navy’s established policy prohibiting TNR, the Trustee Council did not support the transfer of cats to mainland feral cat colonies where they would continue preying on native wildlife and add to the already enormous toll feral cats have on native populations of birds, rodents, and other small animals.

After meetings and phone calls, the MSRP arranged a trip in September 2008 for several members of The HSUS to visit San Nicolas Island. The trip to the Island provided an opportunity for The HSUS staff to work with the Trustee Council and Navy to explore ways of accomplishing the project objective without needing to euthanize the cats.

In November 2008, several HSUS staff, including a trapping expert, wildlife biologist, and a consulting veterinarian worked with staff from IWS on San Nicolas Island to develop a pilot trapping program. The pilot program compared the effectiveness of different types of traps to capture the feral cats. Tomahawk box traps were placed on the Island and baited with a variety of scents, toys, food, or other inducements. During the month of testing from November to the end of December, 14 to 100 box traps were set out each night (equaling about 1,200 trap nights), but only four cats were caught in those two months. Conversely, Island Conservation captured three cats within a one week period beginning January 8, 2009, with 16 padded leghold live traps (equaling 71 trap nights). This effort further confirmed that the use of padded leghold live traps was the more effective method in trapping feral cats on San Nicolas Island.

But there was still the issue of what to do with the cats, including the seven that were captured during the pilot program. The HSUS was clear they wanted these cats to be given a chance to live in peace on the mainland in an appropriate facility. Thus, efforts were made to develop a Memorandum of Agreement (MOA) that would formalize a partnership between the Fish and Wildlife Service, the U.S. Navy, and The HSUS regarding the transfer of custody of any captured cats to The HSUS, and the future care of those cats. The MOA was signed in December 2008. Under the terms of the MOA, The HSUS
assumed financial responsibility for the transportation and permanent care of healthy cats captured on San Nicolas Island.

With the MOA in place, The HSUS worked to identify suitable sanctuaries for the feral cats. The seven cats captured between December 2008 and January 2009, were flown off the Island, and transported by The HSUS to a veterinary facility in El Cajon, California, and later taken to a permanent sanctuary in the community of Littlerock, California, managed by Cat & Canine Assistance, Referral, and Education (CARE).

The Project Gets Underway

From January through June 2009, work continued to prepare for the first full year of the restoration project. This included the placement of material and equipment – including a mobile veterinary unit – on the Island to support the project. The mobile veterinary unit, operated by the IWS, included a full suite of diagnostic and treatment equipment. It was an invaluable asset that offered excellent care for island foxes and for the cats. While the Trustee Council focused on preparing for the start of the intensive effort to remove the feral cats, The HSUS was searching for a suitable place where a potentially large number of cats could be housed.

Beginning in June 2009, the first full year of the restoration project was initiated. Personnel from IC, which was selected to help design and implement the island restoration project, coordinated with U.S. Navy personnel regularly to determine which areas on the Island were accessible for trap placement. Ongoing activities had to be factored into the project to ensure the military mission was not compromised, and removal activities were conducted throughout the Island based on when certain areas were accessible.

The padded leghold live traps were specifically modified to minimize the risk of injury to cats and foxes. Additionally, each padded leghold live trap was equipped with a sophisticated telemetry system that immediately alerted project staff on the Island when it was sprung. This system minimized the amount of time a cat spent restrained, and was also an important safety consideration for island foxes that were caught in traps.

Once removed from a trap, the feral cats were transported to the IWS’ mobile hospital on San Nicolas Island where they were given a preliminary health assessment. Fortunately, none of the cats suffered any permanent injuries from the padded leghold live traps, but they all needed to be given a health check. “We were able to give each cat a very complete examination, including a blood work-up, testing for serious feline diseases, vaccinations, and if needed even X-rays,” said David Garcelon, president of IWS. “In addition, each cat was provided an ID chip under their skin for permanent identification, as is now commonly done with pets.”
Within the first few weeks, 16 adult cats were caught and taken to the mobile hospital on the island. One of them was a very pregnant female that almost immediately gave birth to a litter of 3 kittens.

With the first group of cats waiting transport to sanctuary, The HSUS was able to call on one of its cooperating partners – the Fund For Animals – manager of the Fund For Animals Wildlife Center in Ramona, California (Wildlife Center). Modifications to the existing facility were needed in order to maintain the cats in a secure enclosure while minimizing any risk of disease transmission to other resident animals. Working almost round-the-clock, staff from The HSUS and the Fund For Animals refurbished an existing cattery at the Wildlife Center so it could house up to 25 cats. With assistance of a grant from DoGreatGood, a new, larger enclosure was built at the Wildlife Center which can comfortably house up to 100 cats.

On July 21, a charter plane carrying 9 cats landed at the Ramona Airport, where they were met by representatives from The HSUS and transported just 5 minutes away to the Wildlife Center.

The combined unpredictability of the weather 60 miles out at sea, and the need to arrange specially chartered aircraft trips so as to not interfere with ongoing military operations, turned the transport of the cats from San Nicolas Island to the Wildlife Center into a carefully orchestrated dance.

By the end of November 2009, a total of 52 adult cats were safely housed at the Wildlife Center to live out the remainder of their lives in comfort and security. There were also 12 kittens transferred to the Wildlife Center. In keeping with the Trustee Council’s original commitment outlined in the draft EA, and in the MOA with The HSUS, all the kittens were socialized and made available for adoption into private homes as indoor-only pets.

**Next Steps**

As the trapping effort continued fewer and fewer cats were caught. All trapping efforts were halted in February 2010, to accommodate the breeding season for the island fox. In the interim, IC has placed a number of remote sensing cameras in various locations on the Island to determine whether or not cats are present. Although preliminary indications from the remote sensing cameras show at least some cats still remain on the Island, the overall population of feral cats on San Nicolas Island is likely less than the original estimate of 100-200.

From dealing with fractious cats, to shifting removal activities around the Island in accordance with the Navy’s ongoing mission-essential activities, to coordinating transportation for the cats off the Island and creating a safe home for them, all of the partners involved remained focused on finding solutions to problems. “When we began planning for this project six years ago, we did not anticipate it would turn out the way it did,” said Annie Little, Fish and Wildlife Service biologist and project manager. “By partnering with The HSUS, we effectively achieved a balance of many different interests and found a solution that was supported by the public and the agencies.”
"This project is a testament to the commitment of multiple agencies to find common ground and develop life-saving strategies for both feral cats and wildlife in very sensitive habitats," said Betsy McFarland, The HSUS' Companion Animals senior director. "Although The HSUS supports TNR for feral cats, we recognize there are some situations—such as San Nicolas Island—that require a unique approach and we're pleased with the results."

**Where are they Now**

This story wouldn’t be complete without giving an update on how the cats of San Nicolas Island have fared.

Of the 12 kittens taken to the Wildlife Center, all but 2 have found loving homes. Two of the adopted kittens are now the pampered pets of one of the MSRP’s former staff members [see sidebar story on Ziggy and Cooper].

Some of the adult cats are now minor celebrities, being featured in local news stories, and on The HSUS’ website.

The second year of the project will begin in late summer 2010 after the end of the fox breeding season. The restoration plan also includes a monitoring program that will track nesting success of the seabirds after the removal of all the cats from the island. For each cat removed, their home becomes a little bit safer. The U.S. Navy is also one step closer to their efforts to remove non-native species from San Nicolas Island as part of its commitment to environmental stewardship of the lands they own or manage.

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Milena Viljoen, who worked for the MSRP years ago when this project was in the planning stage, was one of the lucky mainlanders to adopt kittens from San Nicolas Island.

"Understanding the impact feral cats have on island ecosystems, I was happy to see the removal project implemented. What most impressed me, however, was how the partnership between MSRP and The HSUS evolved and was able to benefit both groups. But then, maybe I’m just biased because I got to take home two cuddly kittens!"

Ziggy and Cooper have been a part of Milena’s family for a little more than three months now, and the brothers have adapted quickly to their new mainland digs and life indoors with people. Cooper has turned out to have quite an affinity for belly rubs, while Ziggy prefers head scratches. When they are not napping on Milena’s lap, both enjoy taking acrobatic leaps from the furniture and roughhousing like all good brothers do!