

The Green Legacy of Camp Pendleton

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When considering the many roles of American military bases, the first things to come to mind would likely be their roles in homeland security and warfare, such as training, the storing and distribution of supplies, equipment maintenance, surveillance, and of course, defense against potential threats. Though these are certainly critical aspects of the contributions made by military bases such as Camp Pendleton, many fail to consider their environmental contributions. In terms of environmental contributions, Camp Pendleton serves pivotal roles both on and off the base in ways which greatly outweigh the environmental impacts of the base.

There are many concerns regarding the environmental impacts of Camp Pendleton and military bases in general, mainly in regards to chemical waste, carbon emissions, and habitat disruption. These concerns are not without reason, as contamination of soil and groundwater from hazardous chemical materials such as firefighting foam and jet fuel often impact both drinking water of nearby communities and local ecosystems, as demonstrated in a recent report on American military pollution by Jangira Lewis from Earth.org, stating that there is an “astonishing amount of toxic chemicals, such as perchlorate and other components to jet fuel, that are found to contaminate drinking water, aquifers and the soil surrounding the bases” (Lewis). In addition to this, the high levels of emissions caused by aircraft account for a significant amount of air pollution, particularly around heavily used aircraft bases. Of course, constructing a military base also disrupts habitats through land clearing to build and expand on the base, and from training exercises, causing both physical and noise pollution in surrounding habitat. While environmental concerns regarding the building and use of military bases such as Camp Pendleton certainly have merit, they are greatly outweighed by the ecological benefits brought about by the base.

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Camp Pendleton has a history of serving a pivotal role in ecological conservation in California. This trend is exemplified by the base's efforts to maintain its natural vernal pools, as described in a 2015 article published by Camp Pendleton's Department of Public Affairs. According to the article, there are approximately 4000 vernal pools in Camp Pendleton, varying year to year due to changes in temperature, weather, and other ecological conditions. These vernal pools serve as seasonal habitats for the endangered Fairy Shrimp (*Brachinecta sandiegensis* and *Streptocephalus woottoni*) during the spring and summer months, and the camp's efforts to maintain these pools are a significant contribution to the protection of this species and other native organisms. Camp Pendleton's protection of vernal pools is not the only instance of the base's on-site ecological benefits. The article, *Camp Pendleton Takes Big Steps Toward Wildlife Preservation*, written by Lance Cpl. Nataly Espitia, details many other contributions the camp has made to environmental conservation, such as the Environmental Security Department. The Environmental Security Department is the main force employed by the military base to combat land deterioration and climate issues in the area. Camp Pendleton serves as a massive biodiversity hotspot in Southern California, and is in fact the largest piece of undisturbed land in between Los Angeles and San Diego. This base preserves pristine land that would otherwise be developed, as exemplified by Melissa Vogt, a conservation law enforcement officer with Environmental Security, who stated that "If it weren't for Camp Pendleton existing, all this coastline would be condos and hotels." (Espitia). Furthermore, the article describes the fact that the base is home to 19 federally listed species and many state species classified as either threatened or endangered, such as the California Lease Tern (*Sterna antillarum browni*). All of these species are protected by the Integrated Natural Resource Management Plan, "which is a combination of military priorities, natural resource management priorities, and outdoor

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recreation priorities, [and] is a major document that outlines methods to help preserve this as desert habitat” (Espitia). This protection has not only maintained a stable habitat to provide the opportunity for native species to proliferate, but has actually succeeded in downgrading two species from “endangered” status to “threatened”; Stephens’ Kangaroo Rat (*Dipodymus stephensi*) and California Gnatcatcher (*Polioptila californica*). Finally, Espitia’s article states that, according to wildlife biologist Nate Redetzke, “If an acre of land is disturbed, depending on the species, Camp Pendleton may be required to mitigate and set aside double or even ten times the amount of land somewhere else on the installation that can’t be used for training” (Espitia). The great repercussions that would arise from impacting the pristine land in Camp Pendleton serve as an effective motivation for the base to put a large amount of effort into ensuring the land remains completely undisturbed. Despite the obvious impacts that may arise from any sort of organized human presence in such an undamaged habitat, Camp Pendleton claims it will always make the necessary adjustments and protections to ensure the habitat remains unharmed.

Camp Pendleton’s environmental contributions are not limited solely within the confines of the base. According to the article, *Marine Corps Base Camp Pendleton hosts the annual Environmental Law Training Symposium*, written by Cpl. Emmanuel Necoechea, Camp Pendleton has hosted a yearly conference since 1994 to “provide training on updates in laws about environmental and land use, which include new regulations and policies” (Necoechea). In addition to keeping undisturbed habitat on their own grounds, Camp Pendleton has disseminated information about local ecological conservation to advocate for habitat protection in locations beyond their control. Their stated reason for holding these conferences is that they find that there is a need for attorneys and ecological professionals to exchange information about policies and regulations to improve environmental compliance across the West Coast.

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While there are, of course many concerns regarding the environmental impact of military bases due to chemical and carbon pollution and land usage, Camp Pendleton in particular has gone above and beyond their duty of simply offsetting their environmental impact. They have done this not only within the boundaries of the base by providing protections for pristine land which is home to a multitude of endangered and threatened species, but have also encouraged ecological conservation in areas beyond their control by hosting annual conferences to discuss and provide updates on new laws regarding environmental protection.

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