



## 2016 Secretary of Defense Environmental Award Cultural Resources Management – Large Installation Marine Corps Air Ground Combat Center

### Introduction

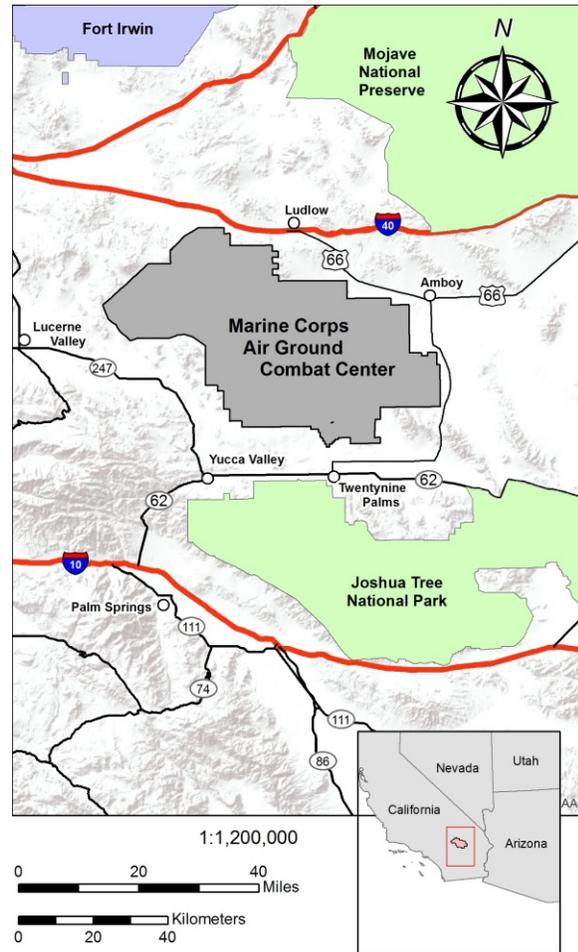
The Marine Corps Air Ground Combat Center (Combat Center) is located in the Mojave Desert approximately 130 miles (209 kilometers [km]) east of Los Angeles in San Bernardino County, California. At 705,000 acres, the Combat Center is the largest installation in the Marine Corps and is the only combined arms live-fire and maneuver training range complex.

### Background

As of the end of FY15, approximately 2/3 (465,263 acres) of the Combat Center has been inventoried for cultural resources, including nearly all of the maneuverable lands. The Combat Center has focused surveys over the past two years on those areas of the installation that will be impacted by future sustained Marine Expeditionary Brigade (MEB) training operations. This unprecedented effort has provided a clear picture of the cultural resources aboard the installation, and directly supported expansion of the Combat Center.

The installation is known to contain 2,052 sites. The vast majority (1,926) of these are prehistoric sites, with 106 historic sites and 20 multi-component sites. Over 600 sites have been evaluated for eligibility for inclusion on the National Register of Historic Places (NRHP), with 185 sites recommended eligible, for an eligibility rate of approximately 30%. Most of the sites recommended eligible are habitation sites containing such features as ground stone or associated rock features, faunal remains, and pottery. Other eligible sites include rock art, quarries, ceremonial sites, and historic mining locations. The Foxtrot Petroglyph site was listed on the NRHP in February 1995, and the Combat Center is developing listing packages for two additional sites—Deadman Lake and Surprise Spring.

The Combat Center met its 5-year Integrated Cultural Resources Management Plan (ICRMP) goals two years early. Because surveys have been completed for so much of the maneuverable land on the base, proposed mission operations require limited or no advance surveys to ascertain whether cultural resources could be affected, expediting the environmental planning process.



Installation Location



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The evaluation of an archeological site in the Black Top Training Area contributed to the completion of the 5-year ICRMP goals almost two years early.

70,000 acres were surveyed for cultural resources with the result that 70% of the three new Training Areas (TAs) in the expansion area have been inventoried, including almost all maneuverable lands. Surveys detected 82 sites in the acquired lands, including 31 historic sites, 2 multi-component, and 49 prehistoric sites. Forty-five of these sites have been evaluated, of which five have been recommended eligible for the NRHP. The addition of more than 105,000 acres of land to the Combat Center, and the occurrence of cultural resources that may be eligible for listing in the NRHP, has triggered the need for a new Programmatic Agreement (PA) and ICRMP. The Combat Center is currently consulting with both the California State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) on a revised PA and ICRMP.

### Summary of Accomplishments

#### *Land Expansion*

FY 2014 saw major changes in the size and functionality of the installation. The base expanded by over 105,000 acres of exclusive military-use area to support sustained MEB (Marine Expeditionary Brigade) exercises. The expansion also added 56,400 acres of shared-use area, the management of which the Combat Center shares with Bureau of Land Management (BLM).

Between 2014 and 2015, over



A continuing priority for the Cultural Resources Section is the archeological inventory and evaluation of recently acquired lands, including the vast area in Johnson Valley.



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### *Conservation Law Enforcement Program*

The Natural Resources and Environmental Affairs Division (NREA) currently has four Conservation Law Enforcement Officers (CLEOs) on staff. The Combat Center is one of the few that fully integrates conservation law enforcement into the cultural resources program. The CLEOs play a critical role in monitoring and deterring illegal incursions onto the base, monitoring cultural resources aboard the installation, and investigating unauthorized resource impacts.

In early October 2014, the Cultural Resources Section was contacted regarding illegal trespass and artifact collection that had occurred on the Combat Center at a historical site known as the War Eagle Mine. The Cultural Resources Section advised the CLEO supervisor of the suspected criminal activity. Through close coordination with the Cultural



Officer Russ Elswick, Conservation Law Enforcement supervisor, assists in the recording of an archeological site in a high traffic area of the Combat Center.

Resources Section staff, and after conducting a thorough investigation, the CLEO supervisor charged two suspects with trespassing on a military installation and one suspect was charged with theft of government property and artifacts. In April 2015, both suspects pled guilty to the federal charges and received monetary fines and six months of probation.

The CLEOs continue to work closely with the Cultural Resources Section staff to expand knowledge and understanding of cultural resources aboard the Combat Center, as well as familiarize themselves with artifact identification, site locations, and the importance of leaving archaeological sites undisturbed. In addition to their role in law enforcement, the CLEOs also play an important role in public outreach and education, as they may be the only conservation personnel with whom the public has regular contact. Their comprehensive knowledge of the archeological resources aboard the Combat Center makes them not only a valuable asset to the Cultural Resources program, but also effective and dedicated advocates for cultural resources conservation.

### *Native American Program*

The Native American program at the Combat Center has been in place since the mid-1990s. The installation consults with seven recognized Native American Tribes that have traditional interests in lands currently occupied by the Marine Corps. These tribal groups include the Agua Caliente



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Band of Cahuilla Indians, the Fort Mojave Indian Tribe, the Colorado River Indian Tribes, the Chemehuevi, the Twentynine Palms Band of Mission Indians, the San Manuel Band of Mission Indians, and the Morongo Band of Mission Indians.



This pot, dropped up to 1500 years ago by its owner, was carefully reconstructed to allow exhibit visitors to see an almost complete vessel, a rare find in the desert.

Human skeletal remains have been identified at two locations on the Combat Center. A small skull fragment was identified on the surface in the Surprise Spring Restricted Area and an intact burial was encountered during a site evaluation in the Emerson Lake Training Area. The skull cap was reburied on site by a tribal elder. The Emerson Lake burial was partially exposed during evaluation excavations and work was halted until tribal groups could be contacted. The bones were exposed sufficiently to make a positive identification, the

condition of the remains evaluated, and left *in situ* in accordance with the recommendation of a tribal representative.

Both burial sites have been declared off limits to training units. The sites continue to be actively protected by the CLEOs in conjunction with the Cultural Resources staff and Range Management monitors, with frequent patrols and motion-activated cameras to identify trespassers. To date there has been no damage to either site where human remains have been identified.

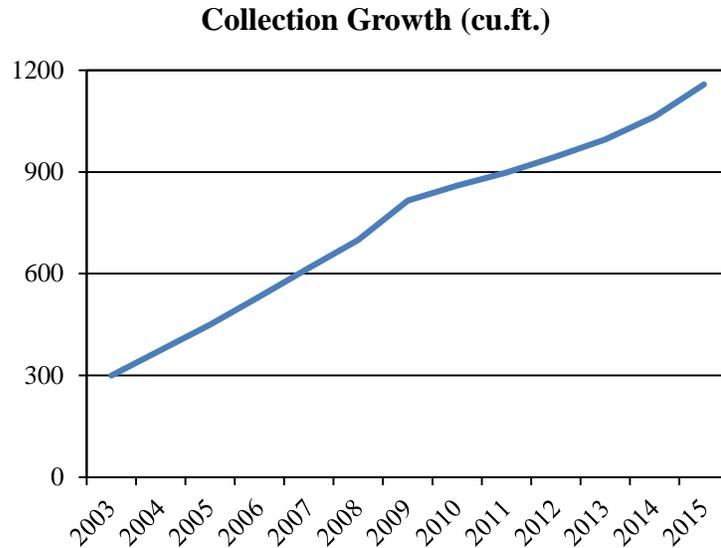
### *Curation*

Constructed to meet Federal standards for curation (36 CFR 79), the Archeology and Paleontology Curation Center ("Curation Center") was the first of its kind aboard a Marine Corps installation. The Combat Center operates this regional curation facility exclusively for the storage of collections from the Combat Center and other Marine Corps installations in California and Arizona, including Marine Corps Air Station, Yuma; Marine Corps Mountain Warfare Training Center, Bridgeport; and Marine Corps Logistics Base, Barstow. The Curation Center encompasses 4,500 square feet and includes a display room open to the public, collections room, fire-proof filing cabinets and storage for incoming collections, office space, artifact analysis stations for visiting researchers, and a laboratory equipped to analyze and process archeological and paleontological materials.



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The facility currently houses more than 420,000 artifacts from the four installations, an increase of over 20,000 items in FY15 alone. Photographs, maps, reports, field notes, and digital files are all tracked in a comprehensive database that allows for quick reference. Archeological work has escalated due to recent land acquisition, leading to a dramatic rise in the rate of incoming artifacts. The Curation Center provides a cost effective alternative to increasingly expensive off-base curation, and allows the Marine Corps to maintain direct control of the cultural resources under its stewardship.



The Curation Center's display room allows Marines, Sailors, and family members the opportunity to view and learn more about the cultural resources on the base. Displays include artwork, an interactive computer station, rare fossil specimens, reconstructed pottery, and a working replica of a prehistoric atlatl. With its informational displays and open-door visitation policies, the Curation Center provides a venue for Marines to learn about cultural resources, why they are important, and why an environmentally sustainable Combat Center is critical for future training.



The discovery of a Clovis projectile point (inset) aboard the Combat Center has pushed the possible occupation dates in the region back by up to 2,000 years, triggering an update of the interpretive displays in the Archeology and Paleontology Curation Center.

In FY2015 the Curation Center staff updated the prehistoric displays to incorporate one of the newest accessions: a Clovis projectile point from the north-central portion of the base. This rare find likely dates to 11,000 to 13,000 years before present, and extends the documented occupation of Combat Center lands by 2,000 years. In its April 2015 edition, the journal *Paleoamerica* published an article entitled “Late Pleistocene to Middle Holocene Archaeology in the Mojave Desert: Recent Discoveries in Twentynine



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Palms, California,” written by archaeologists Ryan M. Byerly and Joanna C. Roberson of Far Western Anthropological Research Group, Inc., which discusses the find in depth.



LtCol Tim Pochop, NREA Director, talks to SgtMaj Karl Villalino, the Sergeant Major for the Combat Center, about the displays in the Archeology and Paleontology Curation Center.

### *Awareness, Education, and Public Involvement*

Three gardens have been established at the Curation Center with grants received from the National Educational Foundation and the Department of Defense (DoD) Legacy Program. One is a native plant garden exhibiting plants used by Native Americans; another is a nectar garden to attract pollinators such as butterflies, bees, and hummingbirds to the area; and the last is a desert tortoise garden constructed using native

plants. The desert tortoise garden supports the Combat Center's ambassador tortoises during their spring and fall active periods so that military personnel, families, civilian employees, and visitors can meet and see tortoises in an interactive environment. The gardens were built by volunteers and are maintained by Curation Center staff. Benches have been installed adjacent to the gardens and have become very popular for informal meetings, visitors to the nearby wildlife viewing area, and installation residents otherwise taking a break.

In September 2015, the Curation Center staff and volunteers constructed a fourth raised bed garden adjacent to the Archeology and Paleontology Curation Center to create habitat for Monarch butterflies, honeybees, and other pollinators to feed and reproduce. The project was inspired by the Memorandum of



A visitor from the adjacent Wildlife Viewing Area takes a break at the Cultural Heritage Garden. The garden helps educate Marines, Sailors, and other visitors on plants used by Native Americans.



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Understanding between the Department of Defense (DoD) and the Pollinator Partnership, which is a cooperative program that promotes the conservation and management of pollinators and their habitats, and was completed with funds from the DoD Legacy Program.

The Cultural Resources Section continues the practice of widely distributing all cultural resource project reports, as it has since 1995. Report recipients include the San Bernardino Archaeological Information Center; Joshua Tree National Park, and Native American Tribes affiliated with Combat Center lands. The current policy is to also provide copies in response to any legitimate request. During FY14 and 15 the Curation Center staff provided 42 tours of the facility, Nectar Garden, Cultural Heritage Garden, and Tortoise Garden. The Natural and Cultural Resources Branch continues to conduct cultural resources sensitivity training for all military and civilian personnel and contractors before any activity or undertaking is commenced, with over 35,000 personnel trained in FY14-15. The staff archeologist provided classes on Native American lifeways to over 200 school age children both for the Combat Center Home School Association and as a guest speaker for the Morongo Basin Unified School District's Gifted and Talented Education (GATE) program.

Community relations and affiliations such as the Twentynine Palms Historical Society, the Morongo Basin Historical Society, the Society for American Archaeology, the Society for California Archaeology, and the Archaeological Institute of America keep all the team members current on trends in archeology and history which can be applied to the work at hand.

### ***Program Documents***

During the early portion of the award period, mission and environmental enhancement was augmented through the use of a Programmatic Agreement (PA), which provided the Combat Center a streamlined mechanism to achieve compliance with Section 106 of the National Historic Preservation Act. The SHPO requested changes to the PA to accommodate the land expansion, and in late FY15 the Combat Center entered consultation with the SHPO and ACHP on the revised agreement. The revised PA, in combination with the extensive surveys the Combat Center has completed on both the original base and the expansion areas, will continue to substantially ease the Section 106 compliance burden associated with undertakings aboard the installation.

The Integrated Cultural Resources Management Plan is also under revision to accommodate the land expansion area. A draft has been provided to the SHPO, and is pending completion of the revised Programmatic Agreement.