



# 2017 Secretary of Defense Environmental Award Cultural Resources Management – Team Marine Corps Air Ground Combat Center

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## 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 761,400 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. The Combat Center's Cultural Resources Management Team includes Ms. Charlene Keck, Collections Management Specialist, and Contractors Tadhg Kirwan and D'Anne Albers.

## Background – Surveys and Evaluations

As of the end of FY16, 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.



Installation Location

The installation is known to contain 2,257 sites. The vast majority (2,207) of these are prehistoric sites, with 180 historic sites and 20 multi-component sites. Over 880 sites have been evaluated for eligibility for inclusion on the National Register of Historic Places (NRHP), with 222 sites recommended eligible, for an eligibility rate of approximately 25%. 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.



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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.

Areas (TAs) in the expansion area have been inventoried, including almost all maneuverable lands. Surveys detected 244 sites in the acquired lands, including 106 historic sites, 3 multi-component, and 135 prehistoric sites. Ninety-four of these sites have been evaluated, of which 17 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.

### 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 FY15 and FY16, over 70,000 acres were surveyed for cultural resources with the result that 70% of the three new Training



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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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.

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 monitors, with frequent patrols and motion-activated cameras to identify trespassers.

In FY16 the cultural resources staff met with the Agua Caliente and the Colorado River Indian Tribes to discuss mutual interests and potential partnerships with regard to cultural resources management.

### **Curation**

Constructed to meet Federal standards for curation (36 CFR

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.

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



One of the oldest hearth features aboard the Combat Center was recently uncovered on the western margin of the Pisgah lava flow. This represents one portion of a growing body of data that suggest this area may preserve some of the earliest evidence of local hunter-gatherer occupations. Photo courtesy of Far Western.

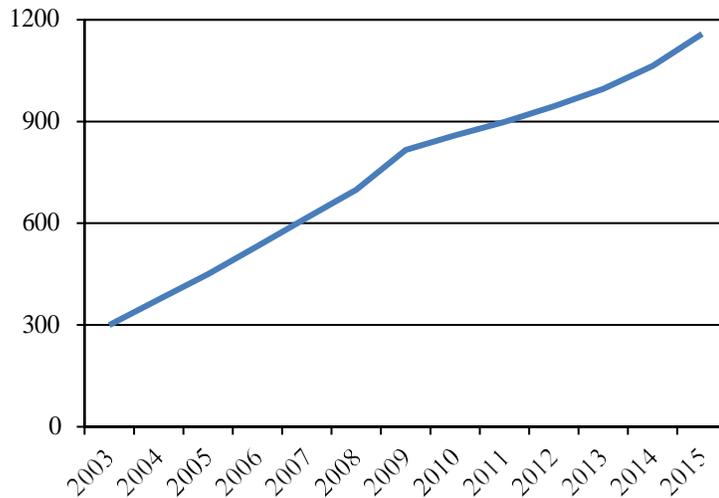


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79), the Archeology and Paleontology Curation Center ("Curation Center") was the first of its kind aboard a Marine Corps installation. The Combat Center operates this regional curation facility exclusively for the storage of collections from Marine Corps installations in California and Arizona, including MCAS Yuma, MWTC Bridgeport; and MCLB 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. The facility currently houses more than 430,000 artifacts from the four installations. Photographs, maps, reports, field notes, and digital files are all tracked in a comprehensive database that allows for quick reference. The Curation Center provides a cost effective

Collection Growth (cu.ft.)



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.

alternative to increasingly expensive off-base curation, and allows the Marine Corps to maintain direct control of the cultural resources under its stewardship. During FY15 and FY16, the Curation Center accepted and processed 25 Cultural Resources reports, recorded over 100 new sites, and accessioned over 30,000 artifacts. In accordance with the agreement with MCAS Yuma, the Curation Center accepted 8 boxes of artifacts and associated documents for curation over this period.

The Curation Center's display room allows military and family members the opportunity to view and learn more about the cultural resources on the base. Displays include artwork, 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



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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.

In FY15 the Curation Center staff updated the prehistoric displays to incorporate one of the newest accessions: a Clovis projectile point found on 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. The journal *Paleoamerica* published an article in April 2015 entitled “Late Pleistocene to Middle Holocene Archaeology in the Mojave Desert: Recent Discoveries in Twentynine Palms, California,” written by archaeologists Ryan M. Byerly and Joanna C. Roberson of Far Western Anthropological Research Group, Inc. In addition, two papers and three posters were presented at regional archaeological conferences in FY16 detailing research on Hunter-Gatherer land use in the Mojave Desert based on Combat Center data.

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

Three gardens had previously been established at the Curation Center using grants from the National Environmental Education Foundation, DoD Legacy Program, and Officers’ Spouses Club. One is a Cultural Heritage Garden exhibiting uses of plants by Native Americans; another is a nectar garden to attract pollinators; and last is a desert tortoise garden demonstrating native habitat. 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 and visitors to the nearby wildlife viewing area.

In September 2015, the Curation Center staff and volunteers constructed a fourth raised bed garden adjacent to the Curation Center to create habitat for Monarch butterflies and honeybees. The project was inspired by the Memorandum of Understanding between the Department of Defense (DoD) and the Pollinator Partnership, and was completed with a National Public Lands Day grant and volunteers from several Boy Scouts of America troops. Three monarch butterfly caterpillars were observed in September 2016, proving the success of the garden.



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The Cultural Resources Section continues the practice of widely distributing all cultural resource project reports, as it has since 1995. Report recipients include the Fullerton Archaeological Information Center; Joshua Tree National Park, and Native American Tribes affiliated with Combat Center lands. During FY2015 and FY2016 the Curation Center staff provided 75 tours of the facility. Visitors included Navy and Marine Corps personnel, the Joshua Tree National Park archaeological staff, the new Commanding General and his staff, the Deputy Assistant Secretary of the Navy, 27 severely handicapped middle school students, and over 50 visitors on Earth day 2016.



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.

The Natural and Cultural Resources Branch continues to conduct cultural resources training for all military, civilian, and contractor personnel before accessing the training areas, with approximately 35,000 personnel trained annually.

In FY16 the Curation Center staff met with Joshua Tree National Park staff to discuss cooperative research including access to the Elizabeth Campbell collection of artifacts and documents recovered from the Combat Center lands prior to DoD ownership. Future plans at the Curation Center include the development of a Docent Program for volunteers interested in sharing the cultural heritage of the Combat Center with visitors and tour groups. In addition, a Cultural Heritage Ethnobotany outreach program for area youth is in the planning stages in coordination with individuals from the seven consulting tribes.

### **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 and associated ICRMP will continue to substantially ease the Section 106 compliance burden associated with undertakings aboard the installation.