The Dr. John D. Cooper Archaeological & Paleontological Center
A California State University, Fullerton Center

Self-Study – 2016-2017

Prepared for
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Submitted by
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Mission and Goals

The Cooper Center mission is to preserve, curate, and manage the collection of fossils and archaeological artifacts collected from the soils and rocks of Orange County for purposes of scientific study and for the educational and public benefit of the citizens of Orange County.

The Center strives to adhere to the overall mission of the University where “Learning is Preeminent” by engaging students, faculty and staff to work in close collaboration to expand knowledge, participate in the practice of their discipline and develop the habit of intellectual inquiry. We also strive to be a center of activity essential to the intellectual, cultural and economic development of our region. The Center is committed to a collaboration between students and faculty from cross campus Departments and Colleges. The Center views that collaboration as a necessity for us to provide significant information about the cultural and scientific history of Orange County to its citizens through Outreach and exhibited displays at museums and events as well as through professional journal articles and meetings.

The Cooper Center shares the mission and visions of both Natural Sciences and Mathematics and Humanities and Social Sciences to engage students in undergraduate research and creative activities that allow them to develop culturally, globally, historically and environmentally astute views of their world.

The Goals of the Cooper Center are to:

- Curate and manage the cultural and scientific holdings at the center to include accessioning and deaccessioning materials in coordination with the county;
- Support engaged student and faculty research directed to the paleontological and archaeological holdings of the Center;
- Provide support and leadership for the County archeological and paleontological educational outreach activities throughout the County;
- Support the Paleontological and Archaeological community by providing a complete catalog of our holdings;
- Ensure the long-term financial sustainability of the Center;
- Remain involved in advising the County for the planning and design of proper storage, handling and exhibit facilities.

Activities

The primary activities of the Center are preparing, curating, data-basing, and safekeeping the Orange County Paleontology Collection (OCPC) and the Orange County Archaeology Collection (OCAC). Research on both fossils and artifacts is essential to the mission of the Center. The Center thus supports the research of students, post-doctoral scholars and faculty of the University and other universities and museums in the region.

Archaeological research by staff, students, interns and volunteers covers a wide range of topics including finding the source of Orange County’s basalt cogstones, the impacts of rising sea levels on Orange County’s cultural sites, Orange County’s Prehistoric Artifacts by time period, archaeological outreach and education programs, and historical artifacts of the ranching period.
Paleontological research continues on fossil whales, walruses, sea cows, dogs, oysters, and sharks by faculty, students and researchers. Taphonomy, the study of how fossils are formed and preserved, is underway on whale fossils. Microfossils, used to correlate and date sedimentary rocks, are being studied to define the age and environmental conditions of strata in the County more clearly.

Members of the Cooper Center staff and faculty took part in or contributed to national and state scientific meetings in geology, paleontology, and archaeology; introducing activities and opportunities to thousands of archaeologists, geologists, and paleontologists and their students.

The Center organized several public events attended by over ~8,000 visitors:
- An exhibit continues at the Upper Newport Bay Muth Interpretative Center (April 2014 continuing in 2017).
- Public lectures were provided at approximately 34 venues and meetings throughout OC.
- The Center continued to provide advice, materials and assistance to OC Parks about existing exhibits.

The Center continues a strong social media presence:
- The website (www.jdcoopercenter.org), Facebook, Twitter, Vine, and YouTube (Cooper Channel) continue to attract thousands of viewers.
- An education section has been added to the Center website.
- The media services of the University and County publicize Center events, lectures, publications, and collaborative activities on websites and in newspapers.

The Center is engaged in K-12, undergraduate, graduate, post-doctoral, and public education programs:
- Three high school and five community College interns worked in the laboratory.
- Twenty-eight University students worked in paleontology and archaeology during the past 3 years.
- Five student interns from the University’s College of Education developed activities for Prehistoric OC and teachers’ curriculum for grades 2-6.
- Seven undergraduate and graduate students were hired and trained to do light preparation, curation and data basing of paleontological materials this past year.
- The Center offered “Kids Science Camps” at all of its public events in OC.

The Center operates an extensive volunteer program involving 30-40 people. Volunteers apply through a web application and are selected based on their backgrounds, interests, and available times. At present, a waiting list exists. Volunteers have contributed to a variety of research projects, K-12 exhibits, and public events. The volunteers helped at all educational and public engagement activities sponsored by the Center.

Organizational Structure and Governance

Artifacts, historical objects and fossils recovered in OC during development and construction since the 1970s are preserved and utilized for the benefit of the citizens of Orange County by The Dr. John D. Cooper Archaeological and Paleontological Center.
The County owns and is responsible for the property, buildings, and collections and the University manages them.

The Center pursues research, educational and public engagement programs utilizing its collection. These fossils, artifacts and historical items record the rich history of life in OC from ~180 million years ago to modern times. The Center is the holding and curation facility for the County’s artifacts and fossils recovered by CRM salvage for the past 50 years and houses items that are unique, rare, and priceless for the understanding of past environmental and cultural development of the County.

The Center is managed on site by the Coordinator and advised and guided by the University Advisory Committee, the Technical Advisory Committee, and in consultation with OC Parks.

- Cooper Center Advisory Committee consists of the Deans of the Colleges of Natural Sciences and Mathematics (NSM) and Humanities and Social Science (HSS), the Director for Government and Community Relations, the chair of the Department of Geological Sciences and the Coordinator for the Archaeology faculty.
- The Technical Advisory Committee (TAC) guides the scientific and historical aspects of the Center. Its membership is one representative from OC Parks, two from the County Historical Commission, and two experts each in archaeology and paleontology designated by the University.

**Resources and Sustainability**

The Cooper Center is supported through an annual contracted grant from the County of Orange originally structured in a Memorandum of Understanding in late 2009. To date, the County has annually amended the agreement to support the Center and an amendment for the 2017-2018 funding has been signed by the University. The University anticipates that a new Memorandum with amended scope and support will be proposed by the County in 2018 and will provide for an expanded agreement between the University and the County.

The County maintains the facility where the artifacts and fossils are stored at a 3+ acre 1141 E. Chestnut Avenue site and the financial support to the University is used to support two curator/collections managers on site full time, a half-time Coordinator and two faculty who are released from campus teaching loads to provide guidance and advice to the Center and to engage students in research and curation at the facility. The facility is approximately 10 miles south of the main campus in Fullerton. The $300,000 support provided by the County is handled by Auxiliary Services Corporation and provides for a large part of the financial needs at the Center. Support also comes from the two Colleges who each provide $7500 and 12 units of teaching release per year.

In general, the Center manages on these funds but future activities of the Center will need to reduce campus funding and find either alternative funding from outside or from an adjustment to the funding base coming from the County. The Center also has funds available for operations from several funded collections amounting to $333,149; a Philanthropic Account amounting to $33,961; an amount remaining from the NSF grant of $143,330 and salary savings to carry over of about $90,000. We therefore see a sustainable source of funding for our operations through the near future, though it is our intent to establish a more comprehensive budget allowance from the County for future operations.
Highlights and Accomplishments

A donor and friend event, Bones & Brews, was hosted by the Colleges in April 2015. This event at the Bootlegger's Brewery Production Facility in Fullerton provided a unique opportunity to educate and engage more than 90 local businesspeople and philanthropists about the Cooper Center.

The Cooper Center recovered its costs for curation from several cultural resource management firms to support curation of collections of fossils and artifacts in their possession.

A Cost Recovery Plan for new acquisitions has been finalized and approved by the Advisory Committee and has been submitted to OC Parks for approval.

The Center has organized and participated in several Outreach events for the past several years including PreHistoric OC at Clark Park, Science in the Park at Centennial Park, Imaginology at the Fair Grounds, OC’s Ancient Wonders at Casper’s Wilderness Park, and several others including longer term installations the Center oversaw. These activities allow us to involve students and other volunteers in exhibiting our holdings and explaining to the public the unique heritage we have.

In August 2014, the Center (through the University) received a three-year National Science Foundation, Collections in Support of Biological Research (CSBR) grant which greatly enhanced the curation and protection of the OCPC. Forty museum cabinets were purchased and installed in the new space, and curation was initiated in October 2014 with University student employees. By 2017, nearly 100,000 fossil specimens had been registered in 6000 database entries through this grant. The grant has just recently been extended for another year on a no-cost basis with the National Science Foundation.

Planning and Strategic Outlook

The County is planning for a redevelopment of the Center and we are looking forward to improving the holding and storage areas and to adding more space for our operations. Long term planning for display and public contact will also be an important part of our activities.

1. Fundraising

The Cooper Center will work in collaboration with the faculty and staff of the College of Natural Sciences and Mathematics and College of Humanities and Social Sciences as well as Orange County Parks to seek the following support:

- $2M for an Endowed Directorship, which will be used to support strategic initiatives within the center
- $5,000 per event to support educational opportunities such as classroom visits, traveling exhibits, outdoor festivals, a scholastic YouTube Channel and traveling lecture series.
- $50,000 annually to support student-involved research at the Center. Funds will specifically offset the costs to increase the number of fossils we catalog and curate each year (Fund a Fossil), impact the number of students directly involved in research, and
support the digitizing of fossils to make them available to an international audience in order to aid scientific discovery.

- $10,000 event sponsorship to support Prehistoric OC.

2. **Outreach**

- Another important goal is to hire a Science Education Specialist who will connect with local K-12 administrations and schools to develop teacher and student programs for the Center. With over 380 elementary schools in OC, this person’s efforts would best be directed at teacher training, for example workshops lasting for a few weeks in the summer. The programs would cover the history of life and of people with a focus on OC as an example. In this way, the Center’s collections of fossils and artifacts that support instruction can be utilized as examples of local materials rather than pictures of objects from other places in the classroom. Some funding is in place for this opportunity but more will be needed through efforts of the University Advancement teams.

3. **Research**

- More research by non CSUF students and scientists will be encouraged by discussion, presentations, and invitations to work at the Center.
- Volunteers, students and interns will continue to assist in the research and curation of the collection. The volunteer group will be brought to full level of 40.
- Targeted foundation and government agencies funding opportunities will be pursued.

4. **Infrastructure**

- Exhibits will be installed in new venues in OC Parks, State Parks, the University, and the community, as opportunities are developed.
- The entire collection will be reorganized over the coming months as both the move of paleontology and archaeology made these collections more accessible.
- The back part of the Laboratory Building will be refitted with a library, work tables exhibit cases and storage cabinets to provide added research, display and teaching space. We have asked OC Parks to upgrade the lighting and electrical outlets and will paint the walls.