

Vandenberg Air Force Base

CESU Agreement

NWO-CESU-01

XUMUOS101716– MGT, SPECIES, SEABIRDS for NATURAL RESOURCE, Natural Resource Program, Vandenberg Air Force Base, Santa Barbara Count, CA

- 1. Objectives:** Monitor the population dynamics, breeding biology, and foraging ecology of seabirds along the coastal margins of VAFB during the critical period for seabird activity and breeding, field work will be completed from 1 April through 31 July.
 - 1.1. Seabird species to be monitored include, but are not limited to: Pigeon Guillemots, Pelagic Cormorants, Brandt's Cormorants, Black Oystercatchers, and various gull species, including Western Gulls (Please see 2013 Annual Seabird Report).
 - 1.2. Surveys of south base shall include Point Michelle/North Honda, South Honda, Point Pedernales, North Arguello Rocks, Point Arguello, and North and South Rocky Points (North Vantage Cove to the Boathouse Dock). Surveys of north base shall include Point Sal, Lion's Head, and Purisima Area (Purisima Point, Purisima Point South, Pockets Cove and Lompoc Landing).
- 2.** Conduct day and night roosting surveys of brown pelicans in August, September, and during the winter. Use of data collection methods consistent with historical methods will be useful in order to make comparisons across years. Please see 2013 Annual Seabird Report for specific survey methodology.
- 3.** Identify new nesting sites for seabird species, especially the Western Gull, focusing on areas occupied by ESA-listed species. Please see attached Seabird Annual Report and Western snowy plover and California least tern annual reports for locations that may require additional nest searches.
- 4.** Collect and analyze the diet of Western Gulls nesting at the Purisima Point Colony and at or near Western Snowy Plover nesting beaches.
- 5.** Achieve successful collaborative and cooperative relationships with VAFB and Travis IST POCs in order to best achieve goals and objectives outlined above and those outlined in VAFBs INRMP.
 - 5.1. A project kick-off meeting and monthly reoccurring meetings are appropriate for ensuring progress and coordination on project objectives.
- 6. Qualifications.** Primary field technician shall have at least two (2) years' experience conducting seabird nest monitoring surveys, and should have accurate bird identification, data recording, and visual mapping skills as some breeding sites contain large multi-species

colonies. Field technician must have ability to independently conduct seabird surveys that are consistent with previous year's survey efforts (please see 2013 annual report for methodology).

7. Deliverables

- 7.1. Draft and final Annual Seabird Report. The report shall include a complete synopsis of the population dynamics and reproductive performance of all seabirds outlined within the objectives above, a comparison of all data with previous years (2001 to present), and the causes of changes if known, with a focus on military activity impacts. The Recipient shall provide management recommendations at the end of the report. The Recipient shall provide updated master data files for all data to include GIS coordinates and a data dictionary.
- 7.2. Draft and Final GIS Files: should follow VAFB GIO standards, include metadata, update existing files, and properly document all project activities with relevant GIS information.

8. PERIOD OF PERFORMANCE: 18 months from Notice to Proceed.

9. COORDINATION

- 9.1. **Travis Installation Support Team** Ms. Lauren B Wilson AFCEC/CZOW Travis IST, 550 Hickam Ave, Bldg 248, Travis AFB, CA 94535, (707) 424-8627, lauren.wilson.8@us.af.mil
- 9.2. **Vandenberg AFB POC:** Luanne Lum, 30 CES/CEIEA, 805-606-5299, luanne.lum@us.af.mil

XUMUOS100816 - MGMT, SPECIES, ESA LEAST TERN / SNOWY PLOVER, Natural Resource Program, Vandenberg Air Force Base, Santa Barbara County, CA

1. **Objectives** The contractor shall conduct species monitoring activities at VAFB.
 - 1.1. Conduct population and breeding surveys for federally threatened western snowy plover and endangered California least tern. Field work shall be conducted through the nesting season (March 1 through September 30).
 - 1.2. Accomplish the required breeding season monitoring tasks in Biological Opinion 8-8-12-F-11R using established methods and procedures outlined within the Western Snowy Plover Monitoring Protocol approved by USFWS to monitor adult population, nest fate, nest hatch success, causes of nest failure, and fledging estimates by banding with approved USFWS Migratory Bird Office color-band combinations.
 - 1.3. Report violations of beach rules to 30 SFS/SFOW and CES/CEIEA and provide assistance for follow-up law enforcement investigations if needed. A complete list of prohibited beach activities is provided in the attached biological opinion.
 - 1.4. Erect symbolic exclosures to protect snowy plover nests located within areas open to recreational use in consultation with 30 CES/CEIEA.

- 1.5. Conduct snowy plover winter population survey in coordination with the statewide winter window survey. Specific surveys dates are coordinated with the “Western snowy plover Range-wide coordinator” and are only available a few weeks before surveys actually occur. However, they generally occur in the December to January timeframe.
- 1.6. Accomplish California least tern breeding season monitoring. Surveys will be conducted at the Purisima Point colony five days a week starting 15 April and continue until the last least tern fledges and disperses; three days will be spent surveying from a location off-colony and two days will be spent on the colony itself to minimize overall disturbance to nesting. Surveys will collect data on the estimated number of breeding pairs, adults depredated and cause, total nests, clutch size, total nests depredated, nests abandoned before hatch date, nests incubated past hatch date, nests hatched but had at least one non-viable egg, nest hatched all eggs, total eggs, confirmed hatch, assumed hatch, non-viable eggs, depredated eggs, total chicks, hatching success, depredated chicks and cause, total fledglings, fledgling success, depredated fledglings and cause, % total eggs fledged, fledglings per adult pair, total adult colony attendance, and evidence of avian and mammalian predators.
- 1.7. Sites historically used by California least terns, including San Antonio Creek North, San Antonio Creek South, Beach 2, Purisima Point South, and the Santa Ynez River Estuary should be visited once per week from 25 April (earliest arrival date) to 30 June (latest egg laying date). Communication is required with western snowy plover monitors to avoid impacts to nesting western snowy plovers; escorts may be necessary to avoid snowy plover impacts. Escorts are persons possessing USFWS 10(a)(1)(A) research permits that allow them to escort non-permitted personnel into plover nesting areas. Tern monitors are expected to independently coordinate with plover monitors without VAFB POC involvement. If least tern presence and breeding behavior is observed at locations other than the fenced Purisima Point colony, observations should be immediately reported to the Vandenberg AFB POC.
- 1.8. Conduct Pre-season maintenance on least tern chick shelters (between 30 and 50), prior to the arrival of least terns to VAFB. If shelters are in disrepair, they should be replaced. Shelter model/design should be approved by the Vandenberg AFB POC in advance. This task will require very minimal personnel time, shelters consist of wooden A-frames.
- 1.9. Escort predator management personnel into nesting areas when required by predator threats.
- 1.10. Check predator traps during surveys, as needed
2. Complete data analysis and reporting for the nesting season, including comparison of population and nest success with prior years.

2.1. Qualifications:

- 2.2. The contractor shall provide Western snowy plover field biologists that hold USFWS 10(a)(1)(A) permits to monitor Western snowy plovers, float eggs to determine hatch date, and band chicks. The contractor shall provide California least tern field biologists that hold USFWS 10(a)(1)(A) permits to monitor California least terns. Besides possessing the necessary permit(s) monitors must be capable of being approved by the USFWS.

3. Deliverables:

- 3.1. Attend bi-monthly meetings at VAFB to review progress on current population and breeding status, predator management accomplishments, and beach violations between March 1 and September 30.
 - 3.2. Draft report on monitoring activities NLT 15 November 2016. Final nesting season report NLT 15 January 2016 following receipt of comments from VAFB POC.
4. All raw data and Geographic Information System (GIS) files shall be submitted to Vandenberg as raw electronic data.
5. **PERIOD OF PERFORMANCE:** 18 months from Notice to Proceed.

6. COORDINATION

- 6.1. **USACE Omaha** Mr Lucas Walsh, PMP, COR
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