Santa Barbara County Fish and Wildlife Commission

Please complete each section of this application. Incomplete applications may be rejected.

PART 1: PROJECT TITLE

Project Title: Bringing Back Burrowing Owls: Revised

Amount Requesting: \$40,000

PART 2: GENERAL INFORMATION

Organization: The Regents of the University of California Santa Barbara

Contact Person: Lisa Stratton

Address: Cheadle Center, Bldg 578 Harder South, Rm 1005, MC 9615

City Santa Barbara State CA Zip 93106-9615

Phone 805-893-4158 Fax: N/A Email: stratton@ccber.ucsb.edu

PART 3: PROJECT

DESCRIPTION

Note: Please state how the program or project complies with FG Code 13103 (Attachment A) and which provisions apply. If the project is for educational purposes (FG Code 13103 a.), attach a curriculum and examples of any teaching aids to be used.

Fulfilling section e of FG Code 13-103, the project proposes to evaluate and enhance habitat in support of overwintering and, potentially, breeding Burrowing Owls (*Athene cunicularia*) in Santa Barbara County. The burrowing owl is now a candidate species for listing under the California Endangered Species Act (CESA) and may be listed within the year. According to Lehman (Lehman, P. E. "The Birds of Santa Barbara County, California", Revised edition, July 2024, available at http://www.sbcobirding.com/lehmanbosbc.html, 2024), this once common breeder (1880s and early 1900s) is now a rare transient across coastal, inland and valley areas of Santa Barbara County during overwintering periods (October – April). Loss of open grasslands, poisoning and loss of ground squirrels and other burrowing animals, and associated loss of burrows, and the expansion of perches supporting predatory hawks and owls have all contributed to the loss of this species in the County. In collaboration with multiple large ranches and open spaces, El Chorro Ranch (871)

acres) on Hwy 1; https://rangelandtrust.org/2019/04/07/el-chorro-ranch/), the 24,000 ac, Nature Conservancy, Jack and Laura Dangermond Preserve, 1000 acre Jalama Canyon Ranch, and 650 acre Casmalia Asset Corporation land, and, potentially, Vandenberg Space Base, we propose to characterize sites for burrowing owl habitability using a habitat suitability model, develop conservation goals with landowners, install artificial burrows and document their usage during overwintering periods. We estimate that 100 artificial burrow entrances and multiple small rodent prey support structures could be installed in areas identified as suitable burrowing owl habitat across these ranches. The rapid habitat survey will determine:

- 1. frequency and distribution of suitable burrows (for overwintering and nesting owls)
- 2. characterization of the surrounding vegetation, and
- 3. nearby predator perches and activity.

We would also develop recommendations for additional actions ranchers could take to enhance burrowing owl habitat through enhancing populations of terrestrial rodents and other owl prey, reducing problematic predator perches and possibly consideration for directed grazing management action to reduce cover of tall, habitat-altering weeds like mustard.

Proposed project partners have conservation easements on their lands and prioritize enhancing the biodiversity of their lands. In the future, we anticipate that nearby ranchers and landowners will become interested in expanding suitable habitat for this rare species once they learn of the successes of this program. El Chorro is under a California Rangeland trust conservation easement. TNC's Dangermond Preserve has an integrated resource management plan (https://www.nature.org/content/dam/tnc/nature/en/documents/tnc DangermondPreserveIRMP.pdf), which includes prioritizing habitat for burrowing owls and other ground nesting grassland birds. The Jalama Canyon Ranch is being managed by the White Buffalo Land Trust for sustainable outcomes and Casmalia Asset Managers would like to enhance the conservation value of their lands (please see letters of support). UCSB has initiated a potential collaboration with Vandenberg Space Base which could, possibly, lead to collaboration on activities related to burrowing owls and rare plants.

We propose to conduct the habitat assessment and burrow installation during the spring and summer of 2025 and to monitor burrow use in the fall of 2025 and winter of 2026.

PART 4: BENEFITS TO SANTA BARBARA COUNTY WILDLIFE

Please describe how this project would directly or indirectly benefit Santa Barbara County's wildlife.

Burrowing owls have declined in California to the extent that they have been listed as a candidate species under the California Endangered Species Act. There are no records to indicate that they currently breed in Santa Barbara County, but there are records to indicate that they visit the County as migrants in the winter. CDFW is currently soliciting input regarding the owl's status to inform their imminent decision regarding listing (https://wildlife.ca.gov/News/Archive/cdfw-seeks-public-comment-related-to-western-burrowing-owl).

This proposed work builds on the successful creation of burrowing owl habitat at the recently restored North Campus Open Space, at the recently preserved San Marcos Foothills Park, and at Hollister Ranch. In all cases several recently installed burrows were immediately colonized by owls. In addition, the Cheadle Center has been collaborating with The Nature Conservancy at the Dangermond Preserve, and biologists have documented an extensive overwintering population of burrowing owls at this site that it may be possible to transition to a breeding population with appropriate habitat improvements. A recent Cheadle Center survey of potentially suitable coastal grassland areas suggests that there is a shortage of available burrows and heavy predation potential across the Dangermond coastal bluffs, but a population of owls may be enhanced if burrows are provided and predator perches reduced. Although no or little burrowing owl breeding currently occurs in the county, a breeding population could potentially be established by building on an overwintering, migrant population. The overwintering population at Dangermond Preserve is likely the largest in the county and, therefore, presents a possible opportunity for re-establishing a breeding population as part of the larger effort to support the rapidly declining over-wintering populations across diverse sites and raising the profile of burrowing owls in the County. Supporting overwintering burrowing owls will greatly enhance the conservation of this species given its significant decline over the past 60 years. Santa Barbara County still receives some winter migrants from British Colombia, Washington, Oregon, and Northern California, as it has for millennia. Improving winter habitat in Southern California is crucial to the conservation of A. cunicularia across its range, because most local suitable habitat has been lost to urban development, agriculture, afforestation, and other perturbations.

This project would provide a model of how ranchers and open space managers can enhance the quality of their lands for the benefit of this rare, but charismatic species. Resources recommended by the SB County Fish and Wildlife Commission would be used to directly assess and physically enhance habitat for this species to enhance their populations and resilience to on-going threats.

PART 5: TIMELINE. For large, multi-year projects, the SBCF&WC may ask for this section to be filled out. For smaller yearly projects or where an item or items are being purchased one time or the project is one event, this section does not apply.

Please provide an outline of your project including the milestones and anticipated achievement dates.

Project Milestones	8
Provide description of milestones	Date
Add additional lines if needed	
Project Start Date: Present	
Milestone:	40
Establish partnerships with ranch owners: 27,000 acres already in partnership.	
Milestone: Secure Fish and Wildlife Commission Grant and establish contract	February 2025
Milestone: Conduct initial evaluation of suitable habitat and identify areas on each ranch to conduct rapid habitat assessment, collaborate with landowners, and install 100 individual burrow entrances.	March- August, 2025
Milestone: Create maps of installed burrow entrances and habitat suitability scores at target sites.	August 2025
Milestone: Monitor burrow adoption by owls in winter 2025-26.	September 2025- March 2026
Anticipated Completion Date: Prepare report in collaboration with landowners to synthesize rapid habitat assessment results, map created burrows, document usage rates, make recommendations for additional work.	April 2026
Final Report due 60 days after grant end date:	June 2026

PART 6: BUDGET

Please use the form below to list the summary of your budget and other funding sources. Attach a detailed list of items such as equipment, supplies, and other tangible items to be purchased. Receipts must be supplied for all expenditures. The Fish and Wildlife Commission traditionally does not fund administration costs, such as overhead and travel.

\$ Amount Requested from the Fish and Wildlife Commission \$40,000 Budget Breakdown:

Item Description	Per Unit Cost	Quantit y	Total
Install 100 burrow entrances	400	100	\$40,000
Includes: site assessment, mapping, installation of burrows, adoption monitoring & reporting on progress and results.			
Total (rounded up to nearest \$500)			\$40,000

Please add additional lines as needed

Other Funding Sources

Unquantified additional value reflects:	
Use of UCSB offices, wireless, computers and other equipment	
Previous investment in training of staff	
Oversight by Lisa Stratton, Director of Ecosystem Management	
Time from other landowners for access support and advice	

Please add additional lines as needed

PART 7: QUALIFICATIONS (optional)

Please describe the personnel who will be working on this project and their background and pertinent qualifications. Name	Background/Qualifications
Wayne Chapman	Twenty-six years of ecological restoration experience across a wide range of projects and habitats, 7 years spent focusing on burrowing owl (BUOW) natural history, creation of artificial burrows, and modification of habitat for BUOW survival. Numerous personal zoom meetings, phone conversations and emails consulting with experts in the field including David Johnson, Lynne Trulio, and others. Attended a western BUOW habitat identification and enhancement online workshop led by Lynne Trulio in 2022. Created the first set of local burrows and consulted on the second set of artificial burrows in the county, which resulted in the first modern records of owls safely overwintering at UCSB's NCOS campus and the San Marcos Foothills Preserve.
Jeremiah Bender	Technical skills in GIS mapping, field surveys, wildlife observation skills, photography, ecological restoration.
Students	Students with experience in wildlife observations and ecological restoration will be selected for this field training opportunity.
Lisa Stratton	Director of the Cheadle Center's restoration program will provide oversight, collaboration with ranch owners and QA/QC on habitat assessment protocol and report synthesizing results of the effort.

Please add additional lines as needed

PART 8: PROJECT PARTNERS (optional)

The Commission strongly encourages prospective grantees to seek partnerships in completing projects. Please list any organizations, groups, or agencies that have agreed to participate in your project. Give a brief description of each organization's role in your project. Include any monetary contribution to the project, if any. Please attach a letter of support from each organization. If this is not possible, please include a name and phone number of a person from each organization who can be contacted to verify participation.

Participating Organization	Role	Monetary Contributi ons	Letter of Support Attached	Name	Phone Number
1.El Chorro Ranch	Land owner	\$	Yes	Deming Isaacson	805-680- 2062
2.Dangermond Preserve	Land Owner	\$	Yes	Mark Reynolds	415-314- 8061
3. Jalama Canyon Ranch	Land Owner	\$	Yes	Jesse Smith	White Buffalo Land Trust Director
4. Casmalia Asset Land	Land Manager	\$	Yes	Jack Keneer	De maximus, inc.
5. Lynne Trulio	Burrowing Owl Expert		Yes	Lynne Trulio	

Please add additional lines as needed

PART 9: MANDATORY REPORTING

A final report demonstrating how the objective of the grant was achieved is due 60 days from the completion of all projects. On longer term, more complex projects, once those projects are initiated, a progress report is required every 90 days until the project is completed unless the SBCF&WC decides due to the nature of the project, progress reports are not needed.

	Date	Actual Date Submitted (Do not write here)
Progress Report - Contract	March 2025	
Progress Report – Mapped constructed burrows and Habitat rating score report.	August, 2025	
Final Report to SBCFWC	June 30, 2026	

NOTE: Receipts for expenditures to date must be submitted with each progress report as applicable.

PART 10: LETTERS OF SUPPORT (Optional)

Please attach any letters of support for your project to your grant application. 5 attached.

PART 11: AGREEMENT

If awarded funds from the Santa Barbara County Fish and Wildlife Commission, I agree to:

- Complete the project as indicated and provide all reports and products as indicated in this application; including any amendments requested by the SBCFWC.
- Spend funds as outlined in this application and/or as voted upon by the SBCFWC. Any request to change how funds are spent must be approved by Santa Barbara County prior to the actual expenditure.

I understand that failure to do so may void this contract with the SBCFWC. Failure to provide such report and products or use of funds other than voted upon, may result in the loss of granted funds and exclusion from future grant opportunities.

Lisa Stratton	Lundtr	e O o			
Print Name	Signature				
Director of Ecosystem Management,					
Cheadle Center for Bio Feb 10, 2025	diversity and Ecological Res	storation (Cheadle Center)			
Title	Date				



Santa Barbara County Fish and Wildlife Commission 123 E. Anapumu St. Santa Barbara, CA

November 25, 2024

Dear Fish and Wildlife Commissioners,

As a landowner and manager of open grasslands in Santa Barbara County who values ecological function and supporting biodiversity, The Nature Conservancy's Jack and Laura Dangermond Preserve supports the application by UCSB's Cheadle Center for Biodiversity and Ecological Restoration to assess restoration opportunities for the western burrowing owl, a CDFW candidate species for listing.

The Dangermond Preserve (24,364 acres) is protected in perpetuity now through easements and deed restrictions from development and we would like to learn what limitations and opportunities exist on our land that might impact/benefit burrowing owl use of the land. We will be allowing the Cheadle Center to access the land for the surveys proposed in this application and will meet with them to discuss findings and determine together what restoration actions we might take together in support of this fragile species. Burrowing owls use our site and so enhancing this habitat should easily translate to better support for the species.

Sincerely,

Mark Raynolds, Ph.D.

Point Conception Institute Director Jack and Laura Dangermond Preserve

mreynolds@tnc.org

415-314-8061

THE JACK AND LAURA
DANGERMOND PRESERVE
8101 Jalama Road

P.O. Box 1177 Lompoc, CA 93436 Phone (805) 980-0711

nature.org



21 January 2025

Santa Barbara County Fish and Wildlife Commission (SBCFWC)
RE: Letter of Support for "Bringing Back Burrowing Owls" submitted by the UCSB Cheadle Center for Biodiversity and Ecological Restoration (PI Lisa Stratton)

Dear Grant Selection Committee,

On behalf of the White Buffalo Land Trust (WBLT) team, I write with great enthusiasm to support the proposed project from UCSB Cheadle Center for Biodiversity and Ecological Restoration, "Bringing Back Burrowing Owls." This project proposes to identify potential burrowing owl habitat on ranch lands in our ecoregion, a study directly in line with the conservation goals of WBLT.

Founded in 2018, White Buffalo Land Trust (WBLT) is a Santa Barbara County based non-profit focused on the practice, promotion and development of systems of regenerative agriculture. We work to grow food, fiber, medicine and other materials that will benefit soil health, water resources, increase biodiversity and support healthy and safe communities. Through our education programs, we work to increase ecological literacy and help farmers and ranchers develop their capacity in the practices and principles of regenerative agriculture. Our research and monitoring programs focus on quantifying and investigating the impacts of our practices for a better understanding of the relationship between applied principles and repeated outcomes. Finally, through our food brand, *Figure Ate*, we help complete the "how you eat can improve your world" link from producer to consumer.

WBLT's 1000-acre Jalama Canyon Ranch (JCR) in northern Santa Barbara County was acquired by WBLT in April 2021. The vegetation at JCR consists primarily of grasslands, oak woodlands and coastal sage scrub. It lies within the Solomon-Purisima-Santa Ynez Hills ecoregion which is distinguished by its high biodiversity as a result of its placement on the border between the central and southern California coast regions.

The team at WBLT strongly supports this proposal and is excited to offer access to JCR to PI Lisa Stratton and her team to evaluate the ecosystem's suitability for burrowing owl habitat.

Thank you for your careful consideration of this proposal.

Sincerely,

Ann Close

Director of Research, White Buffalo Land Trust

ann@whitebuffalolandtrust.org

de maximis, inc.

January 23, 2025

Santa Barbara County Fish and Wildlife Commission (SBCFWC) 123 East Anapamu Street, Santa Barbara, CA

RE: Letter of Support for "Bringing Back Burrowing Owls" submitted by the UCSB Cheadle Center for Biodiversity and Ecological Restoration (PI Lisa Stratton)

Dear Grant Selection Committee,

On behalf of Casmalia Asset Company (CASCO), de maximis, inc. (DMI), and Kisner Restoration and Ecological Consulting, Inc. (KR&EC), we are pleased to support the UCSB Cheadle Center for Biodiversity and Ecological Restoration's (CCBER) proposed project, "Bringing Back the Burrowing Owls." CASCO will grant access to approximately 650 acres of property located west of the Casmalia Resources Superfund Site in northern Santa Barbara County, allowing CCBER to determine if suitable habitat is present for burrowing owls to potentially install artificial burrows. An access agreement will be established to limit liability for CASCO and its partners and contractors.

This area, adjacent to Casmalia Creek, is currently used for cattle grazing and is home to a significant population of California ground squirrels. Additionally, we are assessing the land for potential improvements to mitigate impacts to special-status amphibian species. Site biologists Johanna and David Kisner of KR&EC have observed a few burrowing owls in this location over the past several years. A few burrowing owls still winter in Santa Barbara County; however, the populations have significantly declined in abundance and distribution. There has not been a confirmed breeding record of burrowing owls in North Santa Barbara County since the early 2000's. Four pairs were breeding in the fields west of Santa Maria June 7, 1980, and two pairs persisted until the early 1990's (Lehman, 2024). One or two pairs were recorded as breeding in Cuyama Valley in the early 2000's and their current nesting status there is unknown (Lehman, 2024). They winter here from as early as mid-September to early April according to SB County records (Lehman, 2024).

We are pleased to provide access to the site for Lisa Stratton and her team, alongside site biologist, Johanna Kisner, to evaluate its suitability for installing burrows that will enhance habitat for burrowing owls. Johanna Kisner is also willing to collaborate with CCBER staff to identify an appropriate location for these burrows.

Thank you for your consideration. Please contact Johanna at kisnerecology@gmail.com or myself at jkeener@demaximis.com if you have any questions.

Sincerely

Jack Keener

Casmalia Project Coordinator

de maximis, inc.

----- Forwarded message ------

From: Lynne Trulio < lynne.trulio@sjsu.edu>

Date: Tue, Jan 14, 2025 at 9:47 AM

Subject: Support for Project Funding Proposal: Bringing Back Burrowing Owls

To: Wayne < waynechapman2@gmail.com >

Dear Wayne,

Thank you for sending me the Regents of the University of California Santa Barbara funding application for "Bringing Back Burrowing Owls", submitted to the Santa Barbara County Fish and Wildlife Commission. The proposal seeks funding to "to identify suitable burrowing owl habitat ... and to document current overwintering burrowing owls" with the goal of making recommendations to "enhance areas that are otherwise suitable through such actions as: creation of burrows, distribution of brush piles to support small rodents (prey items), relocation of squirrels" to improve habitat quality for migratory and nesting burrowing owls. The recommendations would be used "to develop cost estimates and secure landowner buy in" for burrowing owl habitat enhancement measures.

As a burrowing owl researcher who has studied this species for over 30 years, I very much support this application. Over the last 30 years, I have seen the species' numbers decline in California and populations become extirpated. The candidacy of the burrowing owl for endangered/threatened species listing now pending in California makes efforts to identify and enhance grassland habitats for this species critically important. The historical presence of burrowing owls in Santa Barbara County and the current use of the area by wintering (i.e., migratory burrowing owls) makes these sites ideal for assessment and habitat enhancement for this imperiled species. I am excited to see these efforts to protect and enhance burrowing owl populations in this region of the state.

I wanted to recognize your personal efforts to understand burrowing owl ecology, habitat needs and enhancement methods. You took my two-day Elkhorn Slough burrowing owl training workshop and have remained in contact with me to increase your knowledge of burrowing owl ecology. It is gratifying to see UC Santa Barbara supporting you in this work to preserve this species in Santa Barbara County.

Best of luck with your funding proposal. I look forward to hearing about your work as you move forward.

Best regards

Best regards, Lynne Trulio

Lynne Trulio, Ph.D.
Professor of Environmental Studies
Environmental Studies Undergraduate Advisor

Make an advising appointment with me by going to this website: <u>Dr. Trulio's Appointment</u> <u>Calendar</u>

(Pronouns: she/her/hers)

Department of Environmental Studies

San Jose State University
One Washington Square Hall
San Jose, CA 95192-0115
Phone: (408) 924-5450

http://www.sjsu.edu/socialsciences/ http://www.sjsu.edu/depts/EnvStudies

"I want to respectfully acknowledge the Muwekma Ohlone People, who have stewarded this land throughout the generations."

Santa Barbara County Fish and Wildlife Commission 123 E. Anapamu St. Santa Barbara, CA

November 25, 2024

Dear Fish and Wildlife Commissioners,

As land owners of El Chorro Ranch (5102 San Julian Road, Lompoc, Santa Barbara County) we support the application by UCSB's Cheadle Center for Biodiversity and Ecological Restoration to assess restoration efforts for the western burrowing owl on our property. As you know, this owl is a CDFW candidate species for listing.

El Chorro is 873 acres, and since 2006 has been protected from development in perpetuity through a Conservation Easement agreement with the California Rangeland. TRUSTE

We would welcome the Cheadle Center's efforts on behalf of the owls on our property. We will give the Cheadle Center to access the land for the surveys proposed in this application, and will meet with them to discuss findings and determine what restoration actions might be undertaken. We need a clear idea of what would be expected of us, and if we would be responsible for any costs.

Sincerely, Co-Owners, El Chorro Ranch:

Richard Deming Isaacson

William Raine Isaacson

Katiè Rose Isaacson Hames