CATALINA ISLAND CONSERVANCY

**JOB TITLE**
**Conservation Analytics Biologist**

**POSITION SUMMARY**
The Conservation Analytics Biologist bridges field-based ecological knowledge with quantitative and computational methods to support evidence-based conservation decision-making. This role designs, manages, and analyzes biological and spatial datasets to inform species management, habitat restoration, land-use planning, and policy recommendations. Although housed in the Conservation Department, this key role supports the other branches of the Conservancy by aiding facilities, real estate, recreation, and communication teams with GIS and other applications to meet the Conservancy's mission to be a responsible steward of the Island through a balance of conservation, education, and recreation. The ideal candidate combines a strong foundation in conservation biology with advanced skills in statistics, GIS, and data science. The position is 90% office-based with 10% field work; however, this ratio can change overtime with project needs.

**LOCATION**
This position is assigned to the Conservancy's Long Beach office and offers the flexibility of a primarily remote schedule. The role also includes occasional time in the Long Beach office and trips by ferry to Catalina Island, which may include overnight stays. Travel will be planned in advance, with reasonable notice provided whenever possible. The employee must reside in California within 100 miles of the Long Beach office.

**KEY RESPONSIBILITIES**

- Manage and run Desktop, ArcGIS Online, FieldMaps, Dashboards, and Experience Builder.
- Manage technology systems, tools and data workflows supporting Conservancy programs, field operations and wildlife management.
- Design and implement analytical workflows to process field, telemetry, camera-trap, acoustic, remote-sensing, and citizen-science data.
- Develop statistical and spatial models (e.g., occupancy, species distribution, population viability, habitat connectivity) to guide conservation strategy.
- Build and maintain databases, dashboards, and reproducible analysis pipelines (e.g., R, Python) for internal and partner use.
- Translate analytical findings into clear, actionable reports, maps, and visualizations for scientists, land managers, and non-technical stakeholders.

- Collaborate with field biologists to design data collection protocols that support robust downstream analysis.
- Conduct literature reviews and apply current best practices in quantitative ecology and conservation science.
- Support grant writing and reporting with data summaries, figures, and analytical justification.
- Contribute to peer-reviewed publications, technical reports, and conference presentations.
- Maintain data quality standards, metadata documentation, and version control across projects.
- Mentor junior staff, interns, or volunteers in field data collection and basic analytical methods as needed.
- Leverage ArcGIS spatial mapping software to evaluate potential project areas' conservation values and their alignment with the strategic plan.
- Provide GIS support and analysis to all programs across the Conservancy such as the facilities, real estate, recreation, education, and communication teams.
- Coordinate with conservation staff to complete ecological monitoring and reports and help conduct site visits on proposed project areas as needed.
- Other work-related duties as directed by your supervisor.

**PHYSICAL REQUIREMENTS**

- Must be able occasionally lift and/or move up to 50 pounds.
- Must be able to hike over rugged terrain and through dense shrub, including step and unstable rocky substrate and cactus.
- Ability to work in various weather-dependent field conditions, including hot, cold, dusty, or muddy conditions.
- Comfortable with encountering wild animals, including bison and rattlesnakes.

**QUALIFICATIONS**

**Skills & Abilities**

- Knowledge of GIS software and prior programming language experience, such as R.
- Proficient in Desktop, ArcGIS Online, FieldMaps, Dashboards, and Experience Builder.
- Proficient in Python and scripting to automate geospatial processes.
- Demonstrated ability to summarize, analyze, and develop written reports and presentations on results of project activities.
- Experience with Bayesian modeling, machine learning, or remote-sensing analysis.
- Familiarity with database management (SQL) and cloud-based data platforms.
- Experience with camera-trap or bioacoustics data processing software.
- Track record of peer-reviewed publication.

- Experience working with government agencies, NGOs, or tribal partners on conservation initiatives.
- Valid driver's license and willingness to travel to field sites as needed.

**Secondary Qualifications**

- Knowledge of California climate, geology, land use history, flora and fauna.
- Willingness and ability to learn new software, technologies, or methodologies to improve the effectiveness of ecological restoration projects.

**Education & Experience**

- Bachelor's degree in GIS, computer science, environmental science, natural resources, geography, ecology, or related degree in natural sciences required. Master's degree preferred.
- Minimum of 2 years' experience in conservation, project management, natural resource managing, planning or other related fields.
- Experience presenting project results and spatial data in oral, graphic, or written formats.

**COMPENSATION & BENEFITS**
**Estimated Starting Salary Range**
$80,000 - $86,000 annually, based on skills and experience.

We're proud to support the health and wellbeing of the people we employ. Our comprehensive benefits package a 403(b) plan with a 3% employer contribution and a 5% match — fully vested after 2 years — as well as access to healthcare coverage, flexible spending accounts, paid time off, life and disability insurance, an employee assistance program, and professional development opportunities.

**HOW TO APPLY**
Please send your resume and cover letter to jobs@catalinaconservancy.org, listing the job title in the subject line. Qualified applicants may be asked for a project portfolio and/or writing sample prior to an interview.

**EQUAL OPPORTUNITY COMMITMENT**
Catalina Island Conservancy is an equal opportunity employer, and all qualified applicants will receive consideration for employment without regard to race, color, religion, age, sex, national origin, ancestry, disability status, genetics, marital status, medical condition, protected veteran status, sexual orientation, gender identity or expression, or any other characteristic protected by federal, state, or local laws.

**OUR STORY**

The mission of the Catalina Island Conservancy is to be an exemplary steward of Island resources through a balance of conservation, education, and recreation.

The Conservancy's vision is for a beautifully functioning Island ecosystem for all to enjoy. Just off the densely populated Southern California coast, Catalina Island is home to approximately 4,000 year-round residents and more than 60 endemic species of plants and animals found nowhere else on Earth.

The Catalina Island Conservancy protects 88 percent of Catalina Island's approximately 48,000 acres, including the region's longest publicly accessible undeveloped coastline.

The Conservancy is a research and conservation leader, protecting and restoring vulnerable habitats and species in its Mediterranean climate. Conservancy staff guides Island ecosystem recovery with the goal of generating a resilient, self-sustaining ecosystem with no endangered forms of life.

The Conservancy offers recreational experiences and educational programs for not only the 300,000 annual visitors who choose to visit the unique and special Conservancy "Wildlands Ecosystems" but also inspires the nearly 1.2 million visitors to other parts of the Island.

Recreation, educational engagement, service opportunities, and partnerships connect the Island's unique resources to people's lives, inspiring environmental stewardship and action.

The Catalina Island Conservancy is a 501(c)(3) non-profit public charity established in 1972 to protect and restore Catalina Island for future generations to experience and enjoy.