BISHOP MUSEUM

1525 BERNICE STREET · HONOLULU, HAWAI'I 96817
BISHOPMUSEUM.ORG · TEL 1.808.847.3511

December 16, 2024

The Honorable Ronald D. Kouchi
President and Members of the Senate
Thirty-Third State Legislature
State Capitol, Room 409
Honolulu, Hawaii 96813

The Honorable Nadine K. Nakamura
Speaker and Members of the
House of Representatives
Thirty-Third State Legislature
State Capitol, Room 431
Honolulu, Hawaii 96813

Dear President Kouchi, Speaker Nakamura, and Members of the Legislature:

For your information and consideration, I am transmitting a copy of Bishop Museum's FY24 Operational Report, as required by Act 398, Section 3, Session Laws of Hawaii 1988, codified as section 6E-40, Hawaii Revised Statutes.

If you have any questions or concerns, please feel free to call me at (808) 848-4187 or via email at: janet.bullard@bishopmuseum.org.

Me ke aloha pumehana,

Janet Bullard
Vice President of Advancement and Marketing Communications
Acting Director of Government Relations
Acting Director of Marketing

BISHOP MUSEUM

State of Hawai‘i Museum of Natural and Cultural History

Annual Report to the Hawai‘i State Legislature

Fiscal Year 2024

Dee Jay Mailer
President & CEO

President's Report

BISHOP MUSEUM'S MISSION calls us to "... inspire our community and visitors through the exploration, celebration, and perpetuation of the extraordinary history, culture and environment of Hawai'i and the Pacific."

An inspiring mission such as this inspires, excites and grounds us! Much of why the Museum exists today is because of our strong kuleana to care and share what we have to strengthen our 'aina and our lāhui. Mahalo to our State leaders and agencies for supporting the work we do as partners, investors and believers in the value of what our Founders left us to steward and use for lifting generations to come.

FY 2024 has been a year of ***stabilization***, ***direction*** and ***execution***. Stabilization has occurred through a restoration of confidence in Bishop Museum's ability to build and share its value with many stakeholders over the year, including welcoming 173,573 visitors, delivering a wide range of community programs, exhibits and gatherings, educating over 15,000 students and teachers learning via our collections and expert practitioners, hosting funders to see, touch and feel the power and potential of our collections and our people and forming numerous partnerships with national, state, county and private stakeholders to jointly rebuild and protect the lands and oceans we draw life from and strengthen communities in Hawai'i and the Pacific that we draw hope from.

Through all that we do, we are reminded daily of the foundation of financial stability we stand on, largely built from the State's annual support for its Museum of Natural and Cultural History. We thank you for the $6.75 million in operational funding (primarily for wages, utilities and IT support for modernization) and $10 million in Capital Improvements that span shoring up our old buildings, protecting our collections against fire and/or flood, replacing antiquated IT infrastructure (including securing off-campus servers) and the installation of a new collection warehouse to allow for the removal of collections from unsafe and overfilled spaces such as Bishop Hall and Hale Kini (housing our

largest collection pieces – ali‘i wa‘a, carriages, surfboards etc.).

FY 2024 has also been a year of setting ***direction*** and the ***execution*** of large projects and strategic change. We completed and received Board approval for a five-Year Strategic Business Plan (FY 2025 – FY 2029), which includes the following priorities:

1. Improve Financial Sustainability
2. Modernize Infrastructure and Strengthen Security
3. Prioritize and Complete Capital Improvement Projects
4. Enhance Knowledge Core and Accessibility
5. Expand Digital Capacity: Centralize Systems and Enhance Access
6. Advance Public Programs for Development and Greater Impact

In FY 2025 – FY 2026, we are focused on **Building a Strong Foundation** for each Priority.

In FY 2027 – FY 2029, standing on a strong and reliable foundation, we accelerate our **Advancement on Strategic Goals** such as growing and sharing our entire Knowledge Core (culture and natural science) with Hawai‘i, the Pacific and the World. Leveraging a growth in financial and in-kind partnerships locally, in the Pacific and nationally, we are able to grow and activate indigenous knowledge and practice, impacting our world for generations to come as it did for many generations past.

Resourceful knowledge core practitioners, modern and cyber-safe IT infrastructure and a large informatics platform, are already being populated by our culture and natural science collections and the stories behind them to share with stakeholders virtually. This digital platform will also directly support our ability to strengthen our support of education in the State, as we pilot and perfect teacher and student applied learning in culture and science, resulting in teacher credentials and greater student readiness for career pathways to preserving biodiversity.

Plans are only as good as their accomplishments! Here are a few: Our lawns and alcoves prepare almost daily for large and small celebrations, as we prepare for programs, weddings and community celebrations, contrasted with humbling moments as we make spaces for returning wahi pana (ancestors) home, such as our pōhaku Kapa‘aheo/Hamumu return to the Mo‘okini Heiau in Kohala, Hawai‘i, iwi kupuna to French Polynesia and plans for the return of beloved Latte stones to Guåhan and CNMI.

For education, we have started two Pilots in our Natural Science arena, hosting teachers and students to learn and work with botanists and malacologists on all the steps leading to bio-preservation, beginning with exploration in our laboratories and ending with site visits to identify, monitor and if possible, return hardy species back to their habitats. At present, we are activating our new Native Snail Rearing Facility, Pūpū Ola, to expand safe spaces for endangered snails to grow, in partnership with state and private partners.

Through all this, our leadership and staff rise to each occasion as stewards and hosts, planners and creators, caretakers and fixers, storytellers and artisans in their own right. We mahalo our Board members for being all of the above along with us. We are excited to welcome two new Board members this year to further strengthen synergistic relationships with our State partners, adding even more value to the work we do – Sharon Hurd, Chairperson of the Board of Agriculture and Keith Hayashi, Superintendent, Department of Education.

Audited financials for the fiscal year 2024 will be completed in Q3 FY25.

It does take a kaiāulu (a village) to fulfill our Founders’ dreams!

The Museum was founded in 1889 by Charles Reed Bishop in honor of his late wife, Princess Bernice Pauahi Bishop, the last descendant of the royal Kamehameha family.

Princess Bernice Pauahi Bishop.

Operations and CIP

Repairs to roofs (outside of one of the issues discovered during heavy rains) are 100% completed. Teams have been working on clearing drains, replacing pipes, and fixing leaks in exterior areas of the buildings. Completed ductwork cleaning, replacement of flooring, and replacement of seating in the Planetarium. A small enclosure (Hale Ikehu) was demolished to make room for the erection of a new Keiki Garden, which will be located near the Hawaiian Garden.

Fire suppression drawings are completed, and the work was put out to bid in July. We met with HECO regarding the replacement of numerous aged transformers on campus. That work is now completed. Bid out and have selected contractors to do hazmat remediation in two locations (roof and bridge), with work ongoing.

Our new storage facility continues to move forward as design documents are being finalized to submit for permits. Installation of a designated clean lab space in our Center for Micro Biodiversity has been completed. We are also making progress on renovations to the Hall of Discovery, which will take some time before design work is completed.

WAIPIʻO VALLEY

Farmers have reported good progress with opening up new loʻi on leased parcels. We continue to work with private landowners to create better access where they may be landlocked or where access is restricted due to waterways. All 23 families have re-signed long term leases – five years with two additional five year options – for a total of possibly 15 years. This will provide farmers with long term stability so they can invest in their operations.


HATS and DRESSES
Elsie Krassas's Vernacular Style
I lalo la, i lalo
Below, below
Na pua o ka honua
All earth's flowers
I uka la, i uka
Na ulu la'au
Inland, inland
All forest trees
I kai la, i kai
I'a o ka moana
Seaward, seaward
All ocean fish
Behold, this Lovely World

Information Technology

INFRASTRUCTURE MODERNIZATION IMPLEMENTATION

EXECUTIVE SUMMARY

Bishop Museum stewards over half of the world's primary source material for Hawai'i and the Pacific, across 11 departments from Archaeology to Vertebrate Zoology. The Museum has over 25 million physical collection items. The physical collections represent the Museum's "core" and require stewardship in perpetuity. This material and information are held in the public's trust and are to be made accessible and utilized for the perpetuation of our natural and cultural heritage.

The IT Infrastructure Modernization (ITIM) Plan, which involves the purchase of state-of-the-art IT equipment and infrastructure, addresses our future needs with scalable, high-performance integrated systems and a full backup and disaster recovery co-location data center. The new IT infrastructure will support the Museum's rapidly expanding digitization for its goal of Digital Future, so its cultural, history and natural science collections will be ready for public access via the internet. The success of the Museum's IT Infrastructure Modernization and Digital Futures projects will make the Museum's collections available for a wide array of uses by educators, students, scientists, natural resource managers and others. Modernizing Bishop Museum's IT infrastructure and making these data available online will increase access and use of Museum collections.

IT INFRASTRUCTURE MODERNIZATION (ITIM) FOR THE DIGITAL FUTURE

Bishop Museum achieved its Information Technology Infrastructure Modernization milestone with the retirement of its aging, outdated, unsupported and insecure servers, storage, and backup devices in FY 2024. In addition, Bishop Museum migrated its computing production environment from an outdated, unstable power source, aging cooling system, and insecure computer room in the Museum to the co-location data-center at DRFortress for its production site and a back-up and Disaster Recovery co-location data center at the Mililani Technology Park. The new IT infrastructure uses the SD-WAN technology with high-speed network connection to provide the Museum a robust, integrated, efficient, and redundant information technology backbone infrastructure to support the Museum's digitization for its 25 million collection items. The Museum also implemented the ZTNA (Zero Trust Network Access) and MFA (Multifactor Authentication) security technologies to strengthen its cybersecurity protection.

The IT Infrastructure Modernization improves operation and collaboration throughout the Museum's IT infrastructure, delivering information faster and more securely to staff who use the Museum's digital devices for the Museum's operations and digitization. Museum staff will have ample storage spaces to store the digital data and secure backup in case of disaster.

The success of the IT infrastructure modernization with its long-term sustainability will strengthen the core digital infrastructure at Bishop Museum. It will provide the Museum with a solid foundation that enables us to embark on mass digitization campaigns, build educational resources, and record the knowledge surrounding the cultural and biological significance of our objects. The digital infrastructure and enhanced content developed will also become central to the work of other Museum departments by tracking new accessions or objects used in exhibits, completely changing the way we operate as an institution and how we connect to our local and global communities.

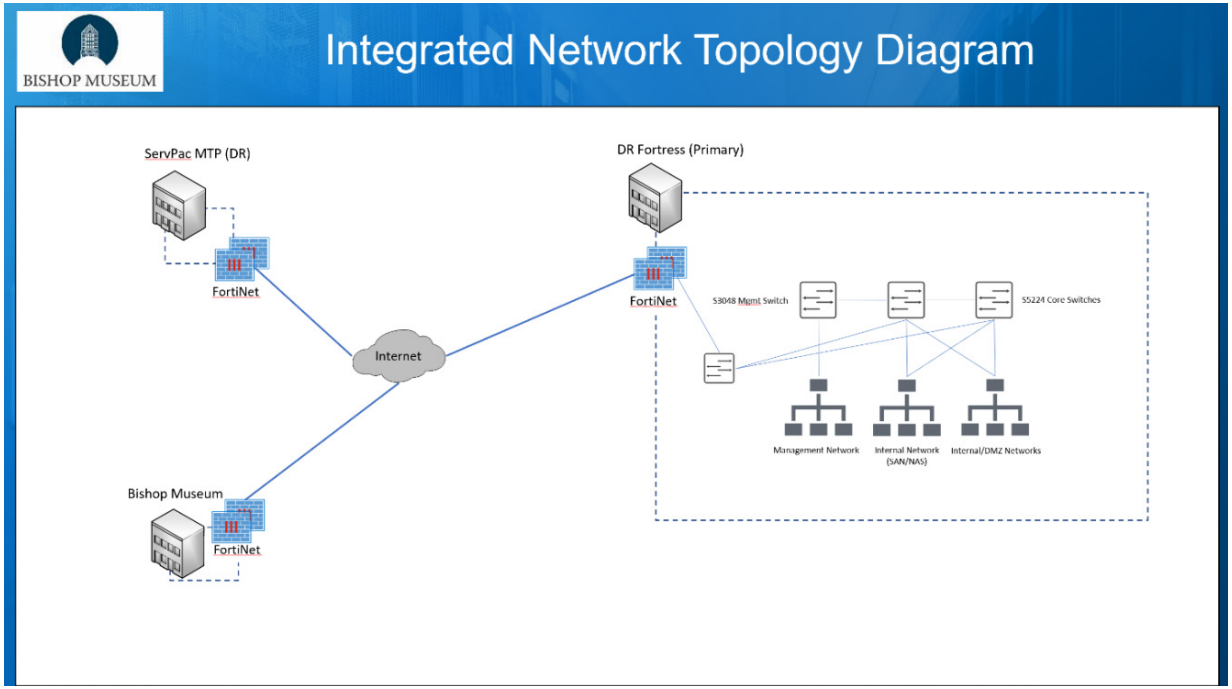
IT INFRASTRUCTURE MODERNIZATION (ITIM) IMPLEMENTATION

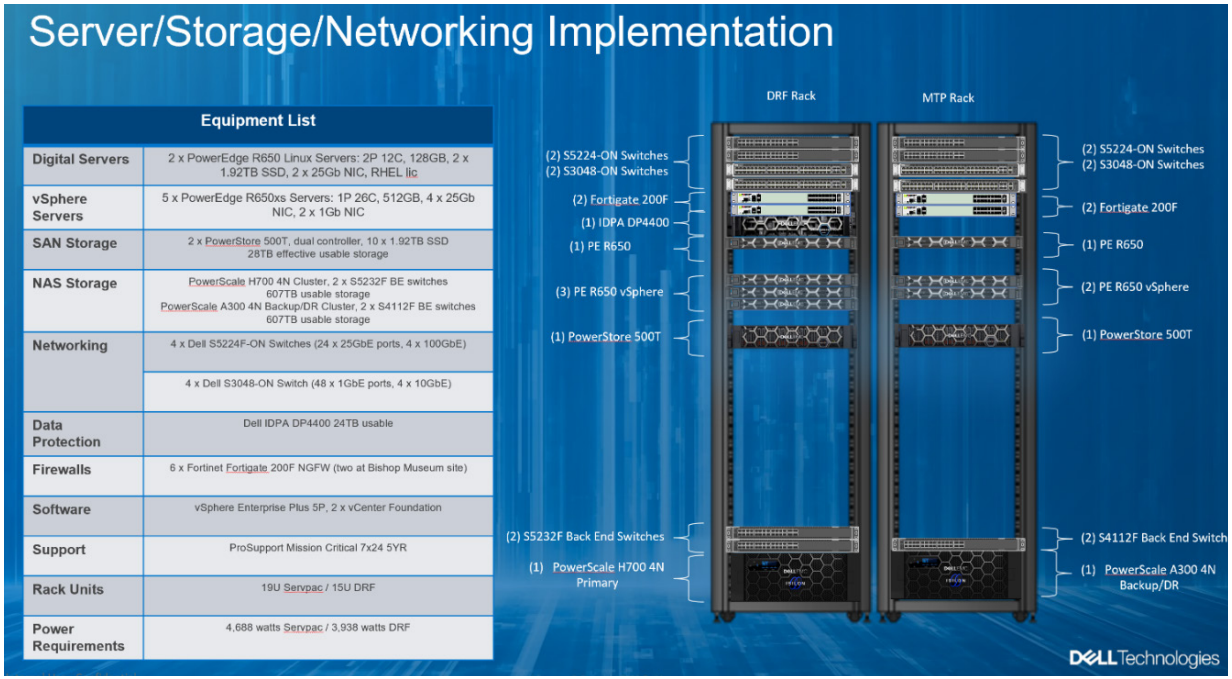
The IT team has accomplished the following important projects successfully in FY 2024.

- Replaced the aging and outdated Firewall in the Museum to enhance cybersecurity prepa-

ration and reduce the risks of cyberattacks.

- Built the new production data center at DRFortress and the Backup & DR (Disaster Recovery) center at MTP with New Servers, Storage Devices (PowerScale, PowerStore, and IDPA), Network Switches, and Firewall Security devices.
- Implemented SD-WAN between Bishop Museum Campus and two co-location data centers. This will provide the redundancy of the Museum's IT Infrastructure.
- Completed 200 TB data migration from Main campus to Primary production Data center at DRFortress.
- Negotiated with Spectrum and implemented 1G high speed internet services with special discount rates.
- Implemented Office 365 email Multifactor Authentication (MFA) to strengthen security.
- Replaced the Museum's aging, outdated, and unsupported Core Switches at computer room and Telecom Room.
- Implemented Zero Trust Network Access (ZTNA) through FortiCloud EMS to ensure the security of the Museum's network access.
- Migrated the print servers to the new production data center and enhanced the networking security for network printing.
- Teamwork with the HR department and the Museum's administration implemented the first IT Policies and Procedures that will help the Museum's risk management, compliance, operational efficiency, and increase productivity under the new IT infrastructure.





Informatics

The Informatics department continues to work towards the centralization of software and hardware infrastructure to support collections data management.

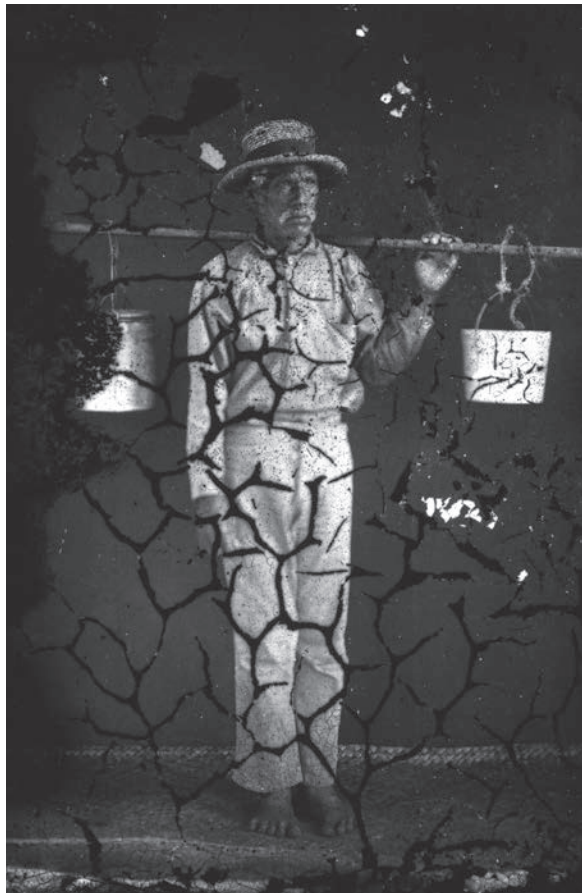
The Digital Futures initiative hit a major milestone with the Axiell EMu Collections Management System (CMS) implementation at the brand-new data centers launched as part of IT's Infrastructure Modernization plan. Migration of the Conservation and Registration data to this new system is complete.

A data model to store information about our library, archives, ethnology, and archaeology collections is also complete and development of the EMu platform to store these data is in progress, with these changes set to go live with the next database release in early 2025. Consolidation and standardization of the existing data from multiple different systems from each of these areas is underway. These data will be migrated to the new platform after launch and they contain information for all our currently digitized books, manuscripts, maps, photographs, audio files, moving images, and material culture.

Informatics and Library & Archives completed the IMLS NANH grant for *(Re)Generations: Challenging Scientific Racism*. This grant funded the creation of a new online exhibit platform to recreate the exhibit in a digital space and incorporate all materials from the exhibit online, including over 950 ancestral photographs. This project provides a framework for how we will integrate exhibit data into the EMu database and build future online exhibits.

Informatics continued creating content and providing support for *Mau ka Leo*, Bishop Museum's online storytelling platform connecting our collections with our expert staff knowledge to provide interpretation and public engagement for our collections. A total of 209 stories are now live, and content from *Mau ka Leo* is regularly featured in social media, membership campaigns, and the *Ka 'Elele* journal, in support of museum outreach initiatives.

Informatics, with support from Library & Archives, has begun an institutional archives and documents digitization project to scan our paper documents containing detailed information about the history of our collections for our Conservation and Registration departments. These documents include condition reports and treatment history, accession files, deeds of gift, and loan documents. These files are being prioritized to make them more easily accessible to internal staff who care for our collections, especially for research projects related to rematriation work. The scanned documents will be uploaded to the EMu CMS and connected to their associated database records.



Public Programs

Bishop Museum's Public Programs creates unique and engaging programs that connect the community with the Bishop Museum. The team works diligently to bring the Museum's storied collection to life through education field trips, public programs, and large-scale signature events. The team also tracks and monitors daily admissions and ensures that each person who comes as a visitor leaves feeling connected to our Museum and Hawai'i. Our exhibits team works daily to maintain our existing exhibitions and works collaboratively with curators to develop exhibitions for Castle and Long galleries including *Ka 'Ula Wena: Oceanic Red*, *Corned Beef & Kalo*, and *Kū a Lanakila! Expressions of Sovereignty in Early Territorial Hawai'i, 1900–1920*.

EDUCATIONAL PROGRAMMING

In FY24, Bishop Museum hosted well over 15,000 K–12 students from schools across Hawai'i. For a large majority, this was their first experience with Bishop Museum. The field trips are designed to introduce students to a range of topics such as Hawai'i's unique environment, navigation practices in the Pacific, natural resource use on an island, traditional makahiki games and planetarium shows.

The Museum also completed its school–museum pilot project. This project was designed with the intention to increase the Museum's impact in education by engaging schools in a meaningful and thoughtful manner; by increasing a teacher's capacity to utilize primary source materials in their classrooms; and by increasing access for underrepresented students to visit the Museum beyond a one-time field trip.

Looking ahead to FY25, the Keiki Garden, a space that connects traditional knowledge and 21st century knowledge, will open. The Keiki Garden will be a demonstration site that invites and inspires thinking about island sustainability.

PUBLIC PROGRAMMING

The Museum regularly holds its Museum After Hours event on the second Friday of each month. This event invites the public to visit the Museum between the hours of 5 p.m. – 9 p.m. and enjoy music, special programming, food, and drinks. The exhibition spaces remain open during this event. In addition to Museum After Hours, the Museum regularly hosts exhibition specific programs. These programs allow further dialogue and connection between the objects and stories of an exhibit and the community. It also brings life to an exhibit and challenges viewers to conceptualize contemporary relevance of traditional stories. This year, we invited speakers and guests to speak and share their perspectives on exhibits like *Ka Ula Wena: Oceanic Red* and *Corned Beef & Kalo*.

Highlighting our Public Programming this year was the 13th Festival of Pacific Arts and Culture (FestPAC). Bishop Museum was one of the official site partners of the festival. The carving and tattoo villages were set up on Museum grounds. These villages hosted traditional carvers and tattoo practitioners from the Pacific who shared their work with visitors. The Museum proper also hosted a variety of performing arts groups in conjunction with FestPAC.

Moonlight Mele returned after a decade of absence. This iconic concert series featured musical groups Walea, Kulaiwi, Maunalua, Kapena, Mark Yamanaka, Liam Moleta, and the Makaha Sons. The Museum donated the proceeds from the second concert (August 11) to the relief efforts on Maui. The Museum plans to continue the Moonlight Mele concerts in summer 2025.

Ola Ka No'eau: Excellence in Hawaiian Artistry was curated by Bishop Museum's Marques H. Marzan in partnership with PA'I Foundation's Maoli Arts Movement (MAMo) initiative. This exhibition honored the excellence in craftsmanship of varying artforms and explored how these practices are passed from kumu

(teacher) to haumana (student). In conjunction with this exhibition, the Museum has invited Hawaiian cultural practitioners to host workshops for our guests. The Living Culture Series connects kumu (teachers) of specific craftsmanship to haumana (students) who are open and willing to learn.

The second annual **Kāhuli Festival** was held in September 2023. Last year's theme focused on increasing capacity and building awareness, highlighting the collaborative efforts between the Museum, its partners, and the community. It was also the opening of the Pūpū Ola: Kāhuli Captive Rearing Research Center which is located in the Richard T. Mamiya Science Adventure Center. This center will advance the work of Bishop Museum's Hawaiian Land Snail Conservation program and the DLNR's Snail Extinction Prevention Program.

Honolulu Intertribal Powwow returned to the Museum's Great Lawn in September. The two-day event brought together local communities and communities from afar to celebrate Native American heritages, pass on Indigenous traditions, build community, and share Native American cultural diversity. Over the two days, this event brought to the Museum over 4,000 guests to share in this celebration.

Lā Kūʻokoʻa, Hawaiian Independence Day was held on November 28, 2023, which marked the 180th year of the national holiday. Bishop Museum celebrated Lā Kūʻokoʻa, the Independence Day of the Hawaiian Kingdom with mea ʻai, ʻawa, mele, tribute presentations, and conversation provoking a contemporary understanding of how Hawaiian Independence is lived and perpetuated today. The Museum partnered with The Lā Hoʻihoʻi Ea and Kanaeokana to present an evening of activities and conversation in honor of the holiday. The program included a walkthrough exhibition presented by Kanaeokana, keiki activities on Gallery Lawns, a T-shirt printmaking booth, and a panel featuring Keola Chan, Kumu at Ka Pā O Lonopūhā; Hinaleimoana Wong-Kalu, Community Leader; D. Kapua Sproat, Counsel for Earthjustice's Mid-Pacific regional office; Daniel Nāhoʻopiʻi, Interim President and CEO at Hawaiʻi Tourism Authority; Victoria Holt Takamine, Kumu Hula at Pua Aliʻi ʻĪlima and Executive Director at PAʻI Foundation; and Noelani Goodyear-Kaʻōpua, Professor, UH Manoa; Trustee, Kamehameha Schools.

Museum After Hours, E Hō Mai Ka ʻIke honored the legacy of Aunty Edith Kanakaʻole. The Museum and the Edith Kanakaʻole Foundation presented a special Museum After Hours that brought together multiple generations of chanters from diverse practices and experiences to pay tribute to Aunty Edith Kanakaʻole's significant influence on the practice of oli in Hawaiʻi today.

Participants included: Hālau o Kekuhi: Ulumauahi Kealiʻikanakaʻoleohaililani, Iliahi Anthony, Kehau Nelson-Kaula, Kaualililehua Kanakaʻole Ioane, Hālau Ka Leo o Laka Ka Hikina o Ka Lā: Kumu Hula Kaleo Trinidad with select haumana oli, Hālau o Ka Pā Hula o Ka Lei Lehua: Kumu Hula Snowbird Bento with select haumana oli, Hālau o Na Pua Lei o Likolehua: Kumu Hula Niuliʻi Heine and haumana alakaʻi, The Moʻolono of Kahoʻolawe, Kiaʻi Loko iʻa from Lokoʻea Fishpond, Ka Pā o Lonopūhā, Academy of Native Hawaiian Healing Traditions: Kahea Wilcox, Kahele Joaquin, Kaulu Luʻuwai, Kamuela Chun, Keola Kawaiʻulaʻiliahi Chan, Keoni DeFranco, Kuʻulei Higashi Kanahele, Mānaiakalani Kalua, Pele Kaio, Pua Lincoln, Kalei Nuʻuhiwa, Taupōuri Tangarō, and more. Attendance: 600

Mālama Hāloa Kalo Festival has been organized by Ka Papa Loʻi ʻo Kānewai and Ka Papa Loʻi ʻo Punaluʻu for the past 15 years. Every year, the festival spotlights a ʻohana kalo or a specific Hawaiian kalo variety. This year, Bishop Museum was honored to host the festival and symposium for the first time to celebrate the kalo piʻialiʻi and ʻeleʻele mākoko. The mission of the Mālama Hāloa Kalo Festival & Symposium is to educate our lāhui about different Hawaiian kalo varieties and how to care for them. This year's event saw over 1,400 attendees.

Celebrate Micronesia was held on June 13, 2024, during the 13th Festival of Pacific Arts and Culture. Bishop Museum in partnership with Pacific Islands Development Program, East-West Center, was proud to celebrate Micronesian voices, Micronesian cultures, and Pacific communities. The annual Celebrate Micronesia Festival highlights traditional and contemporary art, dance, fashion, stories, poetry, food, and music of the people and cultures of the Republic of Palau, the Commonwealth of the Northern Marianas, Guåhan (Guam), Yap, Chuuk, Pohnpei, Kosrae, Kiribati and the Republic of the Marshall Islands.

VISITOR ATTENDANCE IN THIS FISCAL YEAR (FY24)

Visitor Type	FY 2024
General	87,695
Kamaʻaina	50,570
Military	13,272
Museums For All	3,327
School/Private Groups	18,679
Total	173,543

Cultural Resources
(Archaeology, Ethnology, and Conservation)

The Pacific Pipeline, led by the Cultural Resources Division, has three main goals:

1. Increase access to the collection
2. Embrace and develop dynamic models of stewardship
3. Establish an Indigenous museum practice fellowship program

INCREASED ACCESS THROUGH COMMUNITY ENGAGEMENT AND KNOWLEDGE SHARING

EXHIBITIONS

Healoha Johnston, Director of Cultural Resources and Curator for Hawai'i and Pacific Arts and Culture, curated an exhibition in J.M. Long Gallery titled *Corned Beef & Kalo*, in collaboration with Makahiapo Cashman, Director of Ka Papa Lo'i 'o Kanewai at University of Hawai'i at Mānoa. This exhibition coincided with a number of festivals, including Bishop Museum's inaugural hosting of the Mālama Hāloa Festival.

Yuki Kihara, Joy Enomoto, and Healoha Johnston, Director of Cultural Resources and Curator for Hawai'i and Pacific Arts and Culture, curated an exhibition in J.M. Long Gallery titled *Project Banaba*, featuring the work of artist and scholar Katerina Teaiwa.

Kamalu du Preez (Cultural Resource Specialist) and Marques Marzan (the Wayne Pitluck and Judith Pyle Curator for Cultural Resilience and the Museum's Cultural Advisor) co-curated along with the lead curator, Leah Caldeira (Director of Library & Archives and Curator for Cultural Resilience) the Museum's blockbuster exhibition, *Ka 'Ula Wena: Oceanic Red*. The exhibition opened in May and is the first of its kind to constellate the Museum's vast collection of Hawai'i and Pacific pieces through the color red, coinciding with the Festival of Pacific Arts and Culture 2024.

Sarah Kuaiwa, Curator of Hawai'i and Pacific Cultural Resources, curated *Kū a Lanakila! Expressions of Sovereignty in Early Territorial Hawai'i, 1900–1920*, which opened in Bishop Museum's J. M. Long Gallery on Saturday, Oct. 5, 2024 and runs through Aug. 10, 2025. This exhibition considers the intersection between politics, culture, and water sports in the first part of the 20th century. The exhibition features a 40 foot koa canoe that the Museum cares for along with co-stewards in the community.

Sarah Kuaiwa, Kayla Annen, and Healoha Johnston collaborated with the Guåhan working group consisting of experts from University of Guam, Guam Cultural Repository, and Guam Museum to further our understanding of what is called the Hornbostel Collection and to collaboratively clean, move, and reinstall the latte stones in a featured location on the campus lawn.

PUBLICATIONS

Bishop Museum Press published the first full-scale accompanying exhibition catalog since 1980, in conjunction with *Ka ʻUla Wena: Oceanic Red*. The book is co-edited by Leah Caldeira and Healoha Johnston, and features essays by collaborators, artists, scholars, and curators around the world, including Bishop Museum Cultural Resource team members Kamalu du Preez, Sarah Kuaiwa, Marques Marzan, and Healoha Johnston.

Project Banaba reader featuring contributions by Yuki Kihara, Joy Enomoto, Katerina Teaiwa, Healoha Johnston, Paige Okamura, and Teresia Teaiwa.

1898: Visual Culture and U.S. Imperialism in the Caribbean and the Pacific, Yale Press and Smithsonian Press.

LIVING CULTURES AND COLLECTIONS ACCESS

Oral histories — Cultural Resources and Informatics conducted 37 oral histories with artists, scholars, curators, and practitioners from around the world, including but not limited to the following countries: Aotearoa, Guåhan, Fiji, Commonwealth of the Northern Marianas, Sāmoa, Hawai‘i, England, Norfolk Island, Tahiti, and Cook Islands. These oral histories were audio/video recorded and will be made available online and through EMu, our centralized collections database.

Collections Access — The Cultural Resources division conducted a total of 82 collection access sessions, which enabled 568 people from around the world to conduct research and/or experience the collection that is held in museum storage and is not on view.

Guests included a range of scholars, artists, members of government, practitioners, musicians, members of the press, journal editors, lineal descendants, Native Hawaiian Organizations, and elders from numerous countries.

Ethnology Department hosted 68 distinct behind-the-scenes collection access for a total of 484 guests in the collection.

Archaeology Department hosted 14 distinct behind-the-scenes collection access sessions for a total of 84 guests (64 residents, 20 non-residents) in the collection.

SYMPOSIUM AND CONVENING

Cultural Resources collaborated with Huliauapa‘a to co-organize a Wahi Kūpuna Stewardship Community of Practice summit in February 2024 in collaboration with the Kaliuokapa‘akai Collective. Pūlama Lima was our institutional lead who worked closely with Loren Doctolero in Events to bring together more than 70 people representing over 30 organizations across Hawai‘i, the Pacific, and the Americas to consider best practice in wahi pana and cultural resource stewardship.

The Cultural Resources division hosted the "Museums in the Pacific Network" gathering in June 2024 consisting of delegates and colleagues from Kingdom of Tonga, Guåhan, Aotearoa, Hawai'i, and Sāmoa. We also met with colleagues from the Burke Museum to advance our partnership around collections research and activitation; and organized gatherings with colleagues from Auckland Museum, Guam Museum, and National Endowment for the Humanities staff and council members around partnerships and programs.

EMu MIGRATION AND DIGITIZATION

The Cultural Resources division is working on a weekly basis with the Informatics department to see the Archaeology, Ethnology, and Conservation department records migrated into EMu. This digital migration will enable collections management and collections research to occur in a manner consistent with the work of a museum in 2024. The infusion of Indigenous Knowledge in the database is a foundational principle for Informatics, and the Cultural Resources team has played a significant role in this aspect of data management. Each area in Cultural Resources continues to prep materials for digitization and digitial record development. A total of 6,344 items in Cultural Resources have been digitized this year.

- Archaeology: Stephanie Abo Lambert, Archaeology Collections Manager, is leading collection technicians and volunteers in the processing of digitizing slides, paper contents in binders, photographs, and other paper materials that represent decades of research in Hawai'i and the Pacific. To date this year, the Archaeology department has digitized a total of 5,875 pieces consisting of 115 maps, 960 negative images, and 4,800 documents (manuscripts, field notes, lab notes, and catalog records).

- Ethnology: Kayla Annen, Ethnology Collections Manager, is leading the collection technicians and working with a contracted photographer to enable the digitization of three-dimensional pieces in the Museum's cultural collections. A total of 469 3D pieces in the Ethnology collection have been photographed. This will enable us to support digital content creation and story telling, will improve digital access internally and externally, and enable publication of the cultural resources collection.

Ancestral remains returned to French Polynesian government: Between 1960 – 2003, Bishop Museum conducted a number of archaeological projects across the various island groups of French Polynesia (Society Islands, Marquesas, Austral Islands, and Tuamotu). Fieldwork was led by Dr. Yosihiko Sinoto. Archaeological items from these projects were loaned by the French Polynesian government offices to the Museum for Dr. Sinoto's research. In November 2022, Bishop Museum Curator of Archaeology, Pūlama Lima, travelled to Tahiti and met with officals from the Department of Culture and Heritage (DCP) of the French Polynesian government, to discuss the renewal of a partnership between Bishop Museum and DCP. We designed a multi-phase partnership prioritizing first the return of ancestors who were brought to Hawai'i through this long term loan agreement. Two years of diligent research and close collaboration with members of the French Polynesian government and Hawai'i-based contractors culminated in the return of iwi tupuna from Bishop Museum to French Polynesia.

Pacific Pipeline's Te Rangi Hīroa Curator and Caretaker's Fellowship program: Bishop Museum is solidifying multi-phase MOAs with governments in the Pacific to support the fellowship program and ongoing stewardship, collections-based research, and in some cases the evental return of collections to their source community. Meetings with government officials and cultural heritage sector employees from Guåhan and French Polynesia occured during FestPAC to support the drafting of long-term MOAs.

Library & Archives
Bishop Museum Press

LIBRARY & ARCHIVES

Bishop Museum Library & Archives is the principal steward of the most varied and extensive collection of primary source materials and foundational works related to Hawaiian and Pacific cultural and natural history. As the institutional archive, we are further responsible for collections assembled from all departments of the Museum, representing the diverse knowledge fields of archaeology, ethnology, botany, entomology, ichthyology, vertebrate and invertebrate zoology, conservation, publishing, museum exhibits, and administration. Our collections are a resource for Bishop Museum curators, researchers, scientists, and communications. However, we primarily serve a global research community that includes state, and especially Native Hawaiians and Pacific Islanders residing in Hawai‘i.

This expansive collection is cared for by a dedicated staff with a focus on preservation and accessibility. The department offers virtual reference services as well as regular on-site hours dedicated to assisting our community with their research. A foundational strategy of the department is to increase preservation and accessiblity through digitization and online access in collaboration with the Museum’s Informatics department.

A primary focus for the Library & Archives is *He Aupuni Palapala: Digitizing and Preserving the Hawaiian Language Newspapers*, a multi-year project, in collaboration with Awaiaulu, Inc. and Kamehameha Schools, that will digitize and make text-searchable Hawaiian language newspapers in all archival repositories in Hawai‘i for free public access on the Office of Hawaiian Affairs’ Papakilo Database. Hawaiian language newspapers are a primary resource that should be consulted in all curriculum building and research and knowledge gathering for Hawaiian culture, history, and natural history applications. Since 2004, when Hawaiian language newspapers were first made available online, there has been an explosion of scholarship and projects that can be attributed to the increasing accessibility of Hawaiian language newspapers. Still, the goal of full and free access to nūpepa for the Hawaiian language literate community has not been reached. Over 50,000 pages of ‘ike Hawai‘i are missing from the Office of Hawaiian Affairs’ Papakilo Database and Ulukau.org. Many of the pages currently online are obscured, and sometimes entire articles are illegible. These online images were digitized from microfilm created in the 1960s. The poor quality of the images also yields inaccurate search results. At present, despite the wealth of information available via nūpepa online, a large amount of foundational ‘ike Hawai‘i will continue to be inaccessible. Nūpepa Hawai‘i must be digitized from the original newsprint and made publicly available. *He Aupuni Palapala* will fulfill this need. The project team expects that several thousand images will be uploaded to Papakilo during this project period.

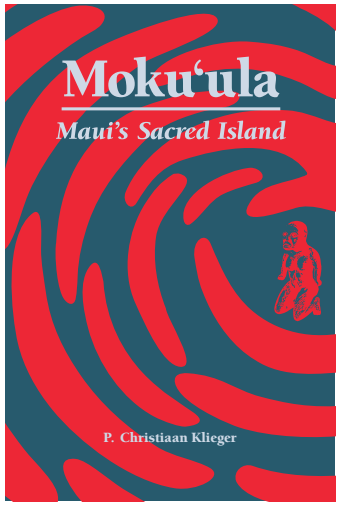
BISHOP MUSEUM PRESS

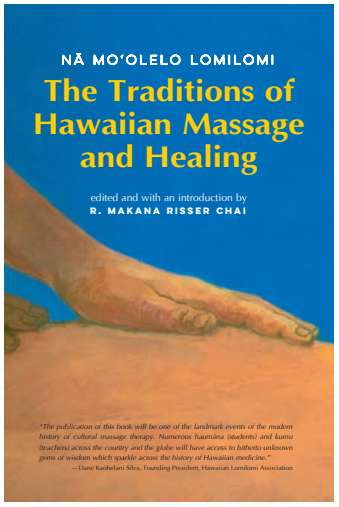
Bishop Museum Press, Hawai‘i’s oldest book publisher and one of the first scholarly publishers in the Western Hemisphere, was established in 1892 as a means of accomplishing one of the Museum’s core objectives: to disseminate the findings of research related to the Museum’s early natural science and cultural collections. Over 129 years later, Bishop Museum Press continues its legacy of excellence and service to Hawai‘i and the world, having published over 1,200 titles and distributed over 1 million books in 72 countries worldwide.

Numerous heartfelt voices reached us in the beginning of FY24 requesting the timely reprinting of *Moku‘ula: Maui’s Sacred Island*. Following the devastating fires that impacted Maui, these calls from all over Hawai‘i and beyond rang clear the collective need for continued education and preservation of Lahaina’s deep history. With support from the Dolores Furtado Martin Foundation, Bishop Museum Press released both a physical reprint and an e-book version of the publication. Half of the profits from the sale of the book go towards supporting ongoing efforts in Lahaina, Maui.

The remaining half will ensure that the publication stays in print.

Additional publications reprinted in FY24 include: *Lāʻau Hawaiʻi: Traditional Hawaiian Uses of Plants* by Isabella Aiona Abbott, *Nā Moʻolelo Lomilomi: The Traditions of Hawaiian Massage and Healing* by Makana Risser Chai, and *ʻŌlelo Noʻeau*, compiled by Mary Kawena Pukui. The Press team also worked with Museum curators to produce an exhibit catalog for *Ka ʻUla Wena: Oceanic Red*, released in May of 2024. A new edition of *Arts and Crafts of Hawaii* (Sir Peter Buck, Te Rangi Hiroa) was produced in October 2024. In this updated edition, readers will find over 350 newly digitized photographs and illustrations that enhance engagement with traditional Hawaiian arts. The book not only serves as an invaluable resource for scholars and educators, but also plays a crucial role in the ongoing revitalization of Native Hawaiian cultural practices. The Press team will also partner with the University of Hawaiʻi Press to co-publish *Ferns and Lycophytes of the Hawaiian Islands* by Dan Palmer and Bishop Museum botanist Miles Thomas. Press is also working on a reprint of M. Puakea Nogelmeier's *Mai Paʻa I Ka Leo: Historical Voices in Hawaiian Primary Materials, Looking Forward and Listening Back*.





Botany

The Botany collection grew to over 518,000 specimens. Just over 217,000 of these are specimens from Hawai'i, with the remainder representing species from around the world which are used to identify non-native species that arrive on our islands. All our Hawai'i specimens have now been imaged and databased and are available at www.PlantsOfHawaii.org. We are working on completing the digitization of our world specimens. We continue to work with DLNR, HDOA, USFWS, OANRP, watershed partnerships, the Hawaii Invasive Species Council, the Laukahi Native plant conservation network and many others to provide identification plant services and to deliver relevant data and analysis to assist with conservation and natural resource management planning. We provide access to our collections for several researchers throughout the year, and we give tours to college classes and professional development opportunities for natural resource managers. Our team includes 10 staff members.

Some of the accomplishments over the past year include the completion of a book about the ferns of Hawai'i which will be co-published by Bishop Museum Press and University of Hawai'i Press, and a well-attended workshop on bryophyte (mosses and liverwort) identification held for natural resource managers that we cohosted with the Army Natural Resources program.

The largest accomplishment of the Botany team over the past year was to complete the native Seed Bank installation. The Seed Bank represents an important intersection between the Museum's research and collections, and public outreach and exhibits. Located adjacent to the Science Adventure Center, this facility simultaneously serves as a vital collection to safeguard rare native plant species, and also educate the public on the importance of biodiversity and protecting endangered species. The final installation of key utilities for this facility included the installation of water, electricity and internet access by Buildings and Grounds staff before the end of calendar year 2023. A magnificent mural was painted on the facility in Q3 of FY2024.

Community partners continue to have their seeds accessioned into the bank: approximately 70,000 from 26 species as of October 2024. The first planting will begin in Fall 2024.

In November 2024, the Botany department will launch two new programs. The first is our Oʻahu Invasive Species Early Detection and Rapid Response Program. Funded by the Department of Defense Readiness and Environmental Protection Integration (REPI), our program will support the Oʻahu Invasive Species Committee and the Oʻahu Army Natural Resource Program with an ongoing botanical and entomological field survey to detect potential new invasive species threats and document distributional changes in known target threats. We are also collating all invasive species occurrence data from a large number of state partners to produce, for the first time, a comprehensive geographic database of invasive species occurrence data.

The second major new program is our Native Seed Orchard initiative. With funding from the USDA NRCS program, we are creating a network of native seed growers. Our seed bank and herbarium staff assist with locating populations of native plants, obtaining permits, collecting seeds, processing and storing seeds and ultimately germinating seeds for our partner organizations. Partners will be located strategically throughout Oʻahu, and they will each grow a genetically diverse population of native plants whose seeds can be given away or sold by individual growers for conservation and reforestation efforts in their area. Our aim is to create a native seed coop that maintains seed zone fidelity and maximizes genetic variation in our native plants.

Bishop Museum Scientists from Botany, Vertebrate Zoology, and Ichthyology are working with the Windward Oahu School district teachers to co-create new place-based Environmental Science curriculum. The project is in a planning phase and work with teachers will begin in March 2025.

Invertebrate Zoology

The Marine Invertebrate Zoology (IZ) Department's collection continues to grow in breadth, diversity, and quality — further solidifying the Museum's standing as the biological repository ("library of life") for Hawai'i. Through the research projects conducted by IZ staff, collaborative projects with community partners, new material collected in Hawai'i and the Pacific, and facilitation of research through collections access, our collective efforts continue to demonstrate that we are the most comprehensive resource for Hawai'i's marine biodiversity in the world.

The Marine Invertebrate Zoology Department through research, collection management, and educational outreach efforts, has continued its efforts to help the museum achieve its mission of preserving, documenting, understanding, and sharing the stories of natural and cultural history of the Pacific.

Collection Highlights: This year, we systematically upgraded large sections of the collection including, but not limited to, Echinoderms (4,539 lots), Tunicates (1,135 lots), and Sponges (1,815 lots). This included cataloging specimens, upgrading the condition of the physical specimens, and updating the data for each (new locations, genetic information, images) in our database. These efforts resulted in 24,6000 existing specimen records being enhanced, increasing the value and quality of the collection and its data.

Notable new material from this year includes over 20 specimens of newly discovered Hawaiian and Pacific deep-sea corals and glass sponges collected on national deep-sea expeditions (NOAA Ocean Exploration, Nautilus Ocean Exploration Trust) by remotely operated vehicles (ROVs).

The IZ department facilitated research in diverse fields throughout this year including artists, scientists, educators, students, and conservationists through in-house visits and specimen loans. This year, the IZ department worked with 15 researchers on subjects

including radiocarbon dating, taxonomic descriptions of new species, and investigating deep sea animal relationships.

NSF TCN DigIn: This October, the IZ department successfully completed a four-year multi-institutional grant project to document marine biodiversity nationwide (https://www.digin.tcn.org/) through natural history collections. As part of the DigIn project, we contributed the addition of 6,695 new specimen lots of Hawaiian marine invertebrates and 6,087 specimen images to this collective effort, surpassing our institutional goals for the project. All new specimens and images digitized into the IZ collection are now available and accessible for research and conservation locally and internationally.

Conservation Research and Invasive Species Work: Invertebrate Zoology staff continue being active members of the Hawaii Invasive Octocoral Working Group (HIOWG) focused on addressing the highly invasive pulse coral wreaking havoc in Pearl Harbor. Due to the extreme situation here in Hawai‘i, IZ staff were invited to be a part of the national US Coral Reef Task Force (USCRTF) to address this issue at a national level. In 2025, we will be receiving funding through a NWFW Coral Reef Stewardship grant to use a part of our collection (Cnidaria: corals, jellyfish, anemones) to develop genetic testing capabilities for eDNA early detection rapid response of the pulse coral, which will be key to ensuring the situation here in Hawai‘i does not become catastrophic as it has in the Caribbean. We continue to host the website HawaiiAIS (https://www.bishopmuseum.org/hawaiiAIS/) which contains the most comprehensive information on marine aquatic invasive species (AIS) here in Hawai‘i. We plan to host an invasive species workshop at the Museum in early 2025 that includes state, federal, and national community partners.

Edmondson Trust: The Edmondson Trust funding awarded each year to the IZ department to support research in marine invertebrate zoology in Hawai‘i has

allowed us to work for the past three years with Jan Vicente, Ph.D., a pioneer in marine sponges. Dr. Vicente works on a group of animals that have been chronically understudied but are vitally important to the health and survival of our coral reef ecosystems. Through his efforts, over half of our Porifera collection (roughly 1,800 specimen lots), including specimens dating back to the early 1900s, have finally been given taxonomic identifications. In addition, he has been responsible for adding hundreds of new specimens into the collection, representing more than 50 additional newly described species and doubling the number of known sponge species in Hawai‘i.

Marine Invertebrate Research- ARMS: IZ staff are part of a multi-year research project to document marine biodiversity in American Sāmoa using Autonomous Reef Monitoring Systems (ARMS). This project is investigating the differences between shallow coral reefs and mesophotic coral reef ecosystems, and the ways, if any, deeper reefs may provide some refuge for shallow coral reefs that are at risk due to stressors like warming ocean temperatures, invasive species outbreaks, and coral bleaching.

Exhibits and Outreach Activities: IZ staff conducted several behind the scenes tours for elementary and college students, participated in museum events including the annual science festival, and have contributed to the development of exhibits and displays in our public galleries. IZ staff are members of the “SAC Attack” committee that meets regularly and is responsible for upgrades in the Science Adventure Center (SAC). In addition, IZ staff continue to curate the upcoming new coral reef display in the SAC that is slated to open in April 2025 for Earth Day.

Vertebrate Zoology

The Vertebrate Zoology collections, which contain bird, mammal, reptile, and amphibian specimens from Hawai'i and the broader Pacific region, continued to grow during FY24 with the addition of both native and nonnnative species. The specimens are an archive of Hawai'i's unique biodiversity, as well as a community resource for scientists and conservation managers engaged in preserving that biodiversity.

Vertebrate Zoology (VZ) staff regularly assist the Hawai'i Department of Agriculture (HDOA) Plant Quarantine Branch in the identification of reptiles and amphibians intercepted during inspections and pest reporting calls in the local community. If needed, VZ staff also dissect animals to provide the state with information about the animals' breeding status and predatory consumption. VZ staff also serve on the Animal Species Advisory Committee and routinely help the HDOA to assess requests to import various species of vertebrates into Hawai'i that require special exemptions.

Vertebrate Zoology staff have been partnering with the Hawai'i Department of Land & Natural Resources and other local agencies in planning and providing educational outreach for **Makahiki o Nā Manu Nahele: The Year of the Forest Birds**, which is a state-wide campaign to celebrate Hawaiian forest bird species and raise public awareness about the ongoing extinction crisis they are experiencing. Governor Josh Green officially proclaimed 2024 as Makahiki o Nā Manu Nahele, and VZ staff transported the Museum's Uchiyama forest bird sculptures to the governor's office as part of the proclamation event.

As part of Makahiki o Nā Manu Nahele, Bishop Museum hosted five unique forest bird-related events to educate the general public about the danger these birds face from nonnative predators and diseases, as well as the efforts being made to save them.

One of the events hosted at the Museum was the opening of a new, permanent display about endemic

Hawaiian birds in the Science Adventure Center. **Lele o Nā Manu: The Splendor and Loss of Hawai'i's Birds** is an exploration of the remarkable avian fauna that evolved over millions of years in Hawai'i. The exhibit features 47 exquisite carvings depicting endemic Hawaiian forest birds (manu nahele) by Japanese master craftsman, Haruo Uchiyama, who spent several weeks examining specimens in the Museum's collections to ensure the carvings were as accurate as possible. Mr. Uchiyama's complete set of historically-known Hawaiian honeycreepers are displayed atop an original mural painted by local artist, Patrick Ching. The exhibit also includes a mural depicting prehistoric Kīpahulu Valley (Maui) painted by Dr. Julian Hume, fossils of extinct bird species, and an interactive game that

challenges visitors' knowledge of native and nonnative animals. To expand on the content presented in the physical space, visitors are able to access online digital content reflecting up-to-date research and conservation projects via QR codes on the display's panels.

The events and the new display have a common goal: raising awareness about critically endangered forest birds. This is an essential effort, as public support is needed to maintain the conservation programs that are our best hope to preserve these unique species and the ecological functions they provide for our native forests. Especially important is educational outreach about Incompatible Insect Technique (IIT), a method for suppressing mosquito populations, which spread both avian and human diseases.

Misinformation about IIT is an issue, and in 2024, VZ lent its support to Hawai'i's Board of Land and Natural Resources in their dispute with a Maui-based group that claimed the Board wrongly approved the environmental assessment that cleared the way for IIT trials in Maui's high elevation forests. During the ensuing case in circuit court (1CCV-23-594), VZ staff submitted educational materials to the court to illustrate the direct effects of avian extinction, and was present in the courtroom to offer testimony on behalf of the state. Fortunately, the judge granted a summary judgement in favor of state conservationists, and IIT trials are proceeding on Maui.

The VZ collection is participating in a two-year grant funded by the Hawai'i Department of Education (DOE). In partnership with the Museum's Botany and Ichthyology collections, VZ staff will work with teachers and science curriculum developers from O'ahu's Windward District. The goal of the grant is to collaboratively create place-based science curricula that reflect the incredible diversity and uniqueness of Hawai'i's flora and fauna, as well as the challenges to preserving that biodiversity in a rapidly changing world. Through this partnership, the Museum will support teachers interested in bringing cutting-edge, collections-based research into classrooms via the expertise and hands-on experiences only Bishop Museum can provide.

VZ staff view the collections as a community resource and are eager to welcome students of all ages who want to learn about its holdings and gain collections-based skills. During FY24, VZ trained students from Kapi'olani Community College and UH Mānoa in vertebrate specimen preparation, including taxidermy and management of the deremstid beetle colony, which is used to clean skeletal material. VZ staff also continued ongoing support for cultural practitioners preparing Molī (Laysan albatross, *Phoebastria immutabilis*) and Ka'upu (Black-footed albatross, *Phoebastria nigripes*) for Makahiki celebrations, which includes storing incoming material from Papahānaumokuākea and instruction on skinning carcasses and techniques for long-term storage.

Twice a year, the VZ collection hosts the University of Hawai'i at Mānoa's Marine Mammal class, providing undergraduate students with a behind-the-scenes experience involving skeletal specimens relevant to their coursework. This valuable opportunity educates the next generation of marine mammals scientists and introduces students to careers in natural history museums.

The VZ collections continue to provide specimens for research contributing to the conservation of Hawai'i's endemic vertebrate fauna. For example, a 2024 publication involving the Museum's staff and collections developed novel insights into the long-term ecosystem changes impacting a critically endangered Hawaiian honeycreeper, the Palila (*Loxioides bailleui*). Warming temperatures and drought due to climate change reduce māmane (*Sophora chrysophylla*) seed crops and caterpillar abundance, both of which are important components of the birds' diet. Isotope analysis of feather samples suggest these changes have contributed to the Palila's recent, dramatic population decline.

Malacology

The Charles Montague Cooke Jr. Malacology Research Center exists to serve the Indo-Pacific community and native culture through growth and curation of both preserved and living collections and using those collections to inform the teaching, research, and conservation of Pacific Island snails. Molluscan biodiversity discovery and conservation research is a central theme to this Center while fostering an academic environment of collaboration and growth within peers and the community to mālama i ka ʻāina. Here is an overview of several, but not all, various externally funded projects and initiatives conducted by Malacology personnel:

Hawaiian Land Snail Conservation: Of the more than 759 land snail species recognized (99.9% endemic) in Hawai'i, it is estimated that ~100 of the approximately 300 remaining species will go extinct in the next decade without immediate and effective intervention. To help in the battle against extinction, the Disney Conservation Fund provided a two-year award to support six students at Bishop Museum (BPBM) to: 1) develop maps of historical and updated distributions for 100 species; 2) care for captive-reared snails at the BPBM Pūpū Ola: Kāhuli Captive Rearing Research Center; 3) develop and participate in community outreach and educational events aimed at increasing awareness and appreciation of snails; and 4) assist in the maintenance (e.g. weeding, predator monitoring) of predator-proof snail enclosures with Hawai'i State Department of Land and Natural Resources Snail Extinction Prevention Program (SEPP). To date, six students participated in the captive rearing of over 2,300 individuals from nine critically imperiled species and 1,641 snails have been reintroduced into protected snail enclosures on O'ahu. Interns also assisted SEPP with predator sweeps and site maintenance of a snail enclosure. Outreach efforts engaged at least 8,000 people via science festivals, collections tours, social media, and workshops for the public and conservationists. With the project's end in September 2024, we will provide conservation managers with 171 species distribution maps, allowing natural resource managers state-wide to more effectively plan conservation actions aimed at preserving Hawaiian land snails facing imminent extinction. Additionally, new educational outreach activities are currently being developed, including K–12 curriculum, science festival demonstrations, and public engagement events.

Early detection and mitigation against invasive species: It is estimated that each week, nearly 20 novel plant and animal species are introduced and established in

Hawai‘i, many going unnoticed until they become major pests. The most notable among these introduced animals include taxa that are the least well studied, making them even more difficult to detect and identify within a timeframe that allows their control. These include gastropods (snails and slugs), annelids (earthworms and leeches), and platyhelminths (flatworms). All these major taxa include species that are known agricultural pests, carriers of zoonotic diseases, and likely to become invasive once established. USDA provided funds to support invasive surveys of these animals across the main Hawaiian Islands (primarily in agricultural and horticultural facilities), develop resources to aid in identification and mitigation of pests, and provide hands-on training to identify these non-native species. Within a year, we have surveyed over 50 sites and recorded more than 52 non-native species, with several new records of earthworms, flatworms, and snails. Additionally, we have conducted five taxonomic workshops on O‘ahu, Maui, and Hawai‘i Islands to the community and conservation managers and developed three identification guides to the invasive freshwater and land snails of Hawai‘i which will eventually be available to download from an online website hosted by Bishop Museum.

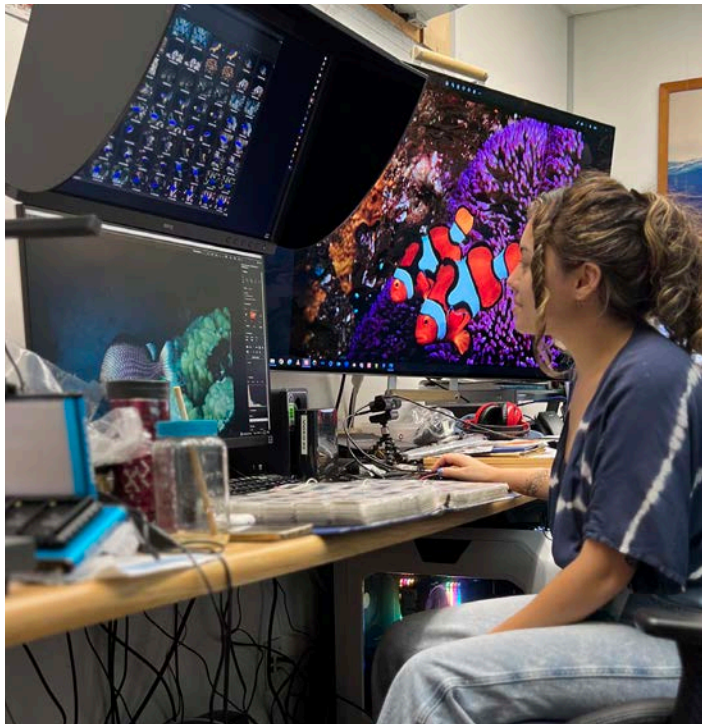
Enhancing Access to Museum Data for Conservation: This four-year project was funded by the National Science Foundation to develop comprehensive online resources that will enable time-sensitive assessment of the systematics and conservation status of Pacific Island land snails. The collaborative network includes six natural history museums: Bishop Museum (BPBM), Academy of Natural Sciences Drexel (ANSP), Field Museum of Natural History (FMNH), Florida Museum of Natural History (FLMNH), Museum of Comparative Zoology (MCZ), and University of Michigan Museum of Zoology (UMMZ); with BPBM as the lead institution. This project ended in August 2024, and the Pacific Island Land Snail Biodiversity Repository (PILSBRy.org) web portal to date contains biodiversity data (e.g. habitat data, collector’s observational notes, map images, localities) for 3.4 million specimens which

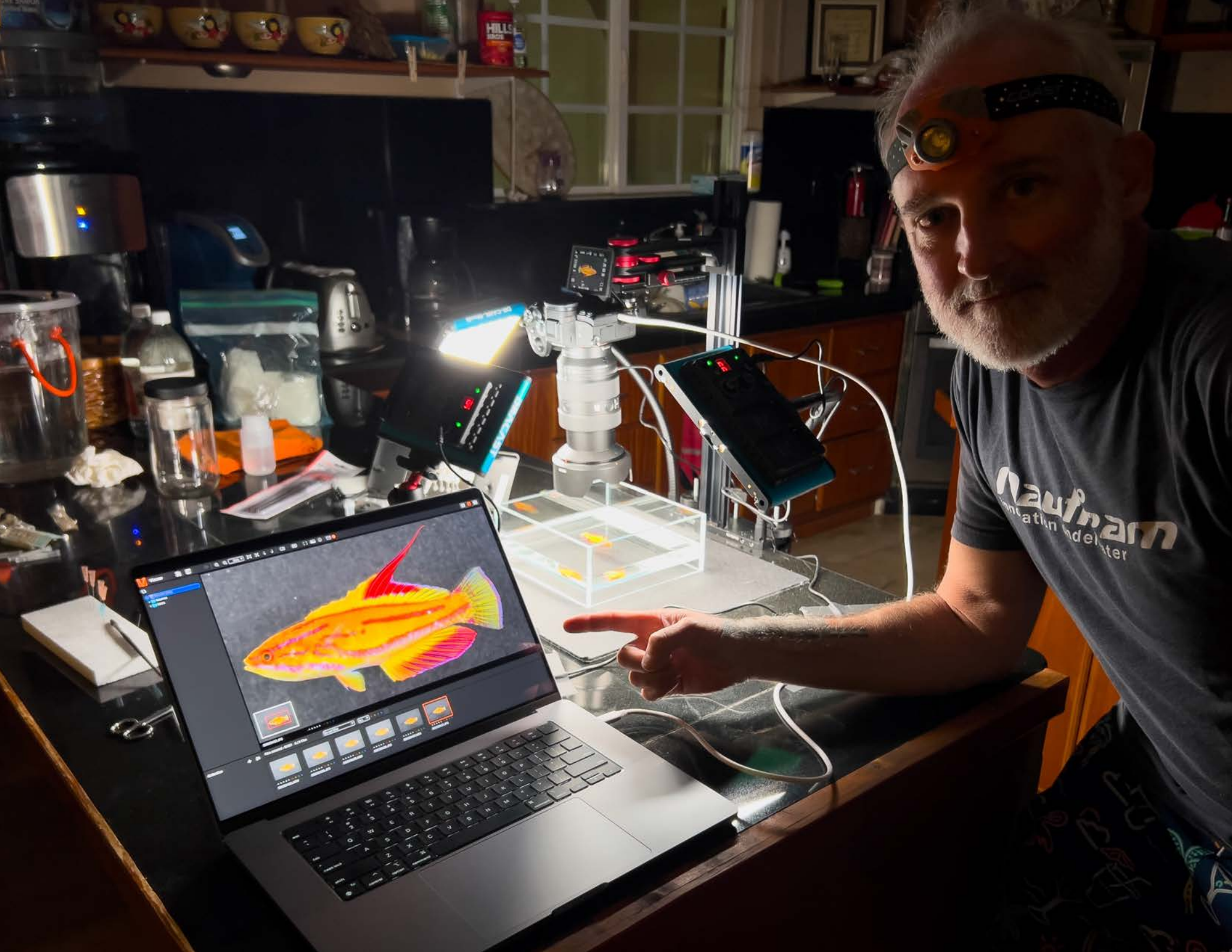
includes 277,191 records, and more than 3,000 species. We have trained more than 60 students and volunteers in the last four years through this project alone. Additionally, this public portal contains all Bishop Museum malacology records and is being updated in real time daily.

Education and outreach: This year, the Center trained nine volunteers and 23 student interns (ranging from high school to graduate students) in biodiversity surveys, captive rearing of endangered land snails, and digitization of the malacology collection. Additionally, a new project was funded by the National Science Foundation aimed to provide local teachers opportunities with hands-on, real world research experiences to develop place-based curriculum for their students and the broader community. Four teachers (two from O‘ahu and two from Hawai‘i island) were provided research opportunities that included conducting biodiversity surveys and assessing food preferences of snails while developing curriculum for students to do surveys and develop invasive species guides. Additionally, Malacology staff partnered with DLNR requesting the official designation of state snails representing the main Hawaiian Islands and the Northwestern Hawaiian Islands. In early 2024, Governor Green officially designated nine snails to represent the state. Lastly, Malacology crew have provided taxonomic workshops and educational presentations throughout the state.

Ichthyology

Ichthyology received funding through the National Park Service Save America's Treasures project to ensure the valuable specimens in its collection are well cared for and to develop the collection as a valuable scientific resource. Access to the project's funds began in early 2024 and through the year, staff have been leveraging funding to upgrade specimen storage and data infrastructure. Through FY24, the Ichthyology collection has kept up with its "typical" needs as they have come up, including routine maintenance of specimens, loan and gift requests, assisting researchers, and tours. Over the fiscal year there were 37 tours of the collection (over 300 visitors), 758 specimen containers were upgraded to meet industry standards, and the collection supported research by providing access to specimens across 30 loans and 15 visits to the collection. In Q2, Ichthyology was particularly busy providing tours to legislators and educators as part of a campaign to increase awareness of the Museum and its collections. In December (FY24, Q2) Ichthyology staff members Calder Atta and Richard Pyle began developing a new version of the collection's database system to provide long-overdue updates. Work on the database has continued throughout the year. In January, Ichthyology Collections Manager Calder Atta completed a handbook for Ichthyology staff, compiling various information about the collection, including its history, curatorial workflow, and policies. In February, Ichthyology Collections Technician Samantha Rickle developed a promotional poster showcasing recent species discoveries made by the Ichthyology team that will be used for outreach events and exhibits. Over the year, Ichthyology staff and collaborators worked through all unidentified specimens in the taxonomic groups Diancistrus, Epinephelus, Pontinus, Ophidiidae, Syngnathidae, Synodontidae, Trachinocephalus, and Acanthochromis, making the collection a better taxonomic resource for researchers.





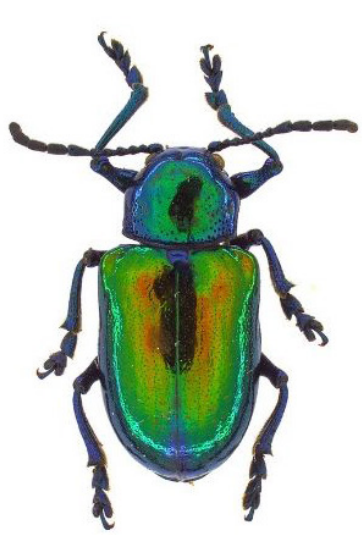
EXCORE

Museum researchers Richard Pyle, Brian Greene, Cassie Ka'apu-Lyons, and Ken Longenecker continued to develop fundraising materials for EXCORE, including the launch of an initial web page (https://bishopmuseum.org/excore), and the creation of a presentation deck (both PowerPoint and PDF) summarizing the EXCORE story. These materials will be incorporated into a focused fundraising campaign (including seeking endowment support), along with other media (e.g., edited videos). In addition to this, Pyle, Greene, and Longenecker participated in four research field expeditions exploring deep coral-reef habitat in support of two projects. In January and March, they participated in two separate expeditions to American Sāmoa as part of a multi-year collaborative project funded by NOAA, involving Bishop Museum, U.S. Fish and Wildlife Service, University of Hawai'i/Hawai'i Institute of Marine Biology, Old Dominion University, and the Association for Marine Exploration, to document biodiversity on Mesophotic Coral Ecosystems (MCEs; deep coral reefs). Besides collecting important specimens of invertebrates, fishes and algae and conducting surveys, they recovered a series of sophisticated sensor arrays that have been gathering data at different depths down to 100 meters (330 feet), which will help better understand the conditions for both coral-reef habitats, and help inform climate-change research. In December and February, team members travelled to Wake Atoll on two separate visits to complete a multi-year project conducting surveys of fishes and sea turtles at Wake Atoll, funded by the U.S. Army Corps of Engineers. The team successfully completed quantitative surveys on shallow reefs, and also took the opportunity to explore deep coral reefs down to depths in excess of 120 meters (400 feet). In addition to documenting many new records of fishes, they also discovered some of the richest and most well-developed stony-coral habitats anywhere on Earth. In April, Brian Greene and Richard Pyle gave the first high-profile public presentation of EXCORE at the Philosophical Society of Washington (PSW), held at the Cosmos Club in Washington, DC, and the presentation is available online (https://youtu.be/NasoP_b5kJY?t=946).

Entomology

Entomology staff have provided collection tours and fulfilled many physical loan requests to researchers. The Entomology department has digitized the data for, and imaged, hundreds of specimens requested by researchers who are interested in using the specimens in this collection. With this, Entomology has started to transition their database containing over 150,000 records from Specify into EMu with the help of our Informatics department to make this data accessible to the public.

The Entomology department is beginning the final year of their IMLS Museums for America grant for digitizing Hawaiian cave arthropods. Over 3,000 new records of cave arthropod collections have been recorded and catalogued and more than 1,500 specimens have been imaged. Cave researchers' field notebooks have been scanned and made accessible to cave researchers in Hawai'i. As part of this project, Entomology staff have collaborated with researchers from the University of Hawai'i at Mānoa to train volunteers and store invaluable Hawaiian cave research collections at the Bishop Museum.



Pacific Center for Molecular Biology

As the only dedicated, non-human tissue and genomic resource cryopreservation in the Pacific, the Pacific Center for Molecular Biodiversity continued to grow the collections of specimens from Hawai‘i and across the Pacific. PCMB added more than 5,000 new samples from rare, endangered, and endemic plants, animals, fungi, and bacteria from across Hawaiian and other Pacific Island ecosystems. This was accomplished through a combination of intensive field work in Hawai‘i, American Sāmoa, and Guam, through collaborations with other museums and researchers, and with a highly supportive community of resource managers and conservationists in the islands. The tissue and genomic resources cared for by PCMB staff now include more than 80,000 samples and serve as a valuable resource for the multiple local, state, and federal agencies tasked with biosecurity and management of natural resources. We work with these agencies and NGOs across the state to provide updated results from a rigorous collections-based research program that uses modern molecular tools integrated with classic taxonomic approaches to more fully understand the biocultural diversity that makes Hawai‘i and the Pacific Islands unique. Our extensive research, collections management, and educational activities have allowed PCMB and partners to achieve and expand the broader museum mission of preserving, understanding, and sharing the stories of natural and cultural history of the Pacific.

Activities in PCMB included the sequencing of the first whole genomes of seven endemic species of Hawaiian land snails – all critically endangered, except one, which is considered extinct. These data are providing deep insights into the blueprints of snail biology, informing conservation practices for the next decade.

Highlights from some of the federal and state funded projects that continued this year are given here.

NSF-PGAFF PASCP Project: Building on the incredible first year of this project, PCMB staff in collaboration with partners in Malacology completed surveys of

native plants, snails, and microbial communities at multiple locations on O‘ahu and West Maui. We identified and sampled the phyllosphere (surface microbial community) from more than 500 individual plants. These data are supporting theses of three undergraduate student projects, as well as a Ph.D. student at UH Manoa.

In collaboration with Malacology and partners at DLNR, UH, and Pomona College we have recruited a cohort of four undergraduate summer interns that spent six weeks at the museum doing hands on research and developing independent projects which will contribute to their degrees. This program culminated in the Summer Conservation Hō‘ike on July 19, where interns presented their research and plans for the school year to representatives from the Governor’s office, Hawai‘i Department of Education, Hawai‘i Department of Land and Natural Resources, and others.

USDA APHIS: This project continued into a second year with a no cost extension as we surveyed for non-native snails, earthworms, and flatworms at the request of the USDA and HDOA. This project was slated to end in April 2024, but has been extended until 2025 to allow the completion of additional sur-

veys. The primary focus of the project is to conduct surveys across the main Hawaiian Islands at nurseries, horticultural, and agricultural facilities for non-native snails, earthworms, and flatworms, all of which have major impacts on biosecurity in Hawai'i.

USFWS Freshwater Snails: This project is the only comprehensive survey of freshwater snails ever conducted in the state of Hawai'i and has provided a wealth of data for the management of freshwater ecosystems across the state. Initially spurred on by the need to assess the conservation status of the federally listed species *Erinna newcombi*, endemic to Kaua'i, the project has grown because of the extensive survey work in some of the most remote reaches of the islands. We have discovered at least 20 new freshwater snail species that are part of an endemic radiation, previously overlooked because of inadequate taxonomic assessments. Accurate taxonomy and well documented distribution models serve as a foundation for making effective resource and conservation management decisions. As such, this project has had far reaching impacts across the state with regard to managing aquatic resources.

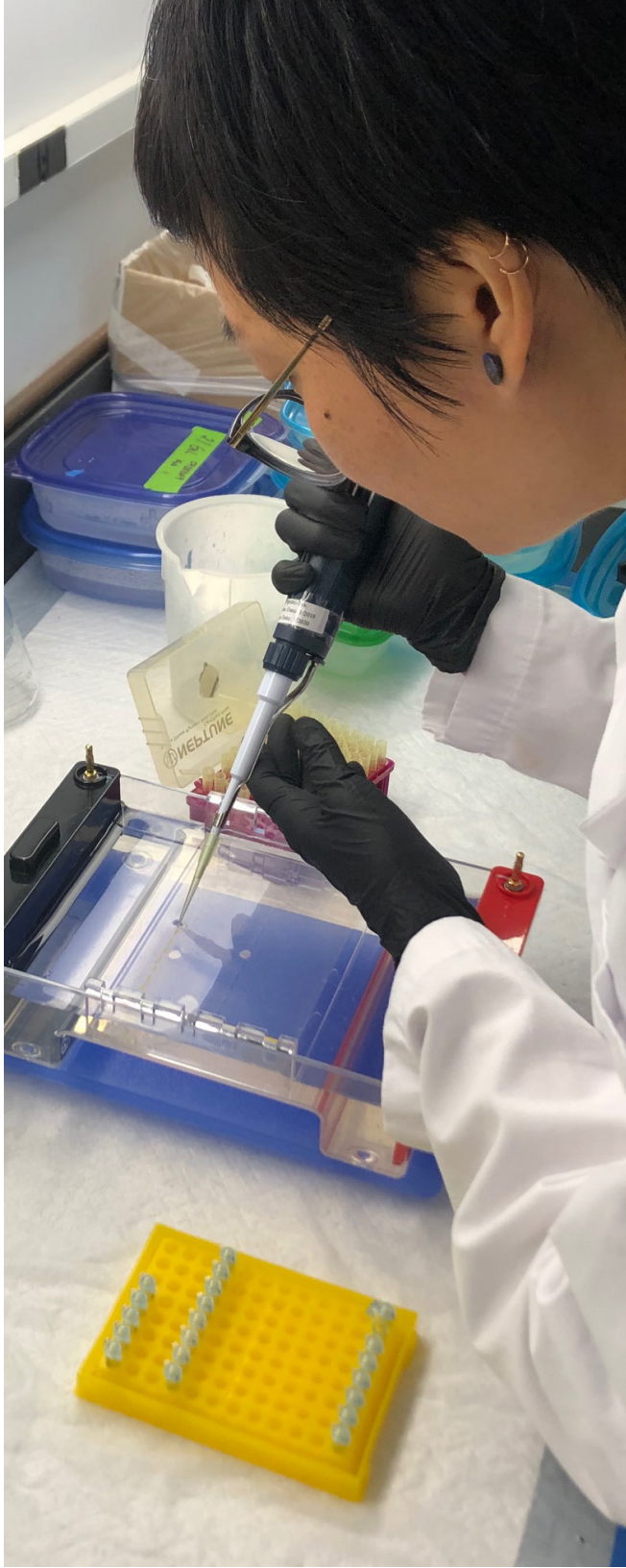
USFWS Snail Parasite Screening: This project wrapped up this year. It was a collaborative effort between PCMB, Malacology, and the state's Snail Extinction Prevention Program. The project developed protocols for screening captive and wild snails for parasites and pathogens, and for assessing their microbiomes – a key indicator of snail health. These results along with ongoing research with PCMB are leading to changes in how snails are reared and cared for in captivity.

NSF BIORETS: The first year of the NSF Biological Research Experience for Teachers was incredibly successful. We hosted four teachers, two from O'ahu and two from Hawai'i Island. As part of the seven week program, teachers worked alongside researchers and collections staff in Malacology and PCMB to develop research projects of their own and to use these to produce novel, hands-on, and place-based curriculum that will be taught at their schools in the year to come. The program is entering its second year and will recruit an additional 10 teachers for the seven week summer program, and with support from the HDOE and other partners, we anticipate it growing beyond Hawai'i, into other regions of the Pacific.

DLNR Captive Rearing: While the bulk of this project is centered in Malacology and is aimed at expanding the capacity for captive rearing and public engagement and education, PCMB staff play a major role in maintaining captive snails, and addressing research questions needed to more effectively conserve them both in captivity and in the wild. Ken Hayes, the Director of PCMB has led the development of the captive rearing research center, which is slated to open in November 2024 with a grand opening ceremony coinciding with this year's Kāhuli Festival.

Wildlife Forensics: PCMB continued to take on contract work from state and private resource management agencies and consultants. We use genetic tools to sex wild bird populations for Pacific Rim Conservation, Archipelago Research and Conservation, Maui Seabirds, and Save our Seabirds Kauai. We used molecular approaches to sex downed bat carcasses recovered on windfarms, a requirement for USFWS permits for the wind farm companies. Additionally, we continue to provide key identification services and molecular resources to many resource managers around the island.

Maui Nui Biodiversity Surveys: We were awarded a new, two-year project with the Maui Department of Forestry and Wildlife to help assess native invertebrate biodiversity on managed lands. This project builds on previous survey work that we've been conducting for more than two decades, and uses a comprehensive approach to understand the community structure in ecosystems managed by the state. As part of the project, training will be provided for DOFAW staff and partners, including taxonomy, biodiversity surveys, invasive species management, and mitigation.



Marketing and Communications

COMMUNICATIONS

The Bishop Museum Communications Team's kuleana includes sharing about the critical work being done by Museum staff via the online channels the Team manages, as well as through engagement with local, national, and global news media.

Our goal is to encourage visitors and media to **visit** the Museum and **experience** its exhibitions, galleries, and public programs, and **engage** with its staff and community partners.

PUBLIC RELATIONS

In 2024, Bishop Museum's media engagement efforts aimed to amplify local, national, and international awareness of the Museum's role as the State of Hawai'i Museum of Natural and Cultural History. Through news releases and targeted media engagement, PR efforts have increased visibility and driven attendance for new exhibitions such as *Ka 'Ula Wena: Oceanic Red*, *Corned Beef & Kalo*, and *Kū a Lanakila! Expressions of Sovereignty in Early Territorial Hawai'i, 1900–1920* – exhibits that all touch on central issues directly related to Hawaiian and Pacific peoples, cultures, and histories.

The Team conducted Media Previews prior to the opening of these exhibitions, and created Media Packages of photographs, b-roll, and video interviews to share with media that were not able to attend the Preview events. This effort resulted in coverage in Hawai'i's main news outlets including the *Honolulu Star-Advertiser*, Hawaii News Now, KHON, KITV, Hawai'i Public Radio, and *Honolulu Magazine*; as well as national and international media including *USA Today*, *Travel Weekly*, *AAA Magazine*, NHK (Japan), and other major outlets.

Bishop Museum's strategic partnerships with organizations such as the O'ahu Visitors Bureau, Hawai'i Visitors and Convention Bureau, and Hawai'i Tourism Authority have further extended its reach, inviting international FAMs from Japan, Korea, Canada, and Germany/Europe, reinforcing its role as an essential destination for visitors to learn about Hawai'i and the Pacific. In the summer, the Museum also played a pivotal role in the 13th Festival of Pacific Arts and Culture as a premier venue for FestPAC's carving and tattoo villages – as well as hosting a public program focused on voyaging's key role and connections across Oceania – resulting in extensive local, national, and international media coverage.

In addition to spotlighting consumer-facing aspects of the Museum, the PR team's efforts also focus on elevating the public's awareness of Bishop Museum as a premier research institution. In 2024, media coverage has highlighted the Malacology team's work to increase awareness of Hawai'i's land snail extinction crisis; the Invertebrate Zoology collaboration with State and Federal agencies, and community partners, to stem the spread of marine aquatic invasive species in Hawaiian waters; Botany's digitization milestone of making the largest Hawaiian plant collection in the world accessible online to the public; Vertebrate Zoology's work to raise awareness of Hawai'i's Native Hawaiian birds; the opening of the Bishop Museum Seed Bank and its work in native plant restoration efforts; Bishop Museum's annual Science & Sustainability Festival, which brings together dozens of government and community partners; as well as the Museum's support of citizen science programs such as the City Nature Challenge.

2024 Media Summary:

(All figures* as of Oct. 30, 2024 | source: Critical Mention)

- Total TV Audience: 2,369,500
- Total Radio Audience: 4,848,403
- Total Online + Print Audiences: 2,619,030,835

*Does not include international media mentions, or media mentions via community calendars and email marketing.

SOCIAL MEDIA

The Museum's approach to social media – the single most-engaged media managed by Bishop Museum, and the sole communications vehicle where Museum news is shared on a daily basis – is similar to that of an education institution: sharing informative and pertinent information paired with rich content reflecting Bishop Museum's role as "The Smithsonian of the Pacific."

Notably, the Museum's social campaigns have brought awareness and visibility to both cultural and natural sciences collections and research, as well as click-throughs to ticketing pages for the Museum's monthly public programs showcasing the same.

Key social media campaigns include:

- #NūhouMonday (preservation of Hawaiian language newspapers)
- #MauKaLeo (showcasing the Museum's storytelling platform – our campaign included verbal storytelling videos of cultural and natural science collections, and the people who care for them)
- #EthnologyThursday (showcasing the Museum's cultural collections)
- #NaturalScienceSaturday (showcasing the Museum's natural sciences collections and research)
- #BishopMuseumOhana (showcasing the Museum's experienced and dedicated staff, and the work they do)

2024 Social Media Summary:
(All figures as of Oct. 28, 2024 | sources noted in parentheses below)

- Followship
  - Facebook: 62.9K+ (Meta)
  - Instagram: 52.7K+ (Meta)
- Reach
  - Combined Page & Profiles: 12M+ (Hootsuite)
- Engagement
  - Average Post Engagement Rate: 5.4%
  - National Average for Education: 3.6% - 4.7% (Hootsuite, Sept. 2024)
- Click-throughs
  - Combined: 115K+ (Meta)

EMAIL MARKETING

The Communications Team sends out an average of two e-newsletters per month, a digital version of its *Ka 'Elele Journal*. The first e-news focuses on a new article highlighting the Museum's collections, galleries, exhibitions, research, public programs, and/or staff. The second provides a preview/overview of the next month's exhibitions, public programs, daily programs, key facility rentals, and Planetarium shows.

2024 Email Marketing Summary:
(All figures as of Oct. 30, 2024 | Source: Constant Contact)

- E-newsletter Subscribers: 32K+
- Average Open Rate: 50%
  - National Average for Education: 34.5% (August 2024)

MARKETING

We have been able to increase our marketing presence thanks to the state funding support. Produced a 30 second spot which began airing in May on HNN and KHON with placements primarily during news and cultural programs. KHON produced three segments of Aloha Authentic, which is hosted by Kamaka Pili featuring cultural content. Digital ads and streaming media were also implemented in May.

Refreshed digital ad content and refined the strategy around search and display ads.

Bishop Museum Website Metrics – FY 2024

Serving the Community and Partnering with Agencies
Our website plays a pivotal role in serving both the local and global community by acting as an accessible platform for educational resources, event promotion, and visitor information. Through strategic SEO efforts and partnerships, we achieved **535,000 active users**, with **305,000** visitors arriving via organic search. These metrics underscore our success in making Hawai'i's natural and cultural history available to a wide audience and reflect meaningful partnerships with external agencies that help amplify our reach.

Contributing and Sharing Knowledge Locally and Globally
The Museum's digital presence attracted **532,000 new users** from diverse regions. While the **United States accounted for 479,000 visitors**, the site also drew traffic from **Japan**, **Canada**, **Australia**, the **United Kingdom**, **Israel**, and **Germany**. Popular educational resources show that users worldwide value our efforts to showcase Hawaiian culture. This global engagement reinforces our commitment to being an international hub of knowledge rooted in the preservation and celebration of Hawai'i's heritage.

Relevance for Future Preservation of Culture and Environment
The Museum's website supports sustainable cultural preservation by engaging users with programming aligned with our mission. For example, the **Planetarium page garnered 29,000** views, underscoring the relevance of astronomy and environmental education in our offerings. With **63,000 views on the Admission page** and **79,000 views on Programs & Events**, the site also encourages active participation in physical exhibits, ensuring that our cultural preservation efforts remain vibrant and participatory.

Justifying Support and Solidifying Our Role as Hawai'i's Museum of Natural and Cultural History
The metrics reflect our role as a trusted institution worthy of continued state support. Bishop Museum's web traffic demonstrates robust interest from Hawai'i's residents and visitors alike. High engagement numbers (**972,000 recorded engagement events**) prove the site's value as more than just a transactional tool — it fosters meaningful interaction with our content. Our diverse traffic channels reveal the Museum's active outreach efforts and responsible use of resources.

Leveraging Expertise to Produce Greater Outcomes
Our digital strategies reflect coordinated internal efforts to optimize content and engage stakeholders effectively. Multiple campaigns generated significant returns:

- **Direct traffic accounted for 171,000 users**, demonstrating strong brand recognition and successful cross-promotions.
- **Paid search and social channels drove 113,000 users**, validating the effectiveness of targeted marketing investments.
- **Organic search** attracted **305,000 users**, underscoring our success with schema and SEO driven content that aligns with user interests and informational needs.
- **Organic social media** efforts brought in **60,000 users**, showing the impact of organic reach through community engagement and social sharing.
- **Display advertising** added **59,000 users**, extending our visibility and supporting specific campaigns, yielding higher ticket sales.
- **Referral traffic**, at **42,000 users**, highlights productive partnerships and collaborations that amplify our reach through allied sites and organizations.

Institutional Advancement
(Membership, Individual Giving, Corporations, Grants, Outreach)

REGIONAL OUTREACH

SEATTLE LIVE ALOHA HAWAIIAN CULTURAL FESTIVAL

Sept. 10, 2023, Seattle Center

Bishop Museum Library and Archives team assisted in providing photos of all five Kamehamehas, Kalākaua and Lili'uokalani to be displayed at the event. In-person with 'ohe kāpala stamping onto bookmarks, hū and pala'ie games, Uchiyama decoy honeycreeper bird display, and various keiki coloring activity sheets.

TACOMA UKULELE FESTIVAL

Oct. 20–21, 2023, Tacoma, WA

Bishop Museum co-sponsored this event with online presence on website.

SAN DIEGO HO'OLAULE'A

June 22 and June 23, 2024

Offered Hawaiian games: hū (spinning tops), pala'ie (loop and ball game). Talk on Hawaiian Honeycreeper bird initiatives. Keiki activities for all ages include 'ohe kāpala (bamboo carved stamps) stamping blank bookmarks, and a variety of coloring sheets. KUSI (Fox 5 San Diego) taped a short video segment featuring Bishop Museum. Social media presence on various channels leading up to the event mentioning Bishop Museum.

CHICAGO'S LEGACY HULA EXHIBIT AT FIELD MUSEUM

Bishop Museum Press provided books for educational tool kits that empower Chicago's public school system. A variety of tool kits containing specific items aligned with a curriculum directly related to the exhibit will live on in the Harris Library education department for registered schoolteachers to check out, Field Museum, and Aloha Center Chicago. Four tool kits highlighting Hawaiian language, Hawaiian values, Regalia/Adornments of Ali'i and implements were created and would be used to conduct professional development workshops for the Field Museum, and to be used by Chicago's public-school teachers whose schools are registered with the Field, field trips and outreach programs.

MEMBERSHIP

AN EVENING WITH DESOTO BROWN

Jan. 25, 2024

Guests learned fascinating history about Hawai'i's visitor industry, from its beginnings in the 1880s and continuing to the present. Numerous rare historic promotional and advertising images, colorful and often pure fantasy, clearly show how travelers have been enticed to visit Hawai'i for well over 100 years. DeSoto Brown shared how the typical visitor's travel evolved as changes in technology served to make the journey faster and cheaper, and how these in turn spurred more extensive development throughout our islands.

A NIGHT BEHIND THE SCENES.

March 28, 2024

Bishop Museum Members at the Visionary and Stewardship Circle level of membership enjoyed an intimate behind-the-scenes engagement with a selection of Bishop Museum artifacts and collections.

CORPORATE RELATIONS & PARTNERSHIPS

Corporate sponsorships and partnerships totaled approximately $163,824 in FY24. In-kind donations of $150,000 were also received. Wholesale contracts were renegotiated and focused on the most productive partners, eliminating unproductive accounts. Hotel keycard programs were also re-established with new hotels onboarded.

Partners included, but were not limited to Aqua Aston Hospitality Group, Kyo-ya hotels and resorts, Halekulani, Wayfinder Waikiki, ProService Hawaii, FICOH, Maui Divers, Zephyr Insurance, Dawson, Outrigger Hotels and Resorts, and Pasha Hawaii.

FOUNDATIONS AND GRANTS

Grants include both private and government grants. In FY24, the Museum received $1,559,634 in grant funding. This does not include science and research grants. Funders included, but not limited to National Endowment for the Humanities, National Park Service, Jesse D. Kay Memorial Fund, McInerny Foundation, Atherton Family Foundation, Hawai'i Tourism Authority, Hawai'i Council for the Humanities, and the National Endowment for the Arts.

INDIVIDUAL DONORS

Individual donors gave about $763,000 in FY24. The number of donors has remained steady YOY. There were no significant realized bequests during the year, as was the case for the last three years.

FY 2024	Previous FY	Change from Previous FY
5670 Memberships	5888 Memberships	(218)
$755,652.03	$767,004.89	($11,352.86)

BISHOP MUSEUM

1525 Bernice Street | Honolulu, HI 96817
bishopmuseum.org