

LG-41-10-0013-10 IMLS Final Report Part 1

2. Project Title: Hawaii Connecting to Collections

3. Partners:

Hawai'i Museums Association
Hawai'i State Archives
Association of Hawai'i Archivists
Hawai'i Library Association
University of Hawai'i at Manoa Museum Studies Program
University of Hawai'i at Manoa Library Preservation Department

4. Overview (150 words or less)

The Hawaii Connecting Connections to Collections IMLS grant engaged representatives from archives, libraries, and museums (on all islands) to create the first statewide preservation plan – *Preserving Cultural Heritage Collections in Hawai'i: A Statewide Preservation Plan*. The cultural heritage community contributed to the development of the plan at two statewide meetings. In addition a survey that gathered data to document issues that endanger cultural resources in the islands. The survey findings and the plan have been shared with everyone who has participated in the project, including key legislators, and local funding agencies. The project fueled enthusiasm and created opportunities for institutions and individuals to work together to develop heritage collection-based networks.

5. Project activities

Statewide meeting – May 22, 2010

A meeting was held in Honolulu at the annual Hawai'i Museums Association (HMA) meeting May 22, 2010. Eighty people from libraries, museums and archives throughout the state attended the kick-off event. Barclay Ogden (project consultant) facilitated the meeting and introduced the grant project. Attendees broke into small groups that were facilitated by the IMLS grant Leadership Group. Participants were asked to prioritize Heritage Health Index goals according to relevance to Hawaii; and this provides a snapshot of their concerns:

- 1) Assign responsibility for collections care;
- Tied: 2) Provide safe conditions for collections;
- Tied: 3) Marshal public and private support;
- 4) Develop disaster plan

Survey (July 2010 – March 2011)

The survey was conducted using Survey Monkey. It provides a snapshot of the issues faced by a diverse group of curators that take responsibility for collection care. Sixty- six Cultural Heritage Institutions participated:

- 51% Museums
- 21% Archives
- 17% Libraries
- 11% Arboretums / Botanical Gardens

Hawai'i institutions manage over 1 Billion artifacts:

2,028	Historic buildings
45,000	Living specimens in Arboretums / Botanical Gardens
51,705	Moving images
100,000	Historic objects
134,000	Works of Art
1.3 million	Books
2.7 million	Photographs
79.7 million	Archival documents (31,901 cu ft archives)
15 million	Natural science specimens

The paradise factor (high relative humidity and temperature) accelerated deterioration of objects. The major factors that caused collection damage:

- 49% insects
- 49% light
- 54% moisture
- 78% physical / chemical deterioration

Need for environmental controls that meet temperature and humidity specifications to house materials – 60% of the institutions do not have environmental controls; only 57% of those that do have controlled environments monitor the area on a regular basis.

Collections are vulnerable to catastrophic loss. 31% represents a strong core of institutions that have written plans and trained staff. 56% had no written plan nor staff trained to carry it out; 13% did not know. Despite good participation in workshops focused on developing disaster preparedness plans, more work needs to be done Hawai'i.

Collection care needs By indentifying these needs, a more complete picture emerges of the conservation and collection management challenges being faced by institutions that are stewards for these varied types of materials.

Collection Care needs	URGENT	SOME CARE	UNKNOWN
Moving images	33%	50%	8%
Historic buildings	30%	57%	0%
NS Invertebrate specimens	20%	40%	0%
Art (Sculpture)	19%	46%	4%
Photographs	18%	78%	4%
Science, technology objects	18%	56%	9%
NS Geological objects	17%	33%	0%
Ethnographic objects	16%	64%	4%
Sound recordings	16%	54%	8%
Furniture	14%	55%	5%
Maps	13%	62%	5%
Archaeological, Bulk	13%	60%	7%
Archaeological, indivi. Cat.	12%	65%	12%

Textiles	12%	74%	0%
Art (paintings)	11%	74%	3%
Art (prints, drawings etc.)	10%	74%	10%
Books	9%	72%	2%
Metal work	7%	52%	11%
Archives	4%	78%	6%
Living specimens	0%	88%	0%
Digital objects	0%	62%	10%
Decorative Arts	0%	52%	15%
Ceramics	0%	48%	7%
NS Herbarium specimens	0%	40%	0%
NS Paleontological specimens	0%	17%	0%
NS Entomological specimens	0%	17%	0%

- Unknown needs indicate an opportunity for completing collection inventories to identify needs or training desired to increase awareness about deterioration issues (e.g. digital objects).
- Urgent needs demonstrates evidence of formats (e.g. moving images, photographs and sound recordings) that face accelerated physical / chemical deterioration.
- Historic buildings and Living specimen collections (zoos, arboretums / botanical gardens) are well documented.
- Natural Science (NS) collections are well documented and generally need some care but only a few (e.g. Invertebrate and Geological objects) need urgent care.
- Living specimens require some care (possibly on-going maintenance) – demonstrating the difference in preservation needs between this type of cultural heritage collection and artifacts.

Preservation and Conservation expertise - Despite all of the significant preservation needs faced by cultural heritage institutions there is not a single in-house conservation treatment lab in Hawaii; and there is only one institution with staff focused solely on preservation management issues (University of Hawai'i at Manoa Library). To address collection conservation needs 16% of the institutions (primarily museums) regularly contract with conservators for specialized treatment of collections.

Statewide meeting – April 7, 2011 – Hawaii Connecting to Collections

Eight-five people representing Libraries, Archives, Botanical Gardens, and Museums attended the all day event at the Queen Emma Summer Palace in Honolulu. Twenty-two percent of the participants were from the neighbor islands (Hawai'i island, Māui, Moloka'i, and Kaua'i).

Participants were provided a written summary of the findings from the 2010 IMLS survey, and Lynn Ann Davis reviewed the highlights to establish a baseline for discussions to follow. Barclay Ogden (project consultant) introduced the small group discussions that were facilitated by the Leadership Group. The topics were:

- **Advocacy** - What does Advocacy look like? How do we communicate effectively?
- **Information and Training** – What ways could a network facilitate information and training? What methods of delivery work best?

- **Networking** - What does networking look like in action? Does a statewide network make sense?
- **Sustainability** – What exists to sustain a statewide program? What do we need to put in place to create sustainable support for collection care?

As each group reported on the discussions, Ogden transcribed their priority initiatives on flip charts at the front of the room. It quickly became clear that priorities overlapped.

Three top needs were identified:

- Preservation information
- Education and training
- Building a statewide preservation network (including island/county networks)

These priorities are the core of *Preserving Cultural Heritage Collections in Hawai'i: A Statewide Preservation Plan*.

6. Project audience

Archives, Library and Museum community (on all islands Hawai'i island, Māui, Moloka'i, and Kaua'i)

To maximize the grant impact workshop participants and supporters included individuals from state government and the private sector (Hawai'i State Legislature, Hawai'i State Civil Defense, Harold K.L. Castle Foundation, Laniakea Foundation, Hawai'i Committee for the Humanities, and Belfor Hawai'i).

7. Analysis of project

a. Compare actual accomplishments with goals and objectives

1) Develop professional leadership network - Hawaii's Heritage Collection Managers (HHCM) with participants from museum, library and archive collection managers

The leadership group has been a successful component of the grant. They participated in developing the survey and leading small groups at the two statewide events. Prior to these meetings, Barclay Ogden organized a half-day training to build skills and confidence of the leaders. Four additional people were identified and invited to take part in this leadership initiative, expanding the leadership group to nine people.

Although a formal leadership network has not yet been created, the project partners and the project leadership group have agreed to work together to develop projects to support collection care needs identified in the statewide preservation plan.

2) Conduct a survey to identify issues that endanger cultural resources in Hawai'i; based on existing models including the *Heritage Health Index* survey, and recent surveys conducted in Guam, Washington and Colorado

The survey was created based on the existing models and data was collected using Survey Monkey. Sixty-six cultural heritage institutions (representing every island) participated. Survey findings were distributed and used to implement discussion at the April meeting and establish statewide preservation priorities.

3) Convene island-wide meetings to review draft report, identify statewide goals, and distribute report to local professional organizations, the Hawai'i State Legislature, and local funding agencies.

There were two statewide meetings. The first was introduced the project, the survey, and developed the foundation for participation. Small group discussions contributed to bridging the traditional division between collection managers in archives, libraries and museums.

Airfare was paid for all neighbor island participants. The number of participants was disappointing low due to collection staff wearing multiple hats, and were needed to

b. Unanticipated events created delays or obstacles; summarize lessons learned

Project Investigator had health issues (October – December 2010) and this postponed the completion of the survey, the interim report, and the scheduling of the final event. Although the grant results were not compromised, it confirms the importance of expanding leadership within Hawaii's cultural heritage collection community.

b. Changes in individuals: knowledge skills attitudes, behaviors

Several individuals mentioned that the regular events, and the survey increased their enthusiasm and their view that by working together we could help them make a better case for collection care. Two of these individuals have begun networks for cultural heritage collections; one on Maui County and the other on Hawaii Island. Another person has made disaster preparedness her budget priority for the next fiscal year.

c. additional information or data that documents project impact. Impact is a large-scale and/or long-term result that affects one or more institutions, communities

8. What's next? Describe any plans to continue work in this area

WESTPAS workshop: *Are You Ready?* – April 8, 2011

Taking advantage of existing opportunities to assist in building a statewide network, the Western States and Territories Preservation Assistance Services (WESTPAS) offered a free *Are You Ready?* workshop (supported by a grant from the National Endowment for the Humanities). It was logical to link this workshop to the IMLS event as a core goal of this workshops network building.

Fifty participants were asked to assess their building vulnerabilities and review their disaster preparedness plan prior to attending the workshop. Using a scenario tabletop exercise to facilitate this experience, Barclay Ogden, explored with the participants how collaborations can help organizations respond to a disaster and to build a shared vision for regional disaster preparedness.

Several collaborations were initiated at the workshop. Participants identified a need to work with other institutions on their island or in the county. Hawai'i Island and Māui County (Māui, Moloka'i and Lana'i) have taken the first steps to develop networks. Lynn Ann Davis (also a WESTPAS trainer) will continue to follow up with participants over the next year.

On-going communication

- On-going communication will be maintained through a Facebook page – Hawai'i Connecting to Collections (HI-ccc) and a list-serve (supported by the University of Hawai'i).
- An up-to-date mailing list is key to the maintaining a sustainable network. The current list is regularly updated and has 188 members. It is being maintained by the UHM Library Preservation Department.

Sustainable Collection Care

The nine members of the Leadership group have agreed to be part of a start-up committee to develop a plan for sustainability. They will work with the six heritage organizations that facilitated the Project (Hawai'i Museums Association, Hawai'i State Archives, Association of Hawai'i Archivists, Hawai'i Library Association and University of Hawai'i at Manoa (UHM) – Museum Studies Program and Library Preservation Department). They will work on developing projects to support the collection care needs identified in the statewide preservation plan:

- Preservation information
- Education and training
- Building a statewide preservation network (including island/county networks)

9. Grant products (attached).

Hawaii Connecting to Collections Survey Report

Preserving Cultural Heritage Collections in Hawai'i: A Statewide Preservation Plan

Preserving Cultural Heritage Collections of Hawai'i: A STATEWIDE PRESERVATION PLAN

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1. Executive summary

Through its nationwide "Connecting to Collections" initiative, IMLS challenged each state to develop a plan to address the preservation needs of cultural heritage collections including historic sites, buildings, art, historical artifacts, scientific specimens, books, and documents. In 2009, the Hawai'i Museums Association partnered with Hawai'i State Archives, Association of Hawai'i Archivists, Hawai'i Library Association and University of Hawai'i at Manoa (UHM) Museum Studies Program and the Library Preservation Department. Through meetings and a survey, individuals from institutions throughout the state came together to explore the issues that endanger cultural resources and to create a plan to address preservation needs.

Hawaii's initiative succeeded in bridging a traditional division between archives, libraries and museums. This is demonstrated by the diverse representation of institutions that participated in the 2010 survey (see Appendices for details) to identify preservation needs (51% museums, historical societies, historic sites; 21% Archives; 17% Libraries; 11% Botanical Gardens and Arboretum). Due to an extra effort on the part of the grant's Leadership Team, participation expanded to include another important segment responsible for cultural resources – Botanical Gardens and Arboretums.

Two statewide meetings (in Honolulu May 2010 and April 2011) brought participants together to discover their common issues. The collections managers from cultural heritage institutions on every island (Hawai'i island, Māui, Moloka'i, Lana'i, O'ahu and Kaua'i) identified common needs. The most commonly identified needs were:

- Preservation information
- Education and training
- Building a statewide preservation network

Meeting these needs will help ensure the survival of Hawaii's heritage collections. Since preservation needs are shared by all types of institutions in Hawaii's cultural heritage community, meeting them collectively creates opportunities to combine resources to achieve strength and cost effectiveness. Further, a statewide preservation network offers opportunities to dramatically improve communication across cultural heritage institutions

on every island; where most have not previously benefited from information sharing and collaboration outside of their segment of the heritage community.

A statewide preservation network designed to meet the needs of the Hawai'i cultural heritage community will build on preservation services already being delivered. Additionally, the invaluable resources of technical expertise in major Hawai'i institutions and organizational expertise in Hawai'i organizations of heritage professionals will be used to make development of a high impact, cost-effective statewide heritage preservation network a realistic goal.

2. Rationale for preserving Hawai'i heritage collections

Hawai'i is rich with cultural heritage institutions – hundreds of museums, libraries, archives, historical societies, historic sites and buildings, and botanical gardens contain millions of cultural artifacts, scientific specimens, and documents. Hawai'i is disaster prone with many potential problems: hurricanes, tsunamis, earthquakes, floods, mold and insects. Collections are at risk because a) institutions are isolated by the ocean, b) staff lack appropriate preservation information, c) funds are extremely limited, and, d) there is no readily available source of preservation assistance. Preserving collections of historical documents, artifacts, buildings, sites and botanical collections costs time, effort and money.

Everyone in Hawai'i gains by investment in their heritage institutions because Hawaii's history embraces many communities and ethnicities, capturing in its diverse records and collections the stories of cultural change and adaptation. Through this inclusive perspective, Hawaii's cultural history informs, inspires, educates, and entertains.

Hawaii's history informs:

- the present about the past in order to avoid repeating costly mistakes of the past
- how society evolves, providing a sense of connectedness to place and culture
- how our physical environment is evolving (e.g., coral reef, climate change)
- about Hawaii's role as part of the United States

Hawaii's history inspires:

- by instilling appreciation and wonder of the natural environment
- by being a center of many global trends-identity-phenomena
- through the creations of its writers, artists, and craftspeople
- through the accomplishments of its leaders (e.g., political, sports)

Hawaii's history educates

- by teaching with physical and virtual worlds to improve understanding of abstract concepts and ideas
- by using historical objects and sites to connect people with place and time
- by appealing to the interests of citizens of all ages and backgrounds

Hawaii's history entertains

- through heritage tourism, contributing to the state's economy

- through Hawaii's pop culture, its images, myths, and story telling
- through the television, film, and music industries

3. Building a Statewide collection preservation network

Building a statewide preservation network will provide a foundation for meeting goals to insure the preservation of cultural resources in Hawai'i. Giant strides have been taken towards developing a network with the IMLS grant. A steering committee (composed of the grant partners and leadership group) will "carry the torch" to develop a sustainable model, raise funds and incorporate existing resources. Leaders have stepped forward to form island networks for Hawai'i Island and Māui County (includes the islands of Māui, Moloka'i, and Lana'i). Other groups have begun to explore and discuss network models that would best facilitate goals, identify information and education and training.

Another important component for the foundation of the network is the existing resources that include professional organizations, local granting agencies, foundations, and national preservation/conservation organizations with trained participants in Hawai'i (AIC-CERT, WESTPAS), and the Preservation Department at University of Hawai'i at Manoa. By building on existing professional expertise in our island community we will build a sustainable model for collection care.

In spite being a smaller community where many people know each other, it remains a challenge to harness the passion of the collection managers, and even to maintain an accurate list of contact information. A sustainable statewide network will create group identification and increase community understanding and interest in preserving cultural resources.

Providing safe conditions for collections and marshalling public and private support for collections care were seen as primary goals. These goals require information and training tailored to meet the different needs of small and large institutions. After soliciting recommendations and suggestions at the statewide meeting, the following clusters of preservation services were identified:

1) Information

- Dedicated website of Hawai'i focused on preservation information
- Maintain up-to-date list serve
- Directory of local colleagues skill sets and ability to help
- Statewide calendar scheduling conservators events, workshops and community events
- Social network for membership discussions
- 24/7 number for advice on disaster response

2) Education and training

- Advocacy for preservation of collections
- Project development and grant writing
- Disaster preparedness and plan writing
- Leadership training
- Hands-on workshops to target specific needs

3) Consulting

- 24/7 number for advice on disaster response
- Email/telephone reference on preservation issues

- Collection needs assessments
- Building risk assessments
- Preservation program planning
- Grant writing and fundraising

4) Infrastructure to initiate a statewide network

The six heritage organizations that facilitated the Project (Hawai'i Museums Association, Hawai'i State Archives, Association of Hawai'i Archivists, Hawai'i Library Association and University of Hawai'i at Manoa (UHM) – Museum Studies Program and Library Preservation Department) and the Leadership group will serve as a start-up team to pursue funding and an organizational structure for a heritage preservation network, and initiate its activities. The start-up committee members represent heritage professionals statewide and will ensure that heritage institutions of all types, sizes, and on all islands have a voice. After the start-up phase, a call will be made to organizations in the heritage community to create a steering committee to succeed the start-up team and develop a plan for sustainability.

4. Outcomes for a statewide heritage preservation network

The enduring outcome of a Hawai'i heritage preservation network will be a culture of preservation management, where institutional resources are committed to preservation and sustainability is ensured by support from institutional collection managers addressing their preservation needs.

Preservation management is a much needed management skill, much like the online communication technologies and institutional marketing that have recently have been added to management skill sets. To ensure progress toward this outcome, a Hawai'i heritage preservation network will assist institutions to:

- initiate public awareness and/or fundraising initiatives for collections care
- make measurable improvements to conditions for storage of collections
- develop disaster response plans for collections
- assign responsibility for collections care to members of the staff

Multiple educational opportunities will be needed to reach a broad audience with different timetables for addressing their preservation issues. Growing a culture of preservation management will take time; a decade of training will be required before today's front line managers who are assigned responsibility for preservation become tomorrow's administrative and budgetary decision-makers. Slow though it may be, the strategy of growing a culture of preservation management works; many institutions that began with a staff member participating in a workshop or a seed project to preserve a single object now have staff with ongoing assignments to manage the preservation functions.

5. Securing support and funding

On behalf of the heritage community, the start up team (identified above) will explore opportunities to develop a sustainable network that includes grants and gifts as well as contributions of staff expertise from institutions and professional organizations.

Applications will be made to funding agencies for implementation grants (e.g., following completion of the statewide planning grants, IMLS is offering implementation grants for a few model statewide plans. The start-up team will submit an application for funding for some activities of the heritage preservation network Hawai'i.)

Several potential obstacles to support and funding have been identified and will be addressed. Many of the institutions that most need preservation assistance are relatively small with few resources other than their collections. The island geography could create a challenge in delivering workshops to participants on all islands. Grants will need to incorporate travel for trainers to provide workshops throughout the state as needed. The very different needs of small institutions from large institutions, creates a challenge to trainers. With multiple trainers and consultants from which to choose, the network will match expertise and institutional experience with audience needs. Many institutions, both large and small, have very limited funding with which to pursue their missions. Emphasis will be placed on teaching and implementing the most critical preservation measures.

The vagaries of funding are an obstacle to maintaining network levels of service. By using trainers and consultants on a contract basis, the network services will grow and shrink in response to funding opportunities and limitations. As institutional funding grows, service levels will stabilize. Funding sustainable programs will also explore partial cost recovery for some training and on-site consultations and membership/service/subscription fees on a sliding scale.

Appendix 1: The Hawai'i Connecting to Collections Project

Hawai'i is rich with heritage institutions (over 110 museums/historical societies/botanical gardens, 40 libraries, 50 archives) throughout the island chain. Collecting institutions are located on six islands (Hawai'i Island, Māui, Moloka'i, Lana'i, O'ahu, and Kaua'i). Separated by miles of ocean, the collection management professionals are isolated from each other. There are only a handful of preservation and conservation professionals located in Honolulu (UHM Library Preservation Department, and four conservators - painting, textile, and furniture). Collections are at risk because of the everyday environment; the "paradise factor" (high temperatures and relative humidity) causes year round damage to collections from light, fungi, and insects. With over 2,500 miles separating Hawai'i from the West coast, response to natural disasters (volcanoes, earthquakes, tsunamis, floods and fires) has to be initiated locally.

Recognizing that the problems that confront Hawai'i are compounded by geographic isolation, the focus of this project is to build capacity within the islands to ensure sustainable stewardship of collections. This can be best accomplished by strengthening professional relationships throughout the island chain between individuals responsible for heritage collections in museums/historical societies, libraries, and archives. To develop a sustainable alliance the Hawai'i Project Partners represents the broadest possible range of partner institutions: Hawai'i Museums Association, Hawai'i State Archives, Hawai'i Library Association and University of Hawai'i at Manoa (UHM) – Museum Studies Program and Library Preservation Department.

Bridging the traditional division between collection managers in archives, libraries and museums is an essential component of this grant. Hawaii's heritage collection management community is too small, and too isolated. To build sustainability for collection care it is vital to work together. Since 2005, the UHM the Museum Studies program and the Library's Preservation Department have integrated collection management instruction, introducing Library and Information Science students to museum management curriculum, and weaving different perspectives into preservation management courses.

Conducting a statewide survey of heritage collections is a tool that will be used to span these professional silos, facilitate leadership within the collection management community and gather relevant data to highlight issues that endanger cultural resources. A collection management leadership group has been selected to participate in developing and implementing the survey. It is made up of professionals representing archives, museums (art, history, historic sites, science collections) and libraries. To ensure statewide commitment to the survey and the project, travel grants will be made to defer cost of air travel for representatives from every island, and every type of cultural institution (libraries, museums, archives, botanical gardens). The project kick-off (planning meeting to introduce survey) will

take place May 20th in Honolulu, and a post survey follow-up meeting to review the final report, discussing goals for collection care in Hawai'i.

The project goals:

- 1) Develop professional leadership network - Hawaii's Heritage Collection Managers (HHCM) with participants from museum, library and archive collection managers;
- 2) Conduct a survey to identify issues that endanger cultural resources in Hawai'i; based on existing models including the *Heritage Health Index* survey, and recent surveys conducted in Guam, Washington and Colorado;
- 3) Convene island-wide meetings to review draft report, identify statewide goals, and distribute report to local professional organizations, the Hawai'i State Legislature, and local funding agencies.

The proposal responds to all of the four primary Heritage Preservation recommendations for organizations that hold collections in the public trust:

- Providing safe conditions for collections by identifying strengths and weaknesses in collection care through the survey and setting priorities for collection care;
- Improving disaster preparedness by building on momentum achieved workshops sponsored by Western States and Territories Preservation Assistance in Hawai'i (92% of the participants completed plans);
- Creating a professional alliance (Hawai'i Heritage Collection Managers) under the umbrella of Hawai'i Museums Association clearly establishes responsibility for collection care and creates a collective professional voice; and
- Increasing public awareness about collections care issues and funding opportunities; the survey will provide institutions with tools to marshal public and private support, and provide an awareness of statewide heritage preservation issues.

Appendix 2. Hawai'i Survey findings

IMLS Hawaii Collections Care Survey



1. Please select the category that best describes your institution? (please select only one)

	Response Percent	Response Count
Arboretum, botanical garden	7.9%	6
Archaeological museum, repository or research collection	6.6%	5
Archives (State or local government)	2.6%	2
Archives (non-government)	14.5%	11
Art museum	6.6%	5
College/University library	11.8%	9
Ethnology/Anthropology museum	1.3%	1
Historical Society	6.6%	5
Historic house/site	3.9%	3
History museum	10.5%	8
Natural history museum	3.9%	3
Public library	1.3%	1
Science technology museum	0.0%	0
School library	0.0%	0
Other (please specify)	22.4%	17
answered question		76
skipped question		0

Appendix 2. Hawai'i Survey findings

2. How many items are in your collection? Numeric answers only (DO NOT USE COMMAS).

	Response Average	Response Total	Response Count
Natural Science - DNA	200.00	3,000	15
Natural Science - Entomological Specimens	823,920.35	14,006,646	17
Natural Science - Zoological Specimens (Invertebrates)	1,990.73	29,861	15
Natural Science - Zoological Specimens (Vertebrates)	3,946.43	55,250	14
Natural Science - Paleontological Specimens (Shell, fossil, bone etc.)	2,697.47	40,462	15
Archaeological, Bulk (record in cubic feet)	269.47	4,581	17
Archaeological, Individually Cataloged	31,467.71	660,822	21
Archival records/manuscripts (record in linear/cubic feet)	839.50	31,901	38
Art on paper (e.g. prints, drawings, watercolors)	1,147.42	41,307	36
Books and bound Volumes	26,113.42	1,305,671	50
Ceramics and glass artifacts (include stained glass)	469.25	13,139	28
Decorative arts (e.g. fine metalwork, jewelry, timepieces, enamels, ivories, lacquer)	325.57	7,488	23

Appendix 2. Hawai'i Survey findings

Digital Objects	10,869.22	347,815	32
Domestic artifacts (include frames, household tools/ machines, dolls/toys, musical instruments)	427.78	11,550	27
Ethnographic & organic collections (e.g. kapa, wood objects)	2,620.77	81,244	31
Natural Science - Food crop (germplasm)	164.29	2,300	14
Furniture	138.68	3,467	25
Historic buildings	81.12	2,028	25
Maps	977.16	36,155	37
Metalwork (e.g. arms, armor, medals, coins)	259.44	6,486	25
Moving images	1,477.29	51,705	35
Natural Science - Herbarium Specimens	44,289.05	885,781	20
Natural Science - Zoological Specimens	584.19	9,347	16
Natural Science - Arboretum, Botanical Garden (Living specimens)	2,131.52	44,762	21
Natural Science - Aquarium specimens	6,800.00	102,000	15

Appendix 2. Hawai'i Survey findings

Natural Science - Zoo (living specimens)

13.50 189 14

Painting (e.g. on canvas, panel, plaster)

719.48 28,779 40

Photographic materials

60,598.25 2,666,323 44

Science, technology, agricultural, medical artifacts (include transportation vehicles)

39.65 793 20

Sculpture (carvings, indoor/outdoor sculpture in all media)

143.03 4,291 30

Sound recordings

1,224.35 41,628 34

Textiles (include flags, rugs, costumes, accessories)

1,025.49 35,892 35

answered question 64

skipped question 12

Appendix 2. Hawai'i Survey findings

3. Number of visitors per year who use the collection holdings described above

		Response Percent	Response Count
Less than 500		57.9%	44
More than 500 up to 1,000		5.3%	4
More than 1,000 up to 5,000		7.9%	6
More than 5,000 up to 10,000		13.2%	10
More than 10,000 up to 50,000		9.2%	7
More than 50,000		6.6%	5
answered question			76
skipped question			0

4. Number of visitors per year to the institution (if different than the previous question)

		Response Percent	Response Count
Less than 500		13.2%	10
More than 500 up to 1,000		1.3%	1
More than 1,000 up to 5,000		10.5%	8
More than 5,000 up to 10,000		11.8%	9
More than 10,000 up to 50,000		22.4%	17
More than 50,000		14.5%	11
Don't know		26.3%	20
answered question			76
skipped question			0

Appendix 2. Hawai'i Survey findings

5. What is your institution's operating budget?





		Response Percent	Response Count
Less than \$200,000		17.6%	13
More than \$200,000 up to \$1 million		28.4%	21
More than \$1 million up to \$10 million		17.6%	13
More than \$10 million up to \$20 million		6.8%	5
More than \$20 million		5.4%	4
Don't know		24.3%	18
answered question			74
skipped question			2

6. What is the estimated percentage of your institution's collection that has been cataloged / processed? (please select only one)






		Response Percent	Response Count
0%		0.0%	0
1%-24%		10.5%	8
25%-49%		18.4%	14
50%-74%		23.7%	18
75%-99%		43.4%	33
100%		3.9%	3
answered question			76
skipped question			0

Appendix 2. Hawai'i Survey findings

7. Do you use environmental controls to meet temperature and relative humidity specifications for the preservation of your collections? (please select only one)








	Response Percent	Response Count
Yes, in all areas 	40.0%	28
In some, but not all areas 	48.6%	34
No, in no areas 	8.6%	6
Don't know	0.0%	0
Not applicable 	2.9%	2
answered question		70
skipped question		6

8. Do you use controlled light levels to the specifications for preservation of your collection (please select only one)

	Response Percent	Response Count
Yes, in all areas 	21.4%	15
In some, but not all areas 	41.4%	29
No, in no areas 	28.6%	20
Don't know 	2.9%	2
Not applicable 	5.7%	4
answered question		70
skipped question		6










Appendix 2. Hawai'i Survey findings

9. Which of the following fire protection equipment does your institution have in collection storage areas?
(please select all that apply)

		Response Percent	Response Count
Smoke detectors		67.1%	47
Fire alarms		75.7%	53
Wet-pipe sprinklers		27.1%	19
Dry-pipe sprinklers		4.3%	3
Non-aqueous fire-suppression systems (e.g., Halon; FM-200)		8.6%	6
Fire extinguishers		84.3%	59
If there are fire extinguishers - they are inspected regularly		65.7%	46
answered question			70
skipped question			6

Appendix 2. Hawai'i Survey findings

10. What estimated percentage of your collection is stored in areas you consider adequate (large enough to accommodate current collections with appropriate storage furniture)? (please select only one)






	Response Percent	Response Count
0% 	5.7%	4
1-19% 	14.3%	10
20-39% 	8.6%	6
40-59% 	8.6%	6
60-79% 	12.9%	9
80-99% 	35.7%	25
100% 	7.1%	5
Don't know 	2.9%	2
Not applicable 	4.3%	3
	answered question	70
	skipped question	6

Appendix 2. Hawai'i Survey findings

11. How many staff members in your institution are assigned responsibility for some preservation or collection care activities? (if you don't know skip this question)




	Response Average	Response Total	Response Count
Staff with full time preservation or collection care responsibilities	2.05	84	41
Staff with part-time preservation or collection care responsibilities	2.19	125	57
Volunteers/Students with preservation or collection care responsibilities	3.93	161	41
	answered question		70
	skipped question		6

12. Does your institution have a WRITTEN Disaster Preparedness Plan that includes the collection? (please select one)

	Response Percent	Response Count
Yes 	31.4%	22
Yes, but it is not up-to-date 	22.9%	16
No, but one is being developed 	25.7%	18
No 	17.1%	12
Don't know 	2.9%	2
	answered question	70
	skipped question	6

Appendix 2. Hawai'i Survey findings

13. If you have a WRITTEN Disaster Preparedness Plan is your staff trained to carry it out? (please select one)

	Response Percent	Response Count
Yes 	31.4%	22
No 	55.7%	39
Don't know 	12.9%	9
	answered question	70
	skipped question	6

Appendix 2. Hawai'i Survey findings

14. Estimate collection care needs.

	Unknown condition	Need no care	Need some care	Urgent need	Response Count
Archaeological, Bulk	6.7% (1)	26.7% (4)	60.0% (9)	13.3% (2)	15
Archaeological, Individually Cataloged	11.8% (2)	17.6% (3)	64.7% (11)	11.8% (2)	17
Archival records/manuscripts	6.4% (3)	12.8% (6)	83.0% (39)	4.3% (2)	47
Art on paper (e.g. prints, drawings, watercolors)	10.3% (4)	7.7% (3)	74.4% (29)	10.3% (4)	39
Books and bound Volumes	1.9% (1)	20.8% (11)	71.7% (38)	9.4% (5)	53
Ceramics and glass artifacts (include stained glass)	6.5% (2)	45.2% (14)	48.4% (15)	0.0% (0)	31
Decorative arts (e.g. fine metalwork, jewelry, timepieces, enamels, ivories, lacquer)	14.8% (4)	33.3% (9)	51.9% (14)	0.0% (0)	27
Digital Objects	10.3% (4)	30.8% (12)	61.5% (24)	0.0% (0)	39
Domestic artifacts (include frames, household tools/ machines, dolls/toys, musical instruments)	10.7% (3)	14.3% (4)	75.0% (21)	3.6% (1)	28
Ethnographic & organic collections (e.g. kapa, wood objects)	4.0% (1)	16.0% (4)	64.0% (16)	16.0% (4)	25
Food crop (germplasm/DNA)	20.0% (1)	60.0% (3)	20.0% (1)	0.0% (0)	5
Furniture	4.5% (1)	27.3% (6)	54.5% (12)	13.6% (3)	22
Historic buildings	0.0% (0)	13.0% (3)	56.5% (13)	30.4% (7)	23
Maps	5.1% (2)	23.1% (9)	61.5% (24)	12.8% (5)	39
Metalwork (e.g. arms, armor, medals, coin)	11.1% (3)	33.3% (9)	51.9% (14)	7.4% (2)	27
Moving images	8.3% (3)	11.1% (4)	50.0% (18)	33.3% (12)	36
Natural Science - Entomological Specimens (insects)	0.0% (0)	83.3% (5)	16.7% (1)	0.0% (0)	6
Natural Science - Geological	0.0% (0)	50.0% (3)	33.3% (2)	16.7% (1)	6

Appendix 2. Hawai'i Survey findings

specimens (rocks and minerals)

Natural Science - Herbarium Specimens	0.0% (0)	60.0% (6)	40.0% (4)	0.0% (0)	10
Natural Science - Paleontological Specimens	0.0% (0)	83.3% (5)	16.7% (1)	0.0% (0)	6
Natural Science - Arboretum, Botanical Garden (Living specimens)	0.0% (0)	12.5% (1)	87.5% (7)	0.0% (0)	8
Natural Science - Aquarium specimens	0.0% (0)	50.0% (1)	50.0% (1)	0.0% (0)	2
Natural Science - Invertebrate specimens	0.0% (0)	40.0% (2)	40.0% (2)	20.0% (1)	5
Painting (e.g. on canvas, panel, plaster)	2.6% (1)	15.8% (6)	73.7% (28)	10.5% (4)	38
Photographic materials	3.9% (2)	5.9% (3)	78.4% (40)	17.6% (9)	51
Science, technology, agricultural, medical artifacts (include transportation vehicles)	9.1% (1)	18.2% (2)	54.5% (6)	18.2% (2)	11
Sculpture (carvings, indoor/outdoor sculpture in all media)	3.8% (1)	34.6% (9)	46.2% (12)	19.2% (5)	26
Sound recordings	8.1% (3)	24.3% (9)	54.1% (20)	16.2% (6)	37
Textiles (include flags, Rugs costumes, accessories)	0.0% (0)	14.7% (5)	73.5% (25)	11.8% (4)	34
			answered question		70
			skipped question		6




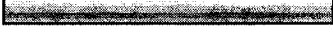


Appendix 2. Hawai'i Survey findings

15. For collections that are currently in need of treatment identify all the causes of the damage or loss. (please select all that apply)

	Response Percent	Response Count
Handling (e.g., by researchers, staff, in shipping)	42.9%	30
Water or moisture (e.g. mold, stains, warping)	54.3%	38
Light (e.g. fading, discoloration)	48.6%	34
Airborne particulates or pollutants (e.g. dust, soot)	44.3%	31
Fire	1.4%	1
Improper storage or enclosure (e.g. bent, creased, creased, adhered together)	57.1%	40
Insects (Pests)	48.6%	34
Vandalism	5.7%	4
Physical or chemical deterioration (due to temperature, humidity, aging, e.g. brittle paper, flaked paint, cracked leather, degradation of electronic media)	78.6%	55
Prior treatment (s) or restoration	18.6%	13
Other (please specify)		4
answered question		70
skipped question		6

Appendix 2. Hawai'i Survey findings

16. Please indicate which security systems your institution uses. (please select all that apply)

	Response Percent	Response Count
Security guard(s) 	40.0%	28
Employee and volunteer screening 	40.0%	28
Alarm system(s) 	72.9%	51
Written policy and procedure(s) 	51.4%	36
Control of access to collections 	82.9%	58
Exhibits behind glass or otherwise secured 	55.7%	39
Other (please specify)		7
	answered question	70
	skipped question	6

Appendix 2. Hawai'i Survey findings

17. What steps has your institution taken to provide care for its collections? (please select one answer for each line)

	Never	Rarely	Sometimes	Regularly	Always	Response Count
Rehousing (e.g., refolding, reboxing, making better storage mounts)	4.6% (3)	15.4% (10)	33.8% (22)	35.4% (23)	10.8% (7)	65
Installing storage furniture (e.g., shelving, cabinetry)	4.6% (3)	24.6% (16)	35.4% (23)	23.1% (15)	12.3% (8)	65
Providing care and handling instruction for staff	5.8% (4)	14.5% (10)	37.7% (26)	31.9% (22)	10.1% (7)	69
Preservation reformatting (e.g., preservation photocopying, microfilming)	11.1% (7)	23.8% (15)	36.5% (23)	28.6% (18)	0.0% (0)	63
Preservation management (e.g., administration, planning, assessment)	7.8% (5)	23.4% (15)	37.5% (24)	28.1% (18)	3.1% (2)	64
Delivering Conservation treatment (in-house)	21.3% (13)	29.5% (18)	34.4% (21)	14.8% (9)	0.0% (0)	61
Contracting Conservation treatment (contract)	39.1% (25)	23.4% (15)	21.9% (14)	14.1% (9)	1.6% (1)	64
Environmental monitoring	4.5% (3)	13.6% (9)	24.2% (16)	31.8% (21)	25.8% (17)	66
Advocacy / fundraising / grant writing	28.6% (18)	22.2% (14)	30.2% (19)	17.5% (11)	1.6% (1)	63
Addressing Preservation needs as part of new building or major renovation projects	24.2% (15)	8.1% (5)	40.3% (25)	19.4% (12)	8.1% (5)	62
Digitization	7.6% (5)	12.1% (8)	48.5% (32)	24.2% (16)	7.6% (5)	66
Preservation of digital files (e.g., databases, web sites, image files)	10.6% (7)	18.2% (12)	37.9% (25)	27.3% (18)	6.1% (4)	66
Exhibit improvement	10.8% (7)	20.0% (13)	38.5% (25)	26.2% (17)	4.6% (3)	65
Pest management (including mold prevention or remediation)	4.5% (3)	9.1% (6)	30.3% (20)	31.8% (21)	24.2% (16)	66
Cataloging / data gathering about	3.1% (2)	7.8% (5)	34.4% (22)	40.6% (26)	14.1% (9)	64

Appendix 2. Hawai'i Survey findings

Subject

Other (please specify) 3

answered question 70

skipped question 6