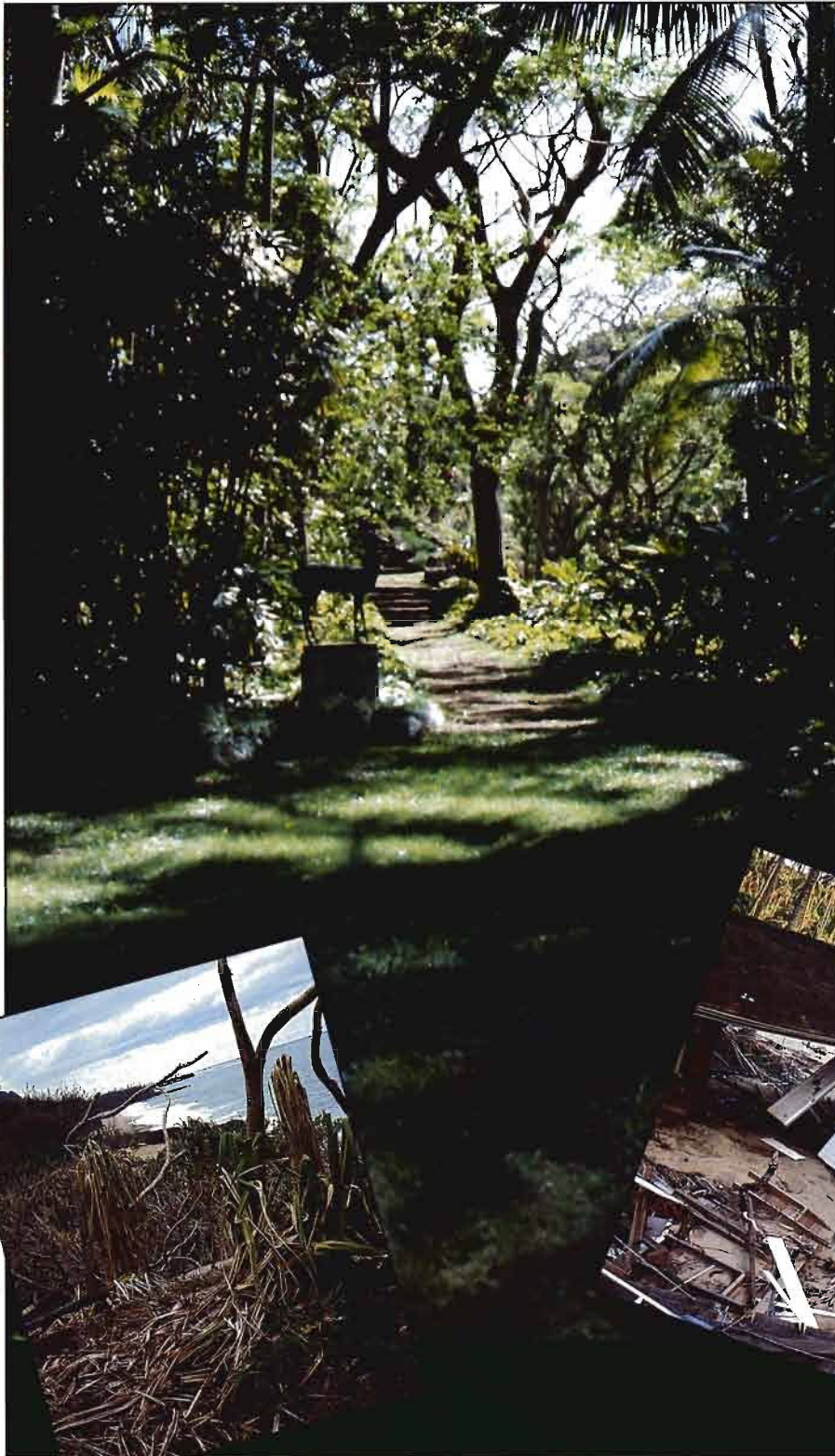


Hurricane Havoc in Paradise

Photo & Story by Randy Silverman, Brigham Young University Library



Tuesday 3 November 1992: Having previously cast absentee ballots, six conservators departed from Honolulu airport on election day for Kaua'i and a first-hand look at the damage caused by Hurricane Iniki. From the air, the jagged volcanic outline and lush tropical foliage of Kaua'i appeared pristine. On the ground, however, the picture was very different: expansive sugar cane fields, now brown and dead; concrete buildings missing windows, walls and roofs, exposing twisted pieces of structural steel; and massive pine trees snapped in two like so many 100-foot match sticks. On September 11th, Iniki passed directly over Kaua'i wreaking nearly one billion dollars in devastation on its inhabitants. Seventy-five percent of the island's buildings gave way to the violence of the storm. Seven weeks later, one could still sense the terrorizing 175-227 m.p.h. winds screaming over the island, now drowned in the muffled cadence of roofing hammers and circular

saws. Free-standing domes and tents dotted the landscape in place of toppled homes; kaki-green tarpaulins blanketing many of the damaged rooftops. Evidence was everywhere of a lightning-fast response by the National Guard, the Federal Emergency Management Agency (FEMA) and a seemingly limitless number of insurance adjusters.

Underwritten by a National Endowment for the Humanities (NEH) emergency relief fund, four conservators from around the country (Jane L. Basset, Getty Museum, Santa Monica; Debra Evans and Alison Luxner, Fine Arts Museums of San Francisco; and myself, Randy Silverman, Brigham Young University Library) joined forces with Diana Dicus and Linda Hee of the Pacific Regional Conservation Center in Honolulu to advise and work out strategies to recover cultural and historic materials from the island's battered libraries, museums, and historic societies.

The Kaua'i Museum, whose cultural and natural history collections date to centuries before the island's "discovery" in 1778 by Captain James Cook, sustained roof damage to both of its buildings, but suffered no significant losses to its rich collection of Hawaiiana. The older building, listed on the National Historic Register, had its roof recently replaced, and though many of the custom-made tiles were blown off, experienced few leaks.

The flat roof of the newer (c.1960) building, however, buckled and lifted slightly away from the walls. This compromised the water-tightness of the structure, disturbed the asbestos insulation contained in the ceiling, and created a more serious repair problem.

The museum reopened its doors immediately after the storm, answering many disaster-related questions by local residents, and occasionally inheriting the problems for themselves. For several weeks, a large collection of photographic negatives taken by the Kekaha Sugar Company, Ltd. was exposed to rain inside a collapsed building. Unable to continue caring for its valuable holdings, Kekaha Sugar donated them to the Kaua'i Museum. Dating from the mid-1930's through the mid-1970's, these water-damaged 4" x 5" negatives spanned the middle years of the 94 year old company still operating on Kaua'i. Comprised of 10,000 chronologically dated images, the photographs captured the lifestyles of four decades of immigrant plantation workers — Chinese, Japanese, Korean, Philippine, Spanish, Portuguese, and Nor-

wegians — and documented many technological advances in the island's sugar history. The photographs were now actively molding and beginning to "block" (or stick) to their glassine storage envelopes. Funding to prepare this new collection for permanent storage in acid free paper envelopes and archival storage boxes was unavailable and would have to be sought privately or through governmental granting agencies.



Not all of the hurricane's damage was immediate, as illustrated by the overflow of a dehumidifier in the basement storage area of the Kaua'i Museum. This mini-disaster was caused by the absence of the person normally responsible for monitoring the water level in the 55 gallon plastic overflow container. (He was now busy repairing his own home.) The basement overflow resulted in water damage to an architectural drawing that required treatment on an emergency basis. Rusting staples that attached the drawing to its binders-board support were removed. Lacking a sink of adequate size, the rendering was supported on a piece of spun polyester (Reemay®), and washed outdoors with a light application of tap water from a garden hose over a wooden bench. Washing (a common paper conservation treat-

ment) helped remove active mold spores from the surface of the drawing, as well as minimize tide-line staining caused by standing flood water. The drawing was dried on a formica counter top between blotting paper, with light pressure applied from two pieces of scrap acrylic plastic found in the museum. Tears in the drawing were mending with Japanese paper and paste, and the successfully restored piece was returned to a map cabinet for flat storage in the now dried basement.

Wednesday 4 November 1992:

Most of the people we met during our visits to Kaua'i seemed surprisingly unruffled by the storm, though fatigued from the ongoing cleanup. It was not unusual for someone to tell me when we "talked story" that damage to their home was quite minor — having only lost the first floor carpeting, a few windows, the living room furniture and a part of the roof!

Occasionally, however, the effects of accumulated stress appeared to be a major behavioral byproduct of the storm. This became abundantly clear when we visited the Allerton Estate, managed by the National Tropical Botanical Garden (NTBG). The garden, established to "preserve for the people of the United States species of tropical plant life threatened with extinction," suffered severe damage. Many of the rare tropical flora were killed and NTBG's employees were preoccupied pruning deadwood and nurturing cuttings from their endangered plants.

The Allerton Estate, which includes Queen Emma's summer cottage — a national historic landmark dating from the 1850's — directly overlooks the Pacific Ocean. Herculean wind and waves had pushed in the outer walls and windows as if they were made of Styrofoam. Books, textiles, ceramics and decorative furnishings were scattered up to 800 yards from the main house. Many botanical prints, Japanese panel paintings, European oil paintings from the 1600's, and Roman bronzes had been recovered, and were being housed temporarily in a classroom at NTGB headquar-

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Hurricane *(continued)*

ters. It seemed probable still other artifacts remained buried under the foot-and-a-half of beach sand and three feet of structural rubble that now occupied the site.

Representing NTBG, our host led us from the Garden's headquarters along the mile-long garden path, past ancient Chinese stone lions and art deco gravity-fed fountains to inspect Allerton's house. After some scavenging among the flotsam, I found two mold-damaged botanical prints and a signed N. C. Wyeth engraving. When I showed our host my finds, however, I was not prepared for the response. The Wyeth engraving could come back with us, she decided, but the other two prints were not in good enough condition to take.

"In that case, what can we do to save them?" I ventured with more than a little concern in my voice.

"Here, give them to me," she replied, "I'm used to this and I'll take care of it." And in front of four visiting conservators capable of treating the damaged artwork, she took from my hands the newly recovered botanical prints, carried them back inside the demolished house, and redeposited them in the sand!

Havoc from the storm and the magnitude of the recovery problem at Allerton had apparently overwhelmed our host. Whatever objects we salvaged only threatened to increase her formidable task of managing a disposition that already included thousands of items. Exacerbating the situation, she personally had been without electricity or phone service for 50 days. She was also justifiably dubious about having responsibility for the recovery but none of the organizational authority to make determinations concerning it. Long term storage for the material at NTBG seemed only a temporary solution; likely the Allerton house would not be rebuilt and ultimately its holdings would be liquidated in a "hurricane sale."

While the situation seemed to stem from stress, it had to be overcome quickly for the sake of the still unrecovered artifacts. However, as I was reminded again and again, our

position on Kaua'i was strictly an advisory one; if an institution opted not to follow our advice in their recovery efforts, we were in no position to interfere.

Thursday 5 November 1992: Returning to another site, the Wilcox Plantation Home, after an earlier visit by four team members revealed our strategic salvage plan for drying rain-drenched material was working. Inhibiting mold growth in an environment touted as "the wettest spot on Earth" (Kaua'i's Mt. Waialeale receives an average annual rainfall of

460 inches) proved quite difficult. However, control of the ambient environment by dehumidification was considered a far safer treatment for mold affected archival material than fumigation. One room in the 19th century missionary home had been sealed off and fitted with two portable dehumidifiers to create a "drying room." Wet books and rare photographic albums containing albumen prints of King Kamehameha III were fanned out to dry in this closed environment. Active mold, when it was discovered, was removed by brushing

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Hurricane *(continued)*

the spores into the nozzle of a vacuum fitted with a High Efficiency Particle (HEPA) filter.

Monday 9 November 1992: Back in Honolulu, we called for a follow-up appointment on the Allerton Estate, but hit a snag. Another of NTBG's recovery team saw no need in our returning unless we brought archival boxes and acid free paper to begin wrapping the recovered objects in the classroom for storage. No further recovery of materials from the Allerton house was envisioned, although we continued to push for a change of mind.

Tuesday 10 November 1992: Contact made with NTBG; they are still uncertain about needing our help.

Wednesday 11 November 1992 Veteran's Day. All business was delayed. On the island of Kaua'i meanwhile, Crosby, Stills, and

Nash, Bonnie Raitt, and Jackson Browne played a free concert as a morale booster for the locals. Previously, they played two Hawai'i Hurricane Relief benefits in Honolulu and raised nearly half a million dollars to be used for aid.

Thursday 12 November 1992 NTBG extends an invitation and a task: spend the following day recovering at the Allerton house!

Friday 13 November 1992 Following a sunrise flight out of Honolulu we were back at Allerton. A brief search through the debris revealed dozens of framed botanical prints pinned under a collapsed wall. We propped up the wall with wooden braces (as it appeared to be none too sturdy), and began clearing away bits of broken glass and wooden frames. As we dug, more and more prints came to light, buried beneath layers of sand, broken glass and moldy blankets that had once served as padding between the frames. Suddenly, the size of the



frames jumped from 2' x 1 1/2' to 4 1/2' x 2 1/2' and the medium changed to oils. We began pulling 600 year old Oriental paintings on paper and 300 year old European masterworks from beneath the shards of glass. The stench of mold was everywhere, and sand caked the surface of every find. Before we were through, Allerton's collection of missing paintings, a bit worse for wear but intact, were lying in the grass outside the house, ready for restoration. For now, our work was done. **GAJ**

The foregoing excerpts are from a journal kept by Mr. Silverman during the recovery operations on Kaua'i.

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