

## Pacific Islander Tapa Experts Aid Smithsonian Research

Tapa experts from Hawaii, Fiji, Samoa, and the Cook Islands are coming to the Smithsonian to help conserve a remarkable collection of tapa (barkcloth) gathered by American sailors and scientists on the U.S. Exploring Expedition 1838-42. Guided by anthropology department conservator Greta Hansen and curator of Oceania Adrienne Kaeppler, these experts will analyze the basic raw materials used in making tapa and how these materials have been modified. This research will contribute to long-term preservation of this collection in the National Museum of Natural History.

Dr. Kaeppler and Greta Hansen travelled this past year to Hawaii to interview and videotape researchers and elders about making Hawaiian kapa (barkcloth), an art that has been dormant for more than a century. Their research primarily focused on a plant known as mamaki, a conservation problem, because it deteriorates more rapidly and differently than the more commonly used paper mulberry material.

In addition to studying kapa at Hawaiian museums, they also collected and sent to the Smithsonian numerous specimens of mamaki taken from different parts of the island and at different altitudes. These specimens will be used for experimenting with the process of preparing the mamaki, beating it, and combining it with other barks. The team also conducted research on how different dyes were processed, and their effect on the deterioration of kapa.

Relying on the writings of early botanists and visitors to Polynesia and on tapa makers today, researchers are putting together the story of each tapa cloth, including the identification of the cultivated or wild plants harvested to make the tapa, the manufacturing process using wooden beaters, the plant and mineral dyes used for decoration, and the cultural function of each piece. To assist in this endeavor, community scholars from Hawaii have prepared tapa samples to help identify the plants, dyes and colorants applied to tapa in the Smithsonian collections and to provide better estimates of the rates of fading. Smithsonian botanists are collaborating with colleagues from other institutions to identify the source plants used in tapa manufacture, by employing SEM techniques, DNA sequencing methods and stable isotope analyses.



Tapa cloth workshop being taught at the Smithsonian Institution by a Hawaiian expert. Photograph by Donald E. Hurlbert, Smithsonian Institution.



Tapa cloth from Lau Islands. Photograph by Donald E. Hurlbert, Smithsonian Institution.

