



HUI MĀLAMA I NĀ KŪPUNA O HAWAI'I NEI

(GROUP CARING FOR THE ANCESTORS OF HAWAI'I)

November 19, 2001

Department of Culture Media and Sport
Working Group on Human Remains
Professor Norman Palmer, Chairman
2-4 Cockspur Street London SW1Y 5DH

Aloha nō kāua e Prof. Palmer:

Mahalo (thank you) for providing our organization with the announcement from the Department of Culture Media and Sport for submissions regarding the treatment of human remains in publicly funded museums and galleries. Hui Mālama I Nā Kūpuna O Hawai'i Nei has been involved in good faith efforts to gain the permanent release of 153 iwi kūpuna (ancestral bones) from the Natural History Museum in London.

As descendants, we inherited a responsibility to provide requisite care and protection to our ancestors and their possessions. We view the withholding of the iwi kūpuna as a violation against humanity, both living and deceased. We pray that one day a higher understanding is achieved in that ancestral human remains are no longer considered property, but rather the remnants of a life force that require our utmost respect.

The Natural History Museum maintains that the provisions of the British Museum Act prohibit it from repatriating human remains. We opine that the Act authorizes the Board of Trustees to dispose of items under limited circumstances that include repatriation of the iwi kūpuna. Following years of consultation, the parties have been able to make some progress. However, we are at a standstill regarding repatriation.

If it is the prevailing opinion that the British Museum Act prohibits repatriation, we strongly urge the Working Group on Human Remains to develop legislation that would require publicly funded museums and galleries including the Natural History Museum to permanently release ancestral human remains and any funerary items to appropriate claimants. Enclosed is our testimony, please append it and this letter to the official record. Hui Mālama I Nā Kūpuna O Hawai'i Nei reserves the right to provide additional evidence at a future time. If there are any questions, please feel free to contact us.

Ola nā iwi,

Kūnani Nihipali
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Pe o

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Introduction

In August 2001, the Department of Culture Media and Sport called for submissions of evidence regarding the treatment of human remains held in publicly funded museums and galleries in the United Kingdom. Interested parties were asked to provide written testimony to the Working Group on Human Remains¹ by November 30, 2001. With this submission, Hui Mālama I Nā Kūpuna O Hawai`i Nei² provides the Working Group on Human Remains with insight into a decade long effort to gain the permanent release of all iwi kūpuna (ancestral bones) and any moepū (funerary items) held by the Natural History Museum, a publicly funded institution in London, England. It is our intent to continue to perform our traditional cultural duty to honor our ancestors by seeking to bring them home for reburial. To provide an understanding of the various relevant issues, the following topics will be discussed:

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The testimony begins with an explanation of the traditional cultural duty to care for and protect the ancestors. Next, a brief overview of Native Hawaiian history is presented focusing on the disturbance and removal of iwi kūpuna (ancestral bones) and moepū (funerary items) and the loss of the ability of living descendants to provide requisite care and protection. The birth of Hui Mālama I Nā Kūpuna O Hawai`i Nei is discussed next along with our accomplishments that led to the restoration of the ability to care for the ancestors. Legal arguments to facilitate repatriation are shared followed by our competence to repatriate from the Natural History Museum. Three important findings are declared and recommended for inclusion in the official record. Finally, specific legislative action to be undertaken by the Working Group on Human Remains is urged.

¹ Established by Arts Minister Alan Howarth in May 2001 following recommendations in *Cultural Property: Return and Illicit Trade* by Select Committee on Culture, Media and Sport (July 2000).

² A Native Hawaiian organization established in April 1988 by Edward and Pualani Kanahele to provide requisite care and protection to iwi kūpuna (ancestral bones) and moepū (funerary items) through repatriation and ceremonial reburial utilizing traditional cultural protocols. The organization is authorized by U.S. law to conduct repatriation and has returned iwi kūpuna and moepū from institutions in North America, Hawai`i, Europe and Australia.

A. The Fundamental Responsibility to Care for the Ancestors

Native Hawaiian identity is defined in a multitude of ways. The following discussion focuses on traditional values, thoughts, practices and proverbs that have helped shape an important part of this identity--- specifically, the fundamental responsibility to care for and protect iwi kūpuna (ancestral bones) and moepū (funerary items).

Kanaka `Ōiwi is a traditional way of identifying Native Hawaiians as the indigenous people. While 'kanaka' is a generic term for people, the word "ōiwi' metaphorically means 'native' but literally translates as 'of the bone.' The word "ōiwi' defines us as the indigenous people of Hawai`i and also demonstrates that Native Hawaiian identity is a function of the bones of our ancestors. This is based on the belief that the iwi (bones) contain mana (spiritual essence) even after death. Thus, who we are includes those who came before us.

Likewise, our homeland is referred to as 'kulāiwi' which literally translates as 'bone plain' and which means 'native land' indicating a connection between the land and the people. Our homeland is defined as the place in which the bones of our ancestors and eventually ourselves and our descendants, are buried. Kulāiwi indicates an inter-relationship between Kanaka `Ōiwi and the land. Note again the presence of the root word 'iwi' (bone) as it relates to another expression of Hawaiian identity.

In addition, the word 'kanu' means both 'to bury/a burial' and a 'to plant/a planting.' The first kanu in the mo`olelo (oral traditions) of our people was the burial of Hāloanaka, the stillborn child of the gods Wākea and Ho`ohōkūkalani. From that spot grew the first kalo (taro) plant, our staple food. Their next son born was also named Hāloa and it is from him that the Native Hawaiian people descend. This mo`olelo establishes the interconnection between the gods, the land and the people. The burial of iwi kūpuna (ancestral bones) results in physical growth of plants and the spiritual growth of mana (spiritual essence). The descendants feed off the foods of the land and are nourished spiritually by the knowledge that the iwi kūpuna are well cared for and in their rightful place.

The people of old understood well the importance of protecting and caring for iwi kūpuna (ancestral bones). Each family identified those who carried the kuleana (responsibility) of ensuring that all iwi (bones) received kanu pono--a proper burial. This meant that the iwi were buried with ceremony and treasured possessions needed in the spiritual world were ho`omoepū`ia (laid to rest) with the iwi. Secrecy went into the hiding of the iwi and moepū (funerary items) for those who sought a person's mana would seek the bones to appropriate its spiritual power. The tranquillity of one's spirit depended on the level of protection provided to the iwi.

Conducting proper burials was especially important for Native Hawaiians because of the belief that ancestors became `aumākua (guardians) of living descendants and that these `aumākua must be cared for in order to maintain the pono (balance and well being) of the family. The kuleana (responsibility) to care for iwi kūpuna (ancestral bones) was the same as the responsibility to maintain harmony between the living, the dead and the land. At the level of the ali`i nui (ruling chief), the ability to maintain the tranquillity of the kingdom was dependent upon the degree to which the ali`i nui cared for the gods and `aumākua. This was evidenced in part by the state of gravesites throughout the islands. When there was peace in the kingdom, the people were buried properly; when there were treacherous rulers, the bones were dug up.

`Olā nā iwi' is an `ōlelo no`eau (traditional proverb) that means, 'the bones live.' It is said of an elder who is well cared for by his family and of the family members who provide such care. This reminds us that our kūpuna (ancestors) reside within us and that we are the sum of all ancestral family members who collectively gave us life. This relationship gives rise to a profound duty to care for and protect the bones of our ancestors and is interdependent in that the ancestors provide us with necessary care and protection. It also recognizes that the physical and spiritual health of the family is a function of the well being of the ancestors. When the iwi are disturbed the living must respond.

One important way to maintain the kuleana to care for the iwi kūpuna (ancestral bones) is to prevent their exposure as explained by the `ōlelo no`eau (traditional proverb), 'mai kaula`i i nā iwi i ka lā' which means 'don't expose the bones to the sun.' One reason to prevent exposure is that the `uhane (spirit) associated with the iwi (bones) resides in a world known as pō or darkness. Thus, the proper place for iwi is to be placed in the ground so mana (spiritual essence) from the iwi can nourish the land physically and spiritually. From this `ōlelo no`eau we understand that the responsibility to care for the iwi includes protecting against disturbances that would result in exposure. Another `ōlelo no`eau provides that the placement of items with the iwi establishes an inseparable bond between both whereby the items are forever considered moepū, the inalienable possessions of the dead. 'Mai lawe wale i nā mea i ho`omoepū`ia,' translates to, 'don't wantonly take things placed with the dead'. It makes clear that the prohibition against disturbing iwi extends to moepū.

These cultural values demonstrate the profound respect held for the kūpuna. Maintaining the kuleana (responsibility) to care for the ancestors is a profound expression of Native Hawaiian cultural identity. By reburying iwi kūpuna (ancestral bones) and moepū (funerary items) following disturbance, the ancestral foundation is strengthened, the interdependence between past and present continues, and the land is re-infused with mana (spiritual essence) necessary to sustain the ancestors, the living and the generations to come.

B. Loss of the Ability to Care for the Ancestors

Traditionally, Native Hawaiians believed that the iwi (bones) were the primary physical embodiment of a person. Following death, only the iwi were considered sacred, for within one's iwi resided his or her mana (spiritual essence). Mana was greatly valued and Native Hawaiians sought to maintain and enhance their mana. Supreme care was accorded to iwi following death. Ancestral bones were guarded, respected, venerated, and deified. It was believed that the `uhane (spirit) of a person hovered near the iwi following death and that desecration of the iwi resulted in an insult to the `uhane and trauma and harm to living descendants. It was the responsibility of the living to care for and protect family burial sites and to pass on this responsibility to the next generation. This practice assured that Native Hawaiians would always provide care and protection to their ancestors. In turn, the ancestors cared for and protected the living, thereby affirming this interdependent relationship.

When Captain James Cook and the first Europeans arrived at Kealakekua on the island of Hawai`i in 1779, they showed little regard for the Native Hawaiian burials they encountered. In the years that followed, the lack of regard transformed into outright acts of desecration. During the period that followed, radical social, economic, and political changes had devastating consequences for the islands aboriginal inhabitants. By 1832, less than 50 years following contact, the Native Hawaiian population was decimated by nearly 85% declining from approximately 800,000 to 130,000 as a result of foreign diseases. In 1893, greedy American businessmen with the assistance of U.S. Marines illegally overthrew the Hawaiian monarchy and violated God's commandment that thou shalt not steal.

The totality of these events resulted in depredation of epic proportions. Those Native Hawaiians who survived were sick, weakened by disease, and alienated from their lands. Those who were healthy were left politically and economically powerless. The ability to protect family burial sites and maintain other important cultural responsibilities was effectively undermined. Native Hawaiians became alienated from traditional cultural values including the kuleana to care for iwi kūpuna (ancestral bones) and moepū (funerary items).

Over the next century, thousands of iwi kūpuna and moepū were disturbed and removed from their final resting places absent the consent of living descendants. Many were shipped to institutions in North America, Europe and Australia. The separation of iwi kūpuna and moepū resulted in the severe loss of mana from the land, the families, and the Native Hawaiian nation as a whole. These harsh consequences made it imperative for healing efforts to be undertaken. One fundamental means by which to bring about healing is to repatriate and rebury the iwi kūpuna and moepū and thereby restore mana.

These revelations lend themselves to an understanding of how the disturbance of burials is intimately tied to the larger process of colonialism---the complicated processes by which Euro-Americans appropriated Native Hawaiian lands, exploited our resources, disenfranchised our people and transformed the very way we think about who we are. Repatriation is intimately tied to the struggle to reclaim our collective mana (spiritual essence) as a people. Colonialism alienated us from our `āina (lands), mo`olelo (histories), `ōlelo (language) and akua (gods) and included the desecration of gravesites. Colonizers 'collected' iwi kūpuna (ancestral bones) and moepū (funerary items) for 1) scientific studies which often posited a racial superiority of Europeans and Americans over primitive natives, 2) sale in the curios market or to educational institutions, 3) use in anthropological studies of a 'disappearing race,' and 4) eviction as part of the urban sprawl transforming the landscape. The common factor in each and every burial disturbance was the lack of authorization from the living families. Native Hawaiians voiced strong opposition to the taking of the iwi kūpuna, the loss of our lands and ultimately our sovereignty. Some have attempted to articulate strategies for decolonization and have found that the care of iwi kūpuna and moepū is a fundamental element of this effort.

Through the sharing of these values and history, the need for repatriation is more clearly understood. Through reburial, mana (spiritual essence) contained in the iwi kūpuna (ancestral bones) and moepū (funerary items) will be returned to the land and families and continue to provide nourishment on the physical and spiritual levels--- for the restoration of mana is a requisite element in the larger effort to heal Native Hawaiians, restore cultural traditions and responsibilities and ultimately rebuild the Native Hawaiian nation.

C. Establishment of Hui Mālama I Nā Kūpuna O Hawai`i Nei

Over the last decade, Native Hawaiians have come to realize that the kuleana (responsibility) to care for and protect the iwi kūpuna (ancestral bones) and moepū (funerary items) must continue and that it is no one else's responsibility to do so but our own. In 1988, the remains of 1,100 ancestral Native Hawaiians were archaeologically removed to make way for construction of the Ritz-Carlton Hotel. The place known as Honokahua became the focal point for Native Hawaiians with respect to the legacy of burial site disturbance. Following vociferous protests the excavations were halted and a settlement was reached wherein the hotel was relocated, the ancestral remains reinterred, and the reburial site set aside in perpetuity. Hui Mālama I Nā Kūpuna O Hawai`i Nei was born from the tragedy and enlightenment of Honokahua. As a result of these events, we learned that legislation was needed to protect and to promote the cultural responsibility of Native Hawaiians relating to the care of iwi kūpuna. We also realized that there was a need to restore the cultural practice of being responsible for the care and protection of the iwi kūpuna.

Founded by Edward and Pualani Kanahale in 1988, the primary goal of Hui Mālama I Nā Kūpuna O Hawai`i Nei is the care of iwi kūpuna (ancestral bones) and moepū (funerary items) through repatriation and reburial. Our members have been trained in traditional cultural protocols relating to the handling of iwi kūpuna and moepū. The mission of the organization is to restore and maintain the ancestral foundation of Native Hawaiians by assisting families and communities to resume the responsibilities to care for and protect the ancestors, thus strengthening our sense of Native Hawaiian self-identity, and perpetuating our culture. See 'Mission Statement' (**attachment 1**). Our members have been taught the importance of prayer to request the assistance of Akua (God) and our kūpuna to provide the tools necessary to conduct our work:

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| E hō mai ka `ike | Grant us knowledge |
| E hō mai ka ikaika | Grant us strength |
| E hō mai ka akamai | Grant us intelligence |
| E hō mai ka maopopo pono | Grant us righteous understanding |
| E hō mai ka `ike pāpālua | Grant us second sight |
| E hō mai ka mana | Grant us spiritual energy. |

D. Restoring the Ability to Care for the Ancestors

Repatriation and burial site protection required changes in Federal and State laws. With the passage of the National Museum of the American Indian Act in 1989 (**attachment 2**) and the Native American Graves Protection and Repatriation Act in 1990 (**attachment 3**), Hui Mālama I Nā Kūpuna O Hawai`i Nei was specifically authorized by Congress and the President to repatriate ancestral remains and funerary items from museums and other federally funded institutions in the United States. In addition, the passage of Act 306 (co-authored by Hui Mālama I Nā Kūpuna O Hawai`i Nei member Edward Halealoha Ayau) by the Hawai`i State Legislature in 1990 provided greater protection for Native Hawaiian burial and reburial sites located on private, State and County lands through the creation of island burial councils and the establishment of the Burial Sites Program within the State Historic Preservation Division, Department of Land and Natural Resources.

Hui Mālama I Nā Kūpuna O Hawai`i Nei accepted the kuleana to care for the iwi kūpuna and moepū and through the practice of cultural protocols and the authority of Federal law, conducted repatriation and reburial efforts from 1990 to the present. See, 'Repatriation Efforts Successfully Undertaken by Hui Mālama I Nā Kūpuna O Hawai`i Nei August 2001' (**attachment 4**). In addition, we assisted native organizations to repatriate their ancestor's remains from the Bernice Pauahi Bishop Museum in Honolulu. See 'Efforts by Hui Mālama I Nā Kūpuna O Hawai`i Nei to Assist Native Peoples to Repatriate Ancestral Remains February 2001' (**attachment 6**). In summary, we have repatriated over 5,732

iwi kūpuna and moepū from 31 institutions in the United States, Canada, Australia, Switzerland and Scotland and have assisted several native organizations with the repatriation of their ancestors held in Hawai`i.

E. Legal and Cultural Grounds for Repatriation

The British Museum Act of 1963 provides the Trustees of the Natural History Museum with both the lawful duty to keep and secure its collections³ while simultaneously providing the Trustees with discretionary authority to permanently dispose of items held in those same collections.⁴ Naturally, it is the instinct of Natural History Museum officials to promote the former duty to keep and secure over the latter discretionary power to dispose. Nonetheless, it is clear that the law does not strictly prohibit the Trustees of the Natural History Museum from disposing of items in their collection, which would include human remains.

With regard to the matter of disposition of items from the collection of the Natural History Museum, section 5 of the British Museum Act, as amended, entitled 'disposal of objects' provides that,

'The Trustees may sell, exchange, give away or otherwise dispose of any object vested in them and comprised in their collections if – (c) in the opinion of the Trustees the object is unfit to be retained in the collections of the Museum and can be disposed of without detriment to the interests of students: Provided that where an object has become vested in the Trustees by virtue of a gift or bequest the powers conferred by this subsection shall not be exercisable as respects that object in a manner inconsistent with any condition attached to the gift or bequest.'⁵

Assuming for the sake of argument that the Trustees of the Natural History Museum are willing to exercise the legal authority to dispose of items in their collection, in order for the Trustees to do so, three conditions must be met. First, it must be satisfactorily demonstrated that the items are unfit to be retained in the collections of the Natural History Museum. Second, it must be satisfactorily demonstrated that the disposal of the items will not be detrimental to the interest of students. Third, that the object was either not vested in the Trustees by virtue of a gift or bequest or the object was so vested in the museum collections by means of a gift or bequest and disposal is not inconsistent with any condition attached to the gift or bequest. Any object in the collection of the Natural History Museum that satisfies these three conditions may be lawfully disposed of at the discretion of the Trustees.

³ British Museum Act of 1963, section 3(1) and 3(3).

⁴ *Id.* at section 3(4), section 5, and section 9.

⁵ *Id.* at section 5(c).

The following discussion applies the aforementioned three conditions to the case of the iwi kūpuna (ancestral bones) held in the collections of the Natural History Museum. This discussion presents arguments⁶ that we believe satisfy all three conditions required for the exercise of the discretionary power of disposal provided by the British Museum Act. Nonetheless, the key is to convince the Trustees to exercise this power based on a finding that permanent disposition of items is a legitimate exercise of legal authority and is not otherwise prohibited.

1. Items Unfit to be Retained in the Museum Collection

The collection of iwi kūpuna held by the Natural History Museum is unfit to be retained in the museum's collection due to the lack of evidence of any authorization or consent from Native Hawaiian families or the rightful government of Hawai`i to remove the ancestral remains from the jurisdiction of the family, the Kingdom of Hawai`i, the Republic of Hawai`i, the Territory of Hawai`i or the State of Hawai`i. Although the Natural History Museum deems itself satisfied that it has proper legal title to the iwi kūpuna in its collection, the Museum has yet to demonstrate any evidence of legal title except to assert that it has such lawful title. There has been no demonstration of consent or authorization from next of kin, collateral relatives, or the reigning sovereign of the Hawaiian Islands for the collection and removal of these iwi kūpuna from their sacred burial sites.

The lack of authorization renders the removal of the iwi kūpuna from their homelands as a illicit taking, with the current possessor lacking bona fide legal title as a result of the unauthorized act. Merely asserting a belief, no matter how much good faith that belief may be based upon does not establish lawful title absent consent. More importantly, at issue is the treatment of the physical remains of deceased family members. The earlier discussion in this document regarding Native Hawaiian beliefs toward iwi kūpuna makes it very clear that under no circumstance would a family member have authorized the taking of his or her ancestor's bones. Nor has there ever been a demonstration of evidence that the sovereign authority at the time of this taking, or any other, duly authorized the removal of these ancestral remains. During the time of the Kingdom, as well as with subsequent governments, it was unlawful to disturb a grave or place of burial.

⁶ The citations from footnote 6 to footnote 31 reference attachments to a 'report.' This document was prepared by Hui Mālama I Nā Kūpuna O Hawai`i Nei and is entitled, 'Proper Disposition: A Proposal Relating to All Ancestral Native Hawaiian Remains Held in the Collections of the Natural History Museum London, England September 16, 1999'. It is appended to this testimony as **attachment 6**. Refer to this 'report' for all alphabetical attachments mentioned in the footnotes.

In addition, English common law does not even recognize an ownership interest in human skeletal remains. American courts have followed that rule and do not recognize property rights to a dead body.⁷ This common law rule originated in Roman law under which certain categories of things were 'beyond human proprietary interest' (*in nullis bonis*) and were exclusively of 'divine understanding' (*in divini iuris*). Human burials were included in the category of inherently 'sacred things' (*res religiosae*).⁸ This view continued into English common law, with the exclusion of human burials from the general law of property.⁹ With the recognition that burials were matters of divine understanding, ecclesiastical figures gained authority and exclusive jurisdiction over the repose of the dead. Thereafter, under early English common law, disinterment and relocation of human remains was lawful only with the consent of appropriate church officials.

The Legislature of the Kingdom of Hawai`i formally adopted the English common law in 1892. Hence, the issue is not whether the Natural History Museum has proper title to the iwi kūpuna. Instead, the proper issue is that at the time the human remains were collected from Hawai`i and consequently removed from the islands, whether the collector's had the authorization to do so. Again, absent proof of consent, the only conclusion is that the remains were unlawfully obtained. Hui Mālama I Nā Kūpuna O Hawai`i Nei respectfully asserts that the Natural History Museum has the burden of proof to demonstrate this requisite authorization. For these reasons, it is respectfully asserted that all iwi kūpuna and any moepū (funerary items) held by the Natural History Museum is unfit to be retained in Museum collections.

2. The Interests of Students Will Not Be Undermined

The permanent disposition of all iwi kūpuna and any moepū from the collections of the Natural History Museum will not undermine the interests of students or science. Although the phrase 'interests of students' is very broad and difficult to accurately define, the presumption here is that it refers to the interests of science, although arguably, permanent disposition would be consistent with the interests of students of ethics, morality, and human rights. There are various forms of scientific examination that may be performed on human remains including metric and non-metric measurements, phylogeny

⁷ See *Dead Bodies*, 22 Am. Jur. 2d., section 4; *Dead Bodies*, 25A C.J.S., section 2; Martin, *Annotation: Corpse-Removal and Reinterment*, 21 A.L.R. 2d. 472, 480, 486; P. Jackson, *The Law of Cadavers and of Burial and Burial Places* 129-31, 133-34 (1050, 2d ed.).

⁸ See Tomkins & Lemon, *Gaius* sections 4, 6, 9 (1869); Abdy & Walker, *Gaius and Ulpian*, 412 quoting 'The Rules of Ulpian,' Tit. XXIV, sections 4-6 (1874); Cooper, *Justinian's Institutes*, Lib. II, Tit. I. sections VII, IX, X, 69 (3d. ed. 1852).

⁹ See, e.g., Throne (trans.), 2 *Bracton on the Laws and Customs of England* 40-41 (1968); Guterbock, *Bracton and His Relation to the Roman Law* 24 (1866); Britton, *Of Purchase*, section 84b(2), 176 (1901); Nichols (trans.) *Britton* 214 (1865).

studies, pathology studies, and mitochondria DNA analysis. The following arguments effectively demonstrate that such factors as the relatively small size of the collection, the lack of accurate provenience information, the lack of completeness of individual skeletal remains, the lack of medical history of the individuals, and the latest developments in DNA analysis of non-human beings each contribute to the result that the iwi kūpuna collection at the Natural History Museum is severely limited for scientific purposes.

Phylogeny is the study of relatedness between populations, which depends heavily upon a temporal and spatial understanding of the assemblages involved. However, the collection held by the Natural History Museum has very imprecise provenience information. Human variation allows for an incredible expression of traits, i.e. height, stature. Your environment, especially your nutrition helps determine your traits, in addition to your genetic make up. Therefore, how well provenienced the Native Hawaiian skeletal remains are is important, including such factors as location and dates. Poor provenience information is problematic where the question being asked involves disease within an island population.

The lack of accurate provenience information leads to problems with assessing bio-cultural adaptations. That is to say that the collection of iwi kūpuna has extremely limited or no value simply because provenience information is so poor and since traits develop in part by social and political surroundings. As a consequence, age and other contextual information is not available. As this is precisely the type of information lacking in the Natural History Museum's collection, phylogenetic studies are rendered extremely problematic if not completely impossible. The age of the remains is especially critical for understanding the evolution of the Native Hawaiian population, their demography, and their pathology.

Pathology studies involve the study of health and nutrition. Life history studies and paleo-pathology rely on complete sets of skeletal remains, not a collection of crania (such as that held by the Natural History Museum). The type of information that can be attained from this biased sample will be inherently limited and incomplete, and many other types of research are precluded (e.g., research into nutritional stress and arthritis). A small collection only allows for the identification of occurrence of disease. Definitive diagnosis in crania only is extremely problematic simply because the whole skeleton is necessary. Moreover, the lack of medical history for these individuals further undermines the accuracy of any pathological examination.

Equally hindered are studies that would conduct DNA analyses upon these iwi kūpuna. The success of such testing on ancient skeletal remains has been

limited due to differential preservation rates of DNA in various bone samples.¹⁰ Additionally, modern day contamination often occurs to such a degree that many of the results are often invalidated.¹¹ Lastly, such studies are not worth doing when they are missing an accurate provenience and age.

Modern day advances in the field of biology have made the study of ancient human remains unnecessary. DNA analysis has been conducted upon comensal animals (e.g. the Pacific rat *Rattus exulans* and the lizard *Lipinia noctua*) that traveled with Polynesians.¹² This has helped to trace the movement of Native Hawaiians throughout Polynesia, thereby providing a non-intrusive alternative means by which to obtain this same information. Furthermore, DNA analysis has developed to a point where it is able to accurately measure human relatedness using materials derived from contemporary human populations (e.g. human tissue, hair, and blood).

The partial and incomplete status of the collection serves as a severe detriment to any type of investigation being carried out today, whether it is phylogenetic, pathological, or DNA. Given the difficulties and problems associated with these types of research, the quality of any osteological collection is of the utmost importance to researchers. The method of collection and the resultant assemblage that is now held by the Natural History Museum is more a reflection of 19th century 'science' than it is of the Native Hawaiian population it is meant to represent. Given the need for accurate information, as well as the standards of scientific and academic rigor to which all contemporary scientists and students are held, it is highly unlikely that researchers will want to do research with this collection other than the collection of metric and non-metric data. For the reasons stated above, the permanent disposition of the iwi kūpuna from the collections of the Natural History Museum will not be detrimental to the interests of students of science.

3. Conditions Against Disposal Lack Requisite Authority

The third condition is that the object was either not vested in the Trustees by virtue of a gift or bequest or the object was so vested in the museum collections by means of a gift or bequest and disposal is not inconsistent with

¹⁰ See Report attachment R, Clegg, J.B. 'Travels with DNA in the Pacific,' *The Lancet* 344:1070 (October 15, 1994).

¹¹ See, Tuross & Kolman, (relating to modern contamination of ancient human skeletal remains that invalidate DNA results; studies involved Native American skeletal remains at the Smithsonian Natural History Museum), *American Journal of Physical Anthropology* (in print) 1999.

¹² See Report attachment S, Matisoo-Smith, E., R.M. Roberts, G.J. Irwin, J.S. Allen, D. Penny, and D.M. Lambert, 'Patterns of prehistoric human mobility in Polynesia indicated by mtDNA from the Pacific rat,' *Proceedings of the National Academy of the Sciences* 95(25), pp.15145-15150 (December 1998); and attachment T, Austin, Christopher C., 'Lizards took express train to Polynesia,' *Nature* 397(6715): 113-114 (January 14, 1999).