

Abstract

The use of pesticides has been a common practice by museums to control insect infestations of ethnographic collections. In the United States, the advent of repatriation legislation mandating the re-introduction of certain culturally sensitive items to their Native American cultures of origin has created a volatile situation for both the tribal and museum communities. Ritual and ceremonial use of repatriated objects contaminated with pesticides may pose serious health hazards for the recipients of these items, presenting a legal and ethical dilemma for museums. This paper discusses the Smithsonian Institution's National Museum of the American Indian's approach to recognizing and addressing the concerns of its Native American constituency, and understanding and resolving the issues related to contaminated cultural collections under its stewardship.

Keywords

American Indian, arsenic, contamination, cultural risk, culturally sensitive materials, health hazard, NAGPRA, Native American, pesticide, repatriation

Pesticides and repatriation at the National Museum of the American Indian

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Repatriation legislation

In November 1989, the National Museum of the American Indian (NMAI) was established through Public Law 101-185. Known as the *NMAI Act*, this historic legislation effectively transferred the collections of the Heye Foundation to the Smithsonian Institution. Furthermore, it set the framework for developing the new museum infrastructure and provided a process for inventorying, identifying and returning American Indian and Native Hawaiian human remains and funerary objects throughout the Smithsonian Institution.

This legislation was the first federal law to require repatriation of indigenous human remains by a federally funded institution to recognized lineal descendants. The argument supporting this mandate evolved from other federal policies and human rights legislation, including the *American Indian Religious Freedom Act of 1978*, created specifically to remedy government-sponsored injustices towards the American Indian population over the past two centuries.

Realizing the inherent need to extend this policy to all museums and institutions receiving federal funds for their operations and programs, the *Native American Graves Protection and Repatriation Act (NAGPRA)* became law in 1990. NAGPRA expanded on repatriation provisions of the *NMAI Act* to include sacred and ceremonial items and objects of cultural patrimony. Additionally, it provided regulations for protection of American Indian gravesites and consultation processes between recognized Native governments and institutions to reach consensus regarding these issues.

NMAI and repatriation

The NMAI has adopted and taken steps beyond the expanded repatriation provisions of the NAGPRA legislation and its subsequent amendments. The museum's mission recognizes its special responsibility to protect, support and enhance the development, maintenance and perpetuation of Native culture and community. This is accomplished through direct consultation, collaboration and cooperation with contemporary Native peoples throughout the Western Hemisphere who are culturally affiliated with the museum's diverse ethnographic and archaeological collections. Where the provisions of NAGPRA are limited to federally recognized Native governments, the NMAI has taken an inclusive approach to repatriation, acknowledging the 'spirit' of the legislation, and voluntarily extending these provisions to all of its indigenous constituents in North, Central and South America.

To some, this may seem to be a drastic approach; however, the NMAI believes repatriation and the respectful disposition of one's ancestors to be a basic human right. The museum understands that it cannot foster trust and a long-term collaborative relationship with its primary constituency if there is no equilibrium, both inter-tribally and between the tribal communities and the general non-native population. With this understanding, the NMAI has mandated the repatriation of all human remains and associated funerary objects in its possession to their culturally

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identified lineal descendants, regardless of geography and socio-political borders. It has also established guidelines to facilitate international repatriations of human remains and associated funerary objects, as well as ceremonial objects and objects of cultural patrimony.

Identifying the museum's role

One stark contrast between the NMAI and science-oriented museums that manage archaeological and ethnographic collections is that the NMAI defines itself to be merely the steward of the collections and not the 'owner'. The NMAI approaches the management of its collections as a partnership with its Native constituency. The museum's challenge is to establish a balance between institutional practices of caring for culturally sensitive collections (human remains, associated and unassociated funerary objects, sacred and ceremonial objects and objects of cultural patrimony as defined by NAGPRA) and concerns of Native communities culturally affiliated with these items. Acknowledging and striving to understand the fundamental differences in the world-view perceptions of the various Native communities as contrasted with the role of the conventional museum is the critical factor in attaining this goal. This ideology must be a common denominator between the museum and the tribal communities in order for this approach to be successful.

The NMAI openly acknowledges that many of the items in its collections are unconscionably alienated from their original cultural contexts. Previous acquisition methods have been less than honourable, and in several instances have been deplorable. The infamy of this legacy remains prevalent in the long memory of the affected tribal communities.

It is important to the NMAI that its Native constituency realize the museum is forthcoming and sincere about its mixed acquisition history and past usage and interpretation of culturally sensitive collections, so that the museum can alleviate Native Americans' inherent and justified mistrust of government sponsored institutions and agencies. Through immediate disclosure, the museum hopes to begin to build trust and, eventually, equitable and long-term partnerships.

Understanding cultural risk

Understanding the beliefs and concerns of its constituent cultures is an evolutionary process for the NMAI. To fully appreciate the vast assortment of items within the collections, there must be a comprehension of the contexts from which they originate. Through direct consultation with various tribal communities, the NMAI is made aware of certain non-tangible consequences of managing, or mismanaging, culturally sensitive materials that are removed from their original cultural support structure.

Many tribal communities and Native individuals believe that objects have a life force power or living spirit that can affect human beings in a positive, negative or passive way. If these objects are purposefully or inadvertently abused or misused, they may bring harm to the individual responsible for the infraction or to persons closely associated with the individual. This concept is referred to as cultural risk.

Certain types of culturally sensitive items are the responsibility of an individual or society that has been indoctrinated to care for these items. If an item is improperly alienated without the knowledge or permission of those charged with its care, the item may be 'unbalanced' or at unrest. Only someone with the proper training and knowledge can pacify or 'retire' such an item. The NMAI recognizes that its staff members do not have this kind of expertise, as it can only be attained through a life-long absorption into a specific community.

The NMAI is actively pursuing ways to minimize cultural risk to staff working directly with collections by implementing handling guidelines for culturally sensitive items, based on the recommendations of the concerned tribal community. The NMAI has coined the phrase 'traditional care' for this particular collections management practice, even though this term is somewhat of a misnomer as it is not the intention of individual staff members to be 'traditional', but rather to be respectful of all collections. The museum encourages and sponsors recognized tribal traditional leaders to visit the collections facility and consult with staff members

concerning the long-term management of sensitive collections and to provide advice for minimizing cultural risk factors.

Complication of contaminants

Ideally, culturally sensitive collections falling within the provisions of repatriation legislation and museum policy will eventually be claimed and returned to their affiliated tribal communities where they can be properly cared for and used for their intended purpose. The museum assumes that objects claimed and repatriated as ceremonial items and items of cultural patrimony will return to ceremonial use by initiated individuals or societies.

Repatriation of items intended for ceremonial use is complicated because many of these items may be contaminated through the application of a variety of substances used to control pest infestations. The use of pesticides was a common preservation technique employed by major museums (Goldberg 1996). Only recently has the museum community begun to realize the potential health hazards that pesticide residues may pose to humans.

Some members of the larger Native community have voiced concerns over the lack of disclosure of the museum community's use of pesticides. In extreme cases, these individuals see the past application of pesticides as an overt act to sabotage tribal repatriation efforts or as a conspiracy to bring harm to tribal communities similar to the smallpox-tainted blanket incidents of the 19th century (Thornton 1987). Others view the use of pesticides as a poisoning of the object itself. In April 2000 at the Contaminated Cultural Material in Museum Collections Workshop sponsored by the Arizona State Museum at the University of Arizona, Tucson, an elder of the Tohono O'odham Nation explained that insect infestation of an object was part of that object's normal lifecycle and, through the application of pesticides, the object's lifecycle had been artificially sustained, adding to the cultural risk factor of the item.

Until recently, many museums and institutions managing ethnographic collections have not given serious consideration to the ramifications of contaminated cultural materials from both legal and ethical standpoints. Section 10.10(e) of the 1996 NAGPRA Final Regulations requires museums and federal agencies to disclose 'any presently known treatment of human remains, funerary objects, sacred objects or objects of cultural patrimony with pesticides, preservatives or other substances that present a potential health hazard to the objects or the persons handling the objects'. It is unfortunate that the phrase 'presently known treatment' is interpreted by many museums as an excuse to not investigate previous applications of these substances or to not test for the presence of hazardous persistent substances such as arsenic, mercury and lead. Ignorance of this issue by an institution can create a false sense of security among recipients of the repatriated object, which may have serious consequences.

Micah Loma'omvaya, EPA Coordinator for the Hopi Tribe, describes a stark example of what can go wrong when a museum does not disclose or thoroughly investigate its own history of pesticide use, and further fails to conduct simple qualitative testing methods to detect the presence of common but hazardous substances, before repatriating a ceremonial item to a Native community (Loma'omvaya 2001). In the spring of 2000, dangerously high levels of arsenic were found on at least two of three Hopi items tested (Seifert et al. 2000), prompting the Chairman of the Hopi Tribe to establish a moratorium on the physical repatriation of sacred and ceremonial items.

In addition to the physical contamination of these objects, there is also a cultural risk factor of metaphysical contamination. Loma'omvaya explains that Hopi ceremonial objects are considered living entities of the Hopi, who treat them with community respect and prescribed care. Loma'omvaya writes, 'We must also understand the sad response when the same Katsina priest is told that these "friends" may be contaminated with pesticides that actually poison rather than promote good health and happiness in the ceremonies conducted with them' (Loma'omvaya 2001).

NMAI and pesticides

Aside from any potential liability issues, the NMAI understands that it has an ethical obligation to research and evaluate its past pesticide use history; to inform and to

educate its employees and the tribal constituency concerning the potential health risks of exposure to contaminated items; and to provide literature that articulates these hazards and that describes methods to minimize exposure. The NMAI is also collaborating with other institutions and agencies to investigate non-destructive techniques for the neutralization and removal of toxic residues from culturally sensitive materials. This proactive approach is a conscious effort by the museum to be forthright and to minimize any technical and financial burden to the repatriating tribal communities.

Investigating the museum's history of pesticide use is a challenge. In general, most museums have not been diligent in keeping records of chemical treatments of collections. The NMAI faces such a dilemma. The museum has completed a historical review of its documentation on pesticide use in collections, including reviews of old purchase orders and correspondence, interviews with past conservators and curators, and careful examination of old photographs (Pool 2001). Through this investigation, NMAI has found that organic fumigants, including naphthalene and dichlorvos, were used widely in the collections. There is little evidence of extensive use of such heavy metals as arsenic or mercury. However, this does not mean that collections were not treated with other pesticides before acquisition or while on loan to other institutions.

A lack of records should never be an indicator that an object has not been chemically treated. The NMAI assumes that all items in the collection have been treated or exposed to pesticides at some point. It is the protocol of the museum to recommend testing for the presence of certain pesticide residues on all items considered for repatriation. The NMAI Conservation Lab has the ability to conduct relatively inexpensive, non-destructive, in-house qualitative testing for persistent hazardous substances including arsenic and lead; lead was not used as a pesticide, but appears to originate from environmental contamination. Quantitative analysis requires samples to be sent to a specialized off-site laboratory. However, results from non-destructive quantitative analysis do not provide actual levels of contamination of an entire object, and the results are presented as qualitative.

Health and safety concerns for staff members working directly with collections led to the development of a general survey for the detection of heavy metals using a rented portable x-ray fluorescence unit. This analysis provided a map of the relative concentrations of lead, arsenic and mercury in previous storage areas. Blood and urinalysis testing on individuals was also carried out. This research shows that while heavy metals (lead, mercury and arsenic) are in collections areas and on artefacts, no hazardous exposures to personnel are occurring, assuming all safety precautions are being used. To date, no hazardous exposure levels have been documented.

Through consultation, it is important for both the museum and the concerned tribal community to understand the ramifications of sampling and testing an object and the interpretation of testing results in order for the tribe to make an informed decision about the object's ultimate disposition. The decision to conduct testing, and to what extent to test, resides with the tribal community requesting repatriation, as there are cultural risk factors to consider. Some tribal communities may view the sampling of an object as invasive and therefore culturally inappropriate. Others request participation in the actual testing process to prepare the object for sampling and to offset any disturbances through its handling, minimizing cultural risk factors. In all scenarios, the tribe is informed of the potential health risks of using and storing the item and is provided with handling guidelines that they may or may not choose to follow.

The NMAI works closely with the Smithsonian's Office of Environmental Management and Safety to develop comprehensive handling guidelines concerning objects that may have been treated with pesticides and other hazardous substances. These guidelines will eventually be distributed to all of the museum's tribal constituents and to various institutions and agencies managing ethnographic collections. Additionally, new methodologies for testing and identification of pesticides are being investigated and results of these efforts will be presented at the conference in Brazil. Regional workshops to educate the tribal communities about this issue are being coordinated by the NMAI Repatriation, Conservation and Community Services offices.

Shepherdstown contaminated-collection symposium

The NMAI also supports the development of collaborations between Native Americans and professionals who are interested in different aspects of the pesticide residue dilemma. In April 2001, a symposium titled 'Contaminated Collections: Preservation, Access and Use' was hosted by the Society for the Preservation of Natural History Collections (SPNHC), the NMAI and the National Park Service. The symposium was funded primarily under a grant from the National Center for Preservation Technology and Training.

This gathering followed two previous efforts to address this issue. The first was the Contaminated Cultural Material in Museum Collections Workshop held for Arizona tribal groups in April 2000. This workshop is documented in *Old Poisons, New Problems: Information and Resource Guide for Contaminated Cultural Materials in Museum Collections* (2001). The second was a working conference held at San Francisco State University in September 2000 titled The Contamination of Museum Materials and the Repatriation Process for Native California. Those proceedings are published in the journal of the Society for Preservation of Natural History Collections, *Collection Forum*, Volume 16, Nos. 1 and 2, Summer 2001.

The Shepherdstown symposium was published in *Collection Forum*, as Volume 17. The papers were also printed with a different cover and about 500 copies were made available to Native American museums and individuals. All the papers published in *Collection Forum* volumes 16 and 17 are available on the SPNHC Website (www.spnhc.org/). The publication of these three conferences makes available a wealth of basic information for museums, tribes, public health officials and scientists who are working toward an understanding and resolution of these issues in different areas of the world.

The Shepherdstown symposium brought together individuals who had been actively working on various aspects of the problem. Participants were pre-selected based on their individual experiences and expertise, specifically for the purpose of creating a think tank to effectively address the symposium objectives. The symposium format started with selected presentations and papers. Twelve speakers collectively addressed topics of testing; tribal perspectives and training; regulatory, legal, and ethical issues; exposure and risk; and mitigation and decontamination. Over the course of two days the participants met in small groups, after each topic presentation, to roughly define issues and develop recommendations.

The main objectives identified in the Executive Summary were to:

- establish a national agenda with regional, local and tribal flexibility based on clear short- and long-term objectives
- develop and promote cross-cultural communication for understanding that leads to mutual respect
- ensure that communication of technical information includes presentation and interpretation of data that helps to explain uncertainty and allows for informed decision-making
- provide information and knowledge support about databases, testing procedures, health assessment/exposure, and research and development
- develop and validate hazard control and decontamination
- develop a code of ethics regarding collections-based hazards for institutions that hold public trust collections.

Conclusion

The National Museum of the American Indian supports the continuation of ceremonial and ritual life among Native American people, fosters and supports the study by indigenous communities of their own traditions, and endeavours to forge consensus among the museum and the Native American constituency while accounting for and balancing the interests of each. To carry out this mission, there must be continuous dialogue between the museum and the Native American community to assure that all viewpoints and beliefs are considered. Disclosure of past collections management practices, including the use of chemical pesticides, is essential in mitigating potential health hazards and cultural risk factors affecting the museum staff and Native American constituency.

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