THE UNIVERSITY OF ALASKA MUSEUM AND THE CURATION CRISIS IN ALASKA ARCHAEOLOGY

Daniel Odess

Curator of Archaeology, University of Alaska Museum, 907 Yukon Drive, PO Box 756960, Fairbanks, AK 99775; ffdpo@uaf.edu

ABSTRACT

The University of Alaska Museum in Fairbanks is the principal repository for archaeological collections from state and federal lands throughout Alaska. These collections serve as a significant public resource for individuals, organizations, and communities, serving interests that range from research and teaching on a wide array of anthropological and paleoenvironmental topics to heritage preservation and heritage tourism. The past three decades have seen dramatic growth in the volume of archaeological collections deposited at the museum and in the subsequent use of these collections in sponsored research, cultural resource management, and a variety of exhibition and other educational activities. Since the 1970s, there have also been major advances in our understanding of how to best ensure the long-term physical preservation of museum collections. As a consequence, the standards for what constitutes best practices in archaeological curation have risen. Mirroring trends across the nation, the growth in collections and higher standards for care have led to what has been termed a "curation crisis" in archaeology, in which growing demands exceed available resources of physical space, staff time, and funding. This paper discusses these trends with respect to the University of Alaska Museum of the North and provides an overview of some of the steps we have taken to ensure that the archaeological collections continue to be a major public resource in the future.

Keywords: archaeological repository, preventive conservation, archaeological collections

INTRODUCTION

The University of Alaska Museum (UAM) is the principal repository for archaeological collections from state and federal lands throughout Alaska. With the exception of the National Park Service, which has chosen to house collections in its own archaeological repository in Anchorage, UAM curates collections belonging to all federal agencies with land management responsibilities in Alaska. This includes collections made before 1959 when Alaska was still a territory, as well as those owned by the Bureau of Land Management, U.S. Army, U.S. Air Force, Army Corps

of Engineers, U.S. Coast Guard, U.S. Fish and Wildlife Service, and U.S. Forest Service. The museum also maintains small comparative collections of archaeological material from several of the lower 48 states, Canada, and Greenland, obtained through exchange with other institutions at a time when this practice was fairly common. Smaller, local museums around the state such as the Alutiiq Museum and Archaeological Repository (Kodiak) and the Museum of the Aleutians (Unalaska) also curate federal collections from within their respective regions.

The University of Alaska Museum of the North's archaeological collections are closely intertwined with the history of Alaska archaeology. The collections had their start with Otto Geist's work on St. Lawrence Island in the early 1930s and they continue to grow. In the intervening years, and in particular since the 1970s, there have been major advances in the fields of museology and materials science concerning how to best care for collections to ensure their long-term preservation. At the same time, changes in federal policy (e.g., 36 CFR Part 79, promulgated in 1990) have raised the standards for what practices are considered acceptable and have thus increased the resources required to care for each object in the collection. The combination of continued collections growth and the need for greater resources to care for existing collections is not unique to Alaska and has led to what many term a "curation crisis" in archaeology (Childs 2004; Ford 1977; Lindsay et al. 1979; Marquardt et al. 1982; Sullivan and Childs 2003). To address this crisis, UAM has made some significant changes over the past five years in our policies and procedures that affect how the museum functions as an archaeological repository. This paper traces the origins of the curation crisis in Alaska and discusses the measures UAM has put into practice to ensure that the archaeological collections we curate continue to be a significant and accessible public cultural resource.

THE OLD NEW MUSEUM

In the late 1970s, when the state coffers were flush with oil money, the University of Alaska completed construction of a new museum facility at its Fairbanks campus. Museum collections previously housed elsewhere on and off campus were brought to the new museum on West Ridge (formerly known as Rainey Ridge).¹ In addition to exhibit galleries, laboratories, and office space, the new facility included approximately 112 m³ of secure storage space for the archaeological collection. Environmental controls ensured that the temperature remained at about 20°C and relative humidity at 45 percent throughout the year, in keeping with what had come to be recognized as best practice to ensure the long-term preservation of the collections. The University of Alaska Museum was among

the first museums in the country to employ Spacesaver high-density compacting mobile storage as a way to maximize the use of space in the collections storage area. Use of such storage furniture has since become standard in many museums and libraries throughout the nation.

As the pace of research-driven and federally mandated archaeological investigations increased throughout the 1970s, the museum's collections grew rapidly. Collections sometimes arrived uncataloged and were typically still housed in the boxes and bags they were placed in at the time of excavation. During this period, there were no specific guidelines in place for how archaeological collections should be packaged before being deposited at the museum, nor did the museum charge repository fees. However, until 1990, the museum was heavily involved in cultural resource management (CRM) activities that employed graduate and undergraduate students and generated overhead dollars used to fund the care and management of the archaeological collections as a whole. In addition to numerous rural airport surveys, some of the more notable CRM projects included a survey of the Susitna River (Dixon 1985), testing of the Amaknak Bridge site on Unalaska (Bacon 1977), and survey and testing near Tok and Gakona as part of the Over-the-Horizon Backscatter Radar project (Sheppard et al. 1991), among others.

RUNNING OUT OF SPACE

With the rise in research and CRM-driven activities that began in the 1970s, the number of archaeological collections coming to the museum for curation grew rapidly. At the same time, the growing emphasis on recovering and recording as much data as possible meant that, in addition to actual artifacts and field notes, faunal remains, soil samples, and a variety of other material began to be deposited as well. The increase in archaeological activity statewide and in the range of materials being curated meant that the collections soon expanded beyond the space available in the compact mobile storage area. By the late 1990s, the volume of the archaeological collections housed at UAM had grown to over 181 m³, exceeding what the facility had been designed to hold by over 60 percent.

In an unpublished manuscript recounting her time at the university and her trip with her husband Wendell down the Yukon River to Hooper Bay to conduct her linguistic research and his excavations at Nukleet. Helen Oswalt describes many enjoyable evenings spent with Louis and Betts Giddings in their cabin on Rainey Ridge. Rainey Ridge, named because that is where Froelich Rainey built a cabin and lived while on the University of Alaska faculty, is now called West Ridge. The cabin where the Giddings family lived in 1949–50 is now known as the Rainey-Skarland Cabin and is managed by UAF's Anthropology Department.

Under similar circumstances, several repositories around the country stopped accepting new collections. However, despite the growing shortage of space, UAM continued to issue accession numbers, agreeing to take additional new collections at no charge. Unfortunately, the sheer volume of the collections being housed began to affect the museum's ability to make those collections available for study. Boxes of artifacts and documentation were stored on shelves along aisles and in corridors not intended to house collections. An office originally used by graduate students and visiting researchers doing collections-based research was converted to handle the overflow and keep the museum in compliance with state fire codes and the Americans with Disabilities Act. The museum was beginning to fail in part of its role as a repository because the lack of storage space had begun to compromise the museum's ability to make the collections available to the public for study.

GRADUAL DETERIORATION

The need for adequate storage space in which to house new collections is the most obvious part of the curation crisis. However, advances in the fields of museology and materials science have led to the realization that past practices, including how collections were treated at the time of excavation and how they have been packaged and stored since coming to the museum are also a major part of the current crisis (Canadian Conservation Institute 1992; Rose and de Torres 1992; Rose et al. 1992). Simply put, things made from organic materials will deteriorate over time unless prevented from doing so by the environment in which they are stored. In some cases, fragile organic artifacts were never adequately stabilized after being removed from the frozen or anoxic environments that preserved them. Left untreated, these objects will deteriorate on their own, and many of them are doing so. In other cases, the materials and methods originally used by the excavators or subsequently used by museum staff to help preserve objects are instead actively contributing to their deterioration. Because these factors affect the existing collections, this part of the crisis cannot simply be resolved with additional storage space or a change in how new collections are handled. Instead, a systematic, collection-wide effort is required to address them. Such deterioration is not limited to UAM: it probably affects collections in every other museum and repository around the world. To the extent that this deterioration gradually undermines the integrity and utility of the collections, it affects everyone, including the agencies legally responsible for the collections, who have an interest in Alaska's cultural resources. In the section that follows, I detail the history of the collections and some of the factors that are contributing to their continued deterioration.

ORIGINS OF THE COLLECTIONS

To understand why the collections are deteriorating, it is necessary to understand their history and, in particular, how they have been treated since excavation. The UAM archaeological collection had its genesis in the 1930s when the university's president, Charles Bunnell, assigned Otto Geist, an industrious if not always meticulous excavator and collector, the task of acquiring objects that would form a university museum collection. Geist concentrated his early efforts on the great prehistoric middens of St. Lawrence Island, competing for specimens with the Smithsonian Institution's Henry B. Collins, who was excavating stratified middens in an effort to establish a basic cultural sequence for Bering Strait (Collins 1931, 1932, 1935, 1937). Geist worked on St. Lawrence Island in 1927, 1931-35, 1937, and 1939, amassing a collection of wood, bone, antler, ivory, baleen, ceramic, stone, and metal artifacts that today occupies 31 m³ within the UAM collections storage area.² Much of that collection remains undescribed and has only been published in the most cursory form (e.g., Geist and Rainey 1936).

Geist's material from St. Lawrence Island is the largest part of UAM's archaeological holdings in volumetric terms. Those collections have now been out of the ground for over 70 years. Some have been treated with unknown chemicals, while others have gone untreated. During much of the intervening time, they were stored in an unheated Quonset hut off campus. The material from St. Lawrence Island is among the most fragile and vulnerable of UAM's archaeological collections, and it is also the least well studied. Many of the crates Geist used to ship the collections to Fairbanks at the end of each season were only opened for the first time in 1979–80.

² Geist also collected human remains and associated funerary objects during his work on St. Lawrence Island. That material is housed separately and is not included in the figures for space listed here.

There are also other large collections at the museum. Next in line in terms of volume is material from various sites on Amchitka owned by the U.S. Fish and Wildlife Service (14 m³); the collection from the Croxton site (Gerlach and Hall 1988), which is owned by BLM (7.6 m³); and the collections from early Fairbanks generated by Northern Land Use Research during the Barnette Street expansion project (2.7 m³). The Trans-Alaska Pipeline Survey (TAPS) collections (Cook 1977) currently occupy 4.6 m³; other TAPS collections are out on long-overdue loan. Castle Hill, the large Russian period site in Sitka excavated by the Alaska Office of History and Archaeology (OHA) as part of an Alaska Department of Transportation-sponsored mitigation project in the late 1990s, has also been accessioned but not yet deposited. Staff from the Alaska Office of History and Archaeology continue to consolidate this important collection, preparing to deposit it at UAM. They estimate that the material from Castle Hill will eventually occupy approximately $4.25 \,\, m^3$ in the collections storage space (Dave McMahan 2005, personal communication).

The museum now houses somewhere in the neighborhood of one million archaeological specimens.³ The exact number is unknown because many collections have accession-level rather than specimen-level catalog information. As of February 2008, we have 260,726 specimen-based records in the archaeology database, and that number is steadily growing as we continue to work through the old collections, rehousing them and transferring data from

individual bags, scraps of paper, coin envelopes, catalog sheets, and field notes into the database as part of a sustained program of preventive conservation. These activities are discussed in greater detail below.

MISTAKES SEEN ONLY IN HINDSIGHT

Advances in the standards for how archaeological collections and associated documentation are handled, labeled, packaged, and stored have occurred since the museum was founded and in particular since 1970. These advances stem from the recognition that the ways artifacts and documentation are stored and handled has a direct impact on their prospects for long-term preservation (Fig. 1). While this relationship might seem self-evident, its implications for collections management are not without irony. In addition to the more obvious sources of damage, such as mishandling and flooding, the very measures intended to protect and preserve objects in the past may be actively contributing to their ongoing deterioration. Such damage tends to be gradual and to go mostly unnoticed, but it is also pervasive and largely irreversible. Paper such as toilet tissue used to wrap and cushion fragile organic objects, and the boxes intended to protect them, often turn out to be acidic and slowly erode the surface of the objects. Coin envelopes and paper bags used in the field or laboratory to record information about the objects they contain are also acidic and deteriorate over time, causing the loss of the very information they were intended to preserve. In the



Figure 1. A typical drawer of fragile organic artifacts from the 1934-1935 Department of Interior - Alaska College Expedition (Geist) collection from St. Lawrence Island. Objects piled atop one another collide when the drawer is opened and are damaged by the excessive handling required to locate specific pieces. No drawer-bydrawer inventory exists. The box in the drawer is made from acidic cardboard. Photo by Chris Houlette.

This number reflects items that would be given a unique catalog number. Thus flake lots and faunal lots, while often consisting of tens or hundreds of individual items, are each counted as a single specimen in this estimate.



Figure 2. Black ink was used to record this object's catalog number on a base layer of white "paint." The two substances were then sealed with a coat of lacquer or varnish, probably in the 1940s or 50s. The paint has detached and the sealer has since cracked and fallen away, taking part of the catalog number with it. When the artifact becomes disassociated from its catalog number, the basis for relating it to context and association recorded in maps and notes is irretrievably lost. Photo by Chris Houlette.

past, it was common practice to use "white-out" and clear fingernail polish when labeling artifacts. Such labels are not chemically stable; over time they become opaque and unreadable or they detach from the object altogether (Fig. 2). Such cases are not uncommon in the museum. When this happens, the time and effort invested in carefully excavating and recording sites and placing a unique catalog number on each object so that it can be associated with specific information in the field notes is wasted. When the ability to associate individual artifacts or samples in the collection with the information about them in the field notes is lost, the scientific value of the collection is severely compromised.

None of the developments that caused the curation crisis were rapid or dramatic. No one came in to work one morning to discover that we had run out of space overnight. The deterioration of individual objects is both gradual and subtle; looked at from one week to the next, change is virtually imperceptible. However, by the year 2000 the curation crisis had clearly reached Alaska. The museum was out of space in which to house additional collections. Conservation assessments conducted in 1983, 1987, 1992, and 1997 had indicated that problems of overcrowding and inappropriate materials were contributing to the deterioration of existing collections.

SOLUTIONS TO THE CURATION CRISIS

MUSEUM EXPANSION

It was clear to anyone who visited UAM's collections storage area during the 1990s that the museum was run-

ning out of room. The need for more space, then, was the most obvious symptom of the curation crisis. When the old UAM opened in 1980, that building was intended to be the first part of a two-phase project. The second phase, which was to include additional gallery, laboratory, classroom, and collections-storage space, was expected to break ground a few years later. When Alaska's oil-driven economy collapsed in the late 1980s, construction of phase II had not begun, and those plans were put on hold. In 2002, after an ambitious fundraising campaign that brought together state and federal funding sources with significant support from private donors and corporate sponsors, the university finally broke ground on phase II. That facility, termed here the New UAM, was completed in 2006, more than 20 years after it was originally expected to come on line.

As part of the facility expansion, much of the existing space has been renovated, and the space used to store archaeological collections experienced a net increase of approximately 105 m³. A major grant from the National Endowment for the Humanities' Preservation and Access program has funded the purchase of another set of compact mobile storage furniture for the museum's anthropological collections.⁴ In addition, the expansion includes state-of-the-art classroom facilities for university courses that make use of museum specimens and dedicated space for visiting researchers and students who wish to use the museum's collections. With the addition of new space, the museum is better positioned than ever before to make the collections available as a public resource.

⁴ Grant no. PH-50018-03.

CHANGES IN COLLECTIONS MANAGEMENT

The purpose of an archaeological repository, as envisioned in the Regulations for Curation of Federally-Owned and Administered Archaeological Collections (36 CFR 79), is to care for and preserve collections to ensure that they remain a public resource in the future. For practical purposes, if the museum is to preserve the cultural materials it curates and prevent the loss of information about them contained in their associated documentation, then there is a lot of work to do. These activities, termed "preventive conservation" in museological circles, fall to the collections manager and the student assistants he trains and supervises.

The museum expansion included additional collections storage space that will alleviate part of the current crisis in curating Alaska's cultural resources. However, the need for more space is only the most obvious part of that crisis. Additional space does not address the problem of deferred maintenance; a significant investment in preventive conservation is needed to halt the gradual deterioration of the collection. Nearly all of the museum's archaeological collections need to be rehoused in archivally appropriate containers, and the information on their existing containers must be captured and recorded. We have begun to work through a backlog of collections amassed over a period of 70-plus years, stabilizing them one artifact at a time through conservation and rehousing and capturing all associated information (Fig. 3). We are also photographing many of the objects as we go, documenting their condition and developing tools for making information about the collections more readily available online.

PARTNERING FOR PRESERVATION

Preventive conservation is both time-consuming and labor-and material-intensive. The \$200 allocated for archaeology from the museum's annual state appropriation does not begin to provide funds to care for collections owned by the state of Alaska, let alone those owned by the federal government. Since 2002, two federal agencies have provided support for the maintenance of the collections they own, and we are hopeful that support from other agencies will be found in coming years. The Fish and Wildlife Service has provided funds to rehouse collections from the Porcupine River and Anangula.



Figure 3. A drawer of organic artifacts organized by catalog number and rehoused in individual archival polyethylene bags. Catalog numbers are copied from the artifact onto its bag and provenience and other data entered into a computer database. A label containing this information is then printed on acid-free paper and inserted into the bag with the artifact. This method of preventive conservation speeds object retrieval, minimizes unnecessary handling, and prevents objects from damaging one another. The poly bags buffer the objects from changes in relative humidity and allow the museum to store a greater number of objects per drawer than is the case in Figure 1. Photo by Chris Houlette.

The Bureau of Land Management has provided matching funds through a Challenge Cost Share agreement to rehouse and record those collections we currently house from the Trans-Alaska Pipeline Survey and the Tangle Lakes Archaeological District. The Preservation and Access grant from the National Endowment of Humanities is funding work on the state-owned collections at UAM, and the museum was also awarded a grant from the Save America's Treasures program in 2005 to perform preventive conservation on the collections Geist made on St. Lawrence Island in 1934-35.5 Museum staff train and supervise student assistants who perform this work, and we have typically been able to employ eight students per semester. Once all this work is completed, the collections involved will be appropriately housed for long-term preservation, and information about them will be captured and made much more accessible electronically. The efforts to upgrade the storage conditions of the

⁵ Grant no. ST-00-05-0005-05.

collections at UAM will make them a much more useful and useable resource for researchers, managers, and other people interested in Alaska's cultural resources. The efforts to rehouse the collections and prevent the loss of information associated with them are important because there have been significant advances in analytical techniques, including radiocarbon dating, stable isotope chemistry, and genetic analyses using ancient DNA since most of the collections housed at UAM were excavated. Many of those collections have never been analyzed, and nearly all continue to hold scientific potential and relevance for modern and emerging research problems.

The current program of preventive conservation is intended to mitigate and, in some cases, reverse damage that has occurred to the collections over decades. It is important to emphasize that these activities are very much akin to building maintenance in that they must be performed periodically. Objects must be checked occassionally, and electronic records must be upgraded and migrated to current data standards and technology if they are to remain useful and accessible. Costs associated with these activities are therefore recurring, even though funds to curate a particular collection are typically provided on a one-time basis.

CHANGES TO PERMITTING, PROVISIONAL CURATION REQUESTS, AND CURATION GUIDELINES

For many years in Alaska, the state permitting process for archaeology required applicants to specify a repository for any collections they expected to generate but included no provisions to ensure that the repository was aware of the collection or had agreed to curate it. In practical terms, this occasionally meant that a phone call saying that boxes of archaeological material were on their way to the museum was our first indication that a particular collection existed and that we were expected to curate it. This situation worked to the detriment of efforts to effectively curate Alaska's cultural resources. There was no mechanism to ensure that archivally appropriate practices for labeling and packaging artifacts were followed. In the absence of such practices, despite our best intentions as archaeologists, the labels and packages can themselves lead to the deterioration of collections. As a result, nearly all archaeological collections deposited at UAM now require preventive conservation if they are to remain a viable resource over the long term.

In 2002, following an assessment of curatorial practices and museum resources, UAM requested that the state historic preservation officer change the permitting process so that the institution designated as a repository on the permit application was given an opportunity to agree or decline to accept a collection before a permit was issued. At the same time, UAM also implemented a process requiring principal investigators to make a provisional request for curation before we would agree to accept individual collections. The provisional curation request allows staff to assess the appropriateness of each collection and our ability to curate it effectively in the face of limited resources. Significantly, as a condition of the curation agreement, investigators were also required for the first time to follow a set of curation guidelines that detailed standards for how collections would be labeled and packaged before coming to the museum. 6 The purpose of this change was to ensure that archivally appropriate techniques and materials are used so that the collections do not gradually degrade once they are deposited with the museum.

REPOSITORY FEES

Perhaps the most controversial change in curation policies at UAM has been the decision to impose repository fees for collections excavated after 2002. Currently, UAM charges \$450 per cubic foot of archaeological material and associated documentation, as well as an hourly rate for work required to bring newly accessioned collections into line with the standards outlined in the curation guidelines. This move follows a national trend begun in the 1970s toward charging repository fees as a way to help recoup the costs of curation. To put the UAM fee structure into a broader context, a survey of repositories around the nation in 2002 indicated that fees ranged from no charge to \$1,500 per cubic foot (Childs and Kinsey 2003). Reactions to the decision to charge repository fees varied widely within Alaska's archaeological community, with some members expressing grudging support for the idea and surprise that a fee structure had not been instituted earlier. Other individuals accused the museum of trying to put an end to research and trying to give itself an unfair advantage in competing for contract work.

⁶ The curation guidelines are available at http://www.uaf.edu/museum/depts/archaeo/forms/Guidelines.pdf. They were developed to reflect current knowledge about best practices in museology.

The decision to impose repository fees was one born of necessity. Over the past five years, the annual state appropriation has covered between 23 percent and 27 percent of the cost of running the museum as a whole. As part of this allocation, the museum's archaeology department receives about \$200 of unrestricted funds in a typical year. This allocation is not sufficient to cover the cost of shipping loans, let alone to purchase laboratory supplies or perform even the most basic preventive conservation. Repository fees do not pay staff salaries; they are used to purchase supplies and pay student assistants working on collection management. In other words, repository fees are used to help ensure that the collections curated at UAM remain a viable and accessible resource for years to come. Because researchers and agencies issuing permits were not told they would have to bear some of the costs of curating their collections, the museum will continue to accept and curate collections excavated before 2002 without charge. The decision to do so is intended to keep the specter of unanticipated curation costs from deterring researchers who would otherwise deposit their collections at UAM. Our ability to continue to accept collections of course depends on the availability of appropriate space.

TYPE COLLECTIONS AND SAMPLING PROTOCOLS FOR HISTORIC ARTIFACTS

The secure, environmentally controlled space available for curating the museum's collections is limited in size and unlikely to increase again any time soon. These limitations have forced the curatorial staff in all departments to carefully evaluate our continued ability to care for all of our collections and to make some strategic decisions regarding what sorts of new collections we will agree to curate. The area where UAM's archaeological collections have seen the greatest volumetric growth since 1990 is in the collections that come from historic-period sites. The growth in interest in Alaska's historic-period cultural resources among researchers and resource managers alike has led to a significant increase in collection-generating activities.

Archaeological sites from the historic period typically have large numbers of mass-produced objects such as bottles and cans. Unlike the artifacts from prehistoric sites that are unique because they are individually produced, these objects tend to be highly redundant. We call this the "Campbell's soup can dilemma," a problem best ex-

pressed by the question, "Does the collection's capacity to support research, teaching, outreach, or resource management benefit from the addition of this soup can when we already have an identical but better-preserved example in the collection?" One way that the museum is working to balance the desire to curate all Alaska archaeological collections with the real-world limitations on space and other resources is by collaborating with the Bureau of Land Management to develop and curate a type collection of cans found in Alaska archaeological sites. Thanks in large part to the efforts of Robin Mills (BLM) and Steve Lanford (BLM seasonal employee and long-time museum volunteer), the museum now curates a collection of over 200 unique, well-preserved cans. This collection will continue to grow as new types are discovered and collected. Lanford has produced and continues to refine a detailed users' guide to some cans that permits specific identification and recording of cans in the field, thereby obviating the need to actually collect them. In practical terms, this development means that field workers can collect the data one might derive from finding dozens of identical cans at a historic site without the museum being required to take on the long-term care and storage of objects that hold little apparent utility for research, teaching, interpretation, or resource management.

The decision to limit what sorts of material we can curate is not ideal. We recognize that we risk failing to curate material that might someday be of considerable scientific interest as analytical techniques continue to evolve. However, it is a pragmatic decision intended to strike a balance between the idealized desire to curate absolutely everything and the realities of available space and other resources. As a result, I believe the museum is now in a much better position to care for existing collections, to accept and care for new collections in the future, and to ensure that these collections realize their full potential as a public resource.

FUTURE ACTIVITIES

Writing this article has provided an opportunity to share information about some of the progress we have made over the past four years. With the assistance of various partners and some changes in curatorial practices, the museum has begun to make real progress in halting the gradual deterioration of its existing archaeological collections. Changes in policies and procedures will also help ensure that new collections have been cared for so as to maximize their

long-term preservation before they arrive at the museum. Writing this paper has also provided an opportunity to reflect on some of the things that still need to be done to ensure that Alaska's museum collections continue to be an important public resource for years to come. The balance of this paper outlines some of those challenges and the ways we might go about meeting them.

ORPHANED COLLECTIONS

One part of the curation crisis that has not been touched on in this paper is the number of archaeological collections for which no provisions for long-term curation have been made. There are literally hundreds of collections excavated over the past several decades in Alaska that are no longer being actively analyzed, but which, for a variety of reasons, have not been placed in a museum or other appropriate repository. Some sit on shelves and under tables in university or agency offices, while others are boxed and stored in basements, attics, and garages. Many such collections were produced by individuals who have since retired or left the field, or by contract firms now defunct. Some have even been accessioned at UAM but have never actually been physically deposited there. The museum periodically receives requests to borrow or study these collections and has even been accused of mismanaging them because they are not available. With the recent expansion to our collections storage space, the museum is now in a position to accept them. We, collectively, need to find ways to ensure that collections that are no longer being actively studied are placed in repositories that meet or exceed federal guidelines.

In addition to the collections that have never been deposited, other collections have been sent out on loan, never to be returned or to return with some or all of the diagnostic pieces missing. Naturally, it is generally the more interesting or significant collections that people wish to borrow, so it is these collections that have shown the greatest attrition. We are currently exploring ways to recover material sent out on loan with both the Alaska Office of History and Archaeology and the various federal agencies that own collections. We have also made the decision to loan collections only to institutions rather than individuals. At the same time, resolving the problems of orphaned collections and lapsed loans is not simply a matter of obtaining the physical return of this material. Such collections will also require substantial resources for preventive conservation and curation as they come in.

These collections are part of the intellectual foundations for our understanding of Alaska's past, and they have considerable unrealized potential to contribute to continued analytical efforts on a wide array of topics. The discipline as a whole benefits when we ensure the preservation of existing collections and maximize access to them (Marino 2004). UAM regularly hosts visitors from Europe, Russia, Japan, and North America who come to the museum to conduct collections-based research. Students also use these collections for research, including research for graduate theses at the University of Alaska, University of Colorado, University of Paris, and other institutions. Unfortunately, there are a number of state and federal collections that visiting researchers express interest in that are not available for study because they remain in private hands. As individuals interested in that past, we must recognize that our offices, laboratories, garages, and basements are not appropriate facilities for the long-term storage of fragile, publicly owned, and scientifically important collections.

One goal of this paper is to prompt some thoughtful discussion within the archaeological community about how cultural resources are and should be curated. It is no longer acceptable to behave as though collections from state land are state property and are therefore solely the state's responsibility. The same is true for collections from federal and private land. Broader currents within the discipline (e.g., Childs 2004) suggest we are moving toward a time when the fate of collections is viewed, in ethical if not strictly legal terms, as part of our collective responsibility.

Where does responsibility for these orphaned collections lie, and what more might we do to ensure their longterm preservation? Where will the necessary resources come from? Should there be institutional responsibility for collections made as part of sponsored research? What about collections generated by management activities or federally mandated site mitigation? Should responsibility for a collection transfer between institutions or agencies when individuals responsible for them change jobs? Should an employer such as a university or federal agency be responsible for collections when individuals who possess them retire? Archaeologists who generate and use collections should ask themselves a couple of additional questions. Am I aware of orphaned collections in danger of passing from the public domain? How am I currently curating the collections and associated documentation in my care, and what provisions have I made for their longterm care?

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