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Managing Archeological Resources from the Museum Perspective

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Federal agencies are responsible for archeological collections acquired from Federal lands and through Federally sponsored or permitted projects. With the promulgation of 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections, Federal agencies now have formal guidance about how to meet their statutory obligations for collections management. Archeological collections must be managed effectively if they are to continue to function as important resources for science, heritage education, and the humanities. Archeologists will need to make thoughtful and explicit decisions about the composition and growth of collections. The problem is not simply one of securing adequate storage space. Difficult decisions have to be made in committing scarce and sometimes costly resources to maintain accessibility to collections, as well as to safeguard them from theft, loss, or deterioration.

One important management decision is the choice of an appropriate repository. Some Federal agencies have in-house facilities; others need to initiate contracts and agreements with repositories that house archeological collections. In this country, state and university museums have traditionally served as major repositories for Federal archeological research collections. The author, who is a curator of anthropology at one of these institutions, points out that archeologists, as resource managers, need to work in concert with repositories in planning for the long-term maintenance of research collections.

Introduction

Archeologists are beginning to rely more and more on curated collections as sources of research data. This trend is inevitable as the number of intact archeological sites decreases. Yet, just as it is not possible to either preserve or investigate every archeological site, it is not feasible to preserve every artifact and sample in a museum¹ in perpetuity. Informed decisions must be made about what to curate and these decisions will in effect determine the composition of archeology's future database. As a consequence, the nature of the sample of the archeological record represented by curated collections and the suitability of this sample for long-term research must become

major considerations in the management of archeological resources. The significance of curated archeological materials to research, education, and cultural heritage, the diversity and magnitude of these materials, and the associated costs of curation in perpetuity, all provide strong arguments for conceiving plans and enacting policies to help guide decisions regarding the composition and growth of collections.

The primary purpose of this Technical Brief is to examine the reasons for curated archeological collections to grow by design rather than haphazardly, and to stimulate critical thinking about the nature of the database represented in curated collections, especially in relation to the range of future research that may be possible with these materials. A recent inventory and assessment of the New York State Museum's (NYSM) archeological collections was the impetus for raising these issues. The results of this project provide an example of the kinds of problems that future researchers may encounter in the extant sample of the archeological record, as represented in curated collections, if long-range planning and strategic thinking are not tied to curation decisions.

A second purpose of this Technical Brief is to encourage a dialogue between archeologists and museum professionals about the management of archeological collections. If the national curation crisis is to be resolved, both archeologists and museum staff must become active participants in making decisions about managing archeological collections. Dialogue is necessary because museum staff members who curate archeological research collections often are not archeologists and, conversely, not many archeologists are trained in collections management. Archeology has become a diversified field and few archeologists now work in museums as compared with the earlier days of the discipline. The museum profession, too, has changed. Especially in large research museums archeologists often have little or no direct involvement in managing collections, as collections management in itself has become a professional occupation.

The intent of this Technical Brief is neither to provide definitive answers about what or what not to curate nor to propose a uniform national approach for making such decisions. A collaborative effort on a regional basis among archeologists, repositories, government agencies, Native

Americans, and other interested parties is suggested as the most reasonable forum for developing plans for managed growth of curated archeological collections.

Curation in the Context of Cultural Resource Management

More than a decade ago the provision of information relevant to long-term research needs and for management of archeological resources was defined as an important goal for cultural resource management (Lipe 1974; Schiffer and House 1977). Museums play an important role in providing information for long-term research needs via the care of a primary data source—curated collections. This critical link between museums and cultural resource management was identified by Christenson, who recognized that repositories “carry on the job of cultural resource management after the archeologist leaves off” (Christenson 1979:162).

At about the same time goals for cultural resource management were being defined, a crisis in curating archeological collections assumed national proportions for the archeological profession as the tremendous increase in the amount of material resulting from cultural resource management-related projects exceeded the curatorial capacities of many repositories (Ford 1977; Christenson 1979; U.S. General Accounting Office 1987; Lindsay et al. 1980; Marquardt et al. 1982). Resolution of this curation crisis is not yet in sight. The persistence of the problem obviously is due in part to the inevitable process of modern development and concomitant disturbance of archeological sites. The volume of curated collections is steadily increasing as the number of intact sites decreases. To quote Christenson (1979:161), “there are only two logical ways that cultural resources can be preserved for future generations: (1) they may be left undisturbed in or on the ground; or (2) they may be permanently housed in a museum or other storage facility.”

The need to cope with the preservation problems posed by modern development was a driving force behind enactment of today's cultural resource management programs. While these programs have matured in their ability to manage problems posed by intact archeological sites (McManamon 1990:14-15), the same kinds of strategic thinking and planning generally have not been applied toward managing the collections. Thus Christenson's (1979:162) portrayal of the archeologist “leaving off” when it comes to curated collections is a telling characterization.

Curation as Resource Management

Because the focus of management and preservation efforts has been on intact sites, there is a tendency for archeologists, and other professionals charged with management decisions concerning archeological resources, to regard curation as a “storage” problem rather than as

a “resource/data management” problem. This is not to say that storage is not an issue. Collections will continue to grow and collections care is an ongoing process. There is now an urgent need for more and better facilities and additional staff to curate archeological collections. It also is the case that there is a wide range of options for storing many archeological materials. Recognition of these facts has led the Federal Government to initiate several important programs to help resolve problems in quality of care and accessibility of collections. These efforts are both necessary and highly laudable.

Of particular note are the National Science Foundation's (NSF) granting program for Systematic Anthropological Collections that provides funding to rectify problems with extant collections. Equally important is the recent issuance of governmentwide regulations for the *Curation of Federally-Owned and Administered Archeological Collections* (36 CFR Part 79), which set standards for collections care and use by Federal agencies. Updated guidelines for management of collections held by National Park Service (NPS) units (1990), and recent assessment by the Southwestern Division of the U.S. Army Corps of Engineers (COE) of the curatorial conditions of collections resulting from COE water resources development projects (Jelks 1990) also are commendable. The work of the Eastern Archeological Field Laboratory of NPS to upgrade the collections from the Minuteman National Historical Park (Towle and MacMahon 1986) is particularly noteworthy, as is the effort by the St. Louis District of COE to develop a program that will comply with Federal curation regulations for collections administered by them. The report for the St. Louis District documents costs in excess of \$1.25 million necessary for bringing these collections up to minimum standards. These funds are separate from annual maintenance (“in perpetuity”) costs (Trimble and Meyers 1991).

Despite the critical need for these programs, Federal support and regulations for collections care do not fully resolve the curation crisis.² Management of archeological collections has become a much broader problem than just that of making decisions concerning types of storage containers, climate control, and cataloging systems. Managing collections has become complex and costly, and for some portions of archeological collections, such as human remains and funerary objects, curation also has raised ethical and moral issues.³ The present situation is due in part to the increasing professionalization of museums, the diversification of the audiences they serve, and the increasingly demanding roles of museums in preservation efforts. Repositories can no longer afford to be passive recipients of the “results” of archeological fieldwork, i.e., collections. Repositories must justify what they curate. They must be accountable to the public they serve.

The curation problems now being faced concern decisions about what types of materials can and should be curated in perpetuity. Decisions about what to curate are made by many repositories on a nearly daily basis. Cu-

rated collections have not been incorporated as explicit elements in archeological resource management plans, so museums are finding themselves in the position of determining archeology's future database. Because the present situation of case-by-case reviews of individual collections is not tied to long-range planning efforts, curation decisions unfortunately are being made without an overall strategy to ensure preservation of information for long-term research needs.

Over the long term, a strategy of informed decision making, including a process of critical evaluation of the composition of the curated data bank, could lead to more productive collections-based research. Scholars certainly have made and are continuing to make valuable contributions to archeological research through studies of extant museum collections (Cantwell, Griffin, and Rothschild 1981), but such projects often face limitations because of the nature of the curated sample. To a certain extent, these problems are inevitable; new ideas may require different kinds of data for testing, or new techniques may make recovery of new information possible. In other cases, limitations are caused by nonmethodical or unsystematic collecting or poor curatorial practice with the result that critical provenience information is irretrievable (Brown 1981). As more and more of the archeological record takes the form of curated collections, these collections will need to contain the range of materials required for continued research.

Recent technological advances in information management of museum collections are for the first time making it possible to evaluate the range of data that is contained in curated collections—to identify gaps in the data, to assess curated materials in terms of their research potential, and to take steps to correct obvious biases. Implementation of a process of continuing assessment and reassessment of collections in relation to research needs is critical for ensuring that data collection is responsive to changing information requirements. The management of archeological collections must become as dynamic as the process of scientific inquiry. Responsive management of collections is urgently needed because there is little time to correct problems as site destruction continues.

The Ethical Dilemma in the Context of Research Museums

Ideally, the decision to collect materials should imply the decision to curate them. A long-standing ethic of professional archeology in the United States, implied in the ethics code of the Society of Professional Archeologists (SOPA 1982), is to curate all materials resulting from a professional investigation. Adherence to this standard already is difficult since resources for curation are limited. In the context of a museum with a mission to preserve research collections, it is poor practice to acquire collections having limited research potential. The ethics of the museum profession require critical collecting and justification of acquisition decisions (New York

State Association of Museums 1974, International Council of Museums 1987, National Park Service 1990).

Because the context of much archeological research has changed as a result of the necessity of managing irreplaceable cultural resources, it may be time to evaluate the "goodness of fit" of present ethics to the current situation (Salwen 1981; Dunnell 1984). Formulating plans for controlled growth of curated collections may mean that not all professionally collected materials will be curated (Salwen 1981). The proposed amendment to the Federal curation regulations,⁴ which provides deaccessioning guidelines, implies that this will be the case under certain conditions. If it is necessary to bend to practicality in deciding what can be curated in perpetuity, then there must be a well-articulated basis for making these decisions. As Milner (1987) has pointed out, "archeologists today...are faced with the considerable problem of ensuring that future researchers inherit a satisfactory database." Perhaps this goal is the most compelling ethic from a scientific point of view. There also is a need to balance this worthy goal with the equally compelling need to preserve materials for their value to the nation's cultural heritage and education.

Research Potential and Curation

Two key factors for ensuring that future researchers will inherit a satisfactory database are ascertaining (1) that those collections curated for research purposes have characteristics that make them appropriate for research use, and (2) that the repositories responsible for curating archeological research collections are capable of maintaining that research integrity. Even though there are several kinds of institutions that may curate archeological materials, e.g., university museums and research centers, public and private museums and historical societies, special Federal facilities, etc., not all repositories are appropriate for or capable of curating research collections. For example, although all museums have some degree of involvement in heritage preservation and education, the missions of many institutions do not include curation of scientific research collections as a central tenet. As a result, such institutions are unlikely to have either the appropriate staffing or facilities necessary for curating such collections.

In those institutions that do have curation of research collections as a fundamental responsibility, and thus are the appropriate institutions for curating most archeological collections, questions concerning research value arise when collections are considered for acquisition. When such criteria are applied to archeological collections, questions of research potential revolve around three general considerations: (1) project designs or plans; (2) quality of recording and recovery; and (3) redundancy of information. Without the benefit of an overall context or plan for making decisions about what to curate many of these questions are difficult to address.

The designs of field projects are important considerations in assessing the future research potential of archeological collections, because these plans structure the ways in which information and materials are collected. In the past individual archeologists essentially controlled which sites they investigated and under what circumstances. This is not the case with most cultural resource management projects. Decisions concerning contracted fieldwork often are compromises (Green 1984:ix-xi). The correspondence between the archeological record represented by collections and the intact sites is not always the most compelling force behind these decisions.

For the purposes of this discussion it is important to distinguish between the ways in which the scientific or research value of collections is assessed and the ways in which site eligibility for the National Register of Historic Places and other legal requirements of Section 106 of the National Historic Preservation Act are determined. Even though archeological research problems and cultural resource management problems clearly are linked, the goals of the two endeavors are not necessarily the same (Dunnell 1984). Although the agendas of either endeavor can lead to creation of collections suitable for long-term research, the long-term research value of collections must be evaluated separately from the eligibility of sites for the National Register and other aspects of the Section 106 process.

National Register eligibility for archeological sites generally is based on research significance, but there are relative "degrees" of significance and ongoing debate as to what constitutes National Register significance. It probably is fair to say that, in general, documenting National Register significance is much easier for large, complex sites or sites of great antiquity than for sites with limited assemblages and no clear chronological information, such as upland lithic scatters. In fact, basic research information often can be acquired from the latter type of site during a comprehensive site evaluation program that determines that the site is not eligible for the National Register. This does not mean that the collections obtained from such sites have no research significance. The same argument can be made for collections resulting from many survey projects. On the other hand, depending on the scope of a specific project, it is entirely possible for collections made from a National Register site to have little or no research value. For example, collections from highly disturbed areas on such sites would have little or no contextual integrity, and thus limited research value. If the future research potential is found to be extremely limited or nonexistent, then there is no justification on a scientific basis for curating collections for long-term research, no matter under what context the collections were made.

Basic descriptive and contextual data must accompany a collection if it is to have future research potential. A major factor in assessing adequacy of documentation is whether a systematic collecting methodology was used (Brown 1981). Even in the context of modern professional inves-

tigations, there is a wide range of performance in basic recording and recovery techniques. Although documentation may be legally acceptable, the minimum level of adequacy may or may not ensure long-term research value, especially those collections that lack associational data or any consideration of sampling biases. Curation decisions in these cases may depend on the type of archeological resource from which the collections came. Other non-scientific considerations such as humanistic or educational values also may influence curation decisions for those collections or materials found to be lacking in scientific value.

While a certain level of redundancy in collected information is necessary for research purposes, excessive redundancy in collected materials may exist for some types of sites and projects. Sites with large and highly redundant sets of materials, e.g., quarry sites and brickyards, pose questions of trade-offs between large samples and costs of facility space (Salwen 1981:570-571; Jelks 1990). What constitutes a sufficient sample of material from these types of sites? Regional variation in the archeological record must be considered since redundancy at the regional level, e.g., regions with many quarry sites, may allow conservatism in sample size at the site level. Consideration of sample size and composition leads to a second key factor in ensuring a satisfactory database for future research—the overall representation of the archeological record in curated collections.

Curated Collections as Samples of the Archeological Record

Not only must individual collections possess characteristics that make them useful for continuing research, the aggregate sample of the archeological record preserved in collections must allow continuing study of the broadest possible range of research problems. Preservation of a representative sample of regional archeological resources was suggested in the mid-1970s by Lipe (1974:414) in regard to preserving intact sites. More recently, Dunnell (1984) and Salwen (1981) have suggested that, because archeological resources are nonrenewable, preservation of a representative sample is the most ethically defensible strategy in terms of general management of archeological resources.

This same argument can be extended to curated collections. Preservation of such representative samples in collections would insure persistence of the inherent variation in the archeological record and thus preserve the ability of future archeologists to study variation and its causes. The goal of managing collections growth would then be to move toward curating more representative samples of archeological resources for specific areas. A central point to be made here concerning the representative sample concept is that if a broad range of archeological studies of cultural characteristics and processes through time and across space is to continue, collections from one type of site/resource must not be curated to the exclusion of other kinds of sites, and that

various kinds of sites, features, and materials must be represented in sufficient, yet practical, quantities to allow meaningful comparisons. Because the nature of the sample collected by cultural resource management projects is driven largely by development needs, the representation problem for curated collections becomes one of relating accumulating individual collections to a long-range plan based on long-term research needs.

Defining the composition of a representative sample is fraught with difficulties, but is not entirely impossible. Categories must be used to structure the sample, and any sampling plan will need to consider various categorical levels, such as kinds of sites, contexts, (e.g., features,) and artifacts/samples. Definition of representative samples of site types has been accomplished successfully in certain regions, as Glassow (1977:414) demonstrates. He also makes the important point that the criteria for defining categories must transcend as much as possible the restrictions of current archeological concerns and biases. The problem of assuring representativeness when blind sampling is necessary is discussed by Dunnell (1984:71-72). He suggests that a spatial frame of reference can provide an independent control.

A complementary problem inherent in obtaining representative samples is determining the proportions of the categories. This can present difficulties when samples must be drawn from numerous, broadly distributed resources as well as rare or localized occurrences (Dunnell 1984:72). For example, in the hierarchical settlement systems of complex societies, large sites with rich deposits form a small proportion of the sites in a region. Yet, given the diversity of materials and data potential of these sites, a strong argument could be made for curating collections from a larger proportion of such sites than other types of sites. There also may be multiple reasons, i.e., scientific, humanistic, educational, and artistic, to curate the aesthetically and culturally significant artifacts that often are found at such sites. Such artifacts merit special consideration for scientific reasons because of the wide variety of information that can be derived from them (Brown 1982:181-183).

An even larger problem in defining samples is the inability to predict the kinds of biases that future researchers will discover, even in the collections resulting from today's most carefully designed data collection strategies. While it is not possible to predict the future, it is possible to evaluate the past. To not correct existing recognizable biases in the curated data bank is counterproductive. Such biases severely limit the kinds of research problems that presently can be addressed with collections, and these limitations are apt to become more profound over time. As was discussed above, periodic review and evaluation of collections is necessary to identify and correct biases so that collections management becomes responsive to new information and changing research needs. An important component of a review and evaluation process is comparison of the curated sample with the overall composition of the archeological record.

The New York State Museum's Collections: A Case Study of the Present Sample

A logical beginning place for developing plans aimed at better managing collections is to determine the nature of the sample of the archeological record presently represented in curated collections. The nature of the present sample generally is unknown, largely because of problems in collections accessibility. A chronic problem in the management of archeological collections has been access to information about what is in a particular institution's collections. This situation is beginning to change as museums are being required to become more accountable for their activities, and as the information management capabilities of modern computers are applied to collections management. Support from programs such as the NSF Systematic Anthropological Collections Program is also a critical element of this change.

An NSF-sponsored collections inventory recently undertaken by the NYSM provided an opportunity to assess the nature of the curated sample of archeological material held by that institution (Sullivan 1987, 1989). The primary goal of the collections inventory was to make these collections more accessible for research, but the compiled data on collections composition also allowed recognition of information gaps.

The NYSM is a 150-year-old institution that has been "home" to a number of distinguished archeologists, including Arthur C. Parker, M. R. Harrington, and William A. Ritchie, who made collections that are still curated by the museum. It also serves as the repository for collections resulting from many cultural resource management related projects. The archeological collections include an estimated 1,000,000 objects and associated records with statewide coverage. As such, the NYSM archeological collections are the most extensive for the State of New York, and represent a century and a half of archeological research in the Northeast (Sullivan et al. 1990).

The representativeness of the State Museum's collections in relation to present knowledge of the nature of archeological resources in the State was assessed by asking the following questions. How well do the curated materials represent the archeological resources of the geographic region, i.e., the State of New York, from which the museum curates collections? Are all the known types of sites included? In what proportions? At what level of recording/investigation? How well are the investigations documented? Currently it is neither feasible to compile precise statistics nor to directly compare the contents of the NYSM collections with expected distributions of archeological resources in various regions of the State,⁵ but several patterns are suggested by the inventory data.

A series of maps and graphs showing collection distributions by geographic area, time period, and volume serve to illustrate the extent of coverage of the NYSM collec-

Sites by County
in the
NYSM Collections

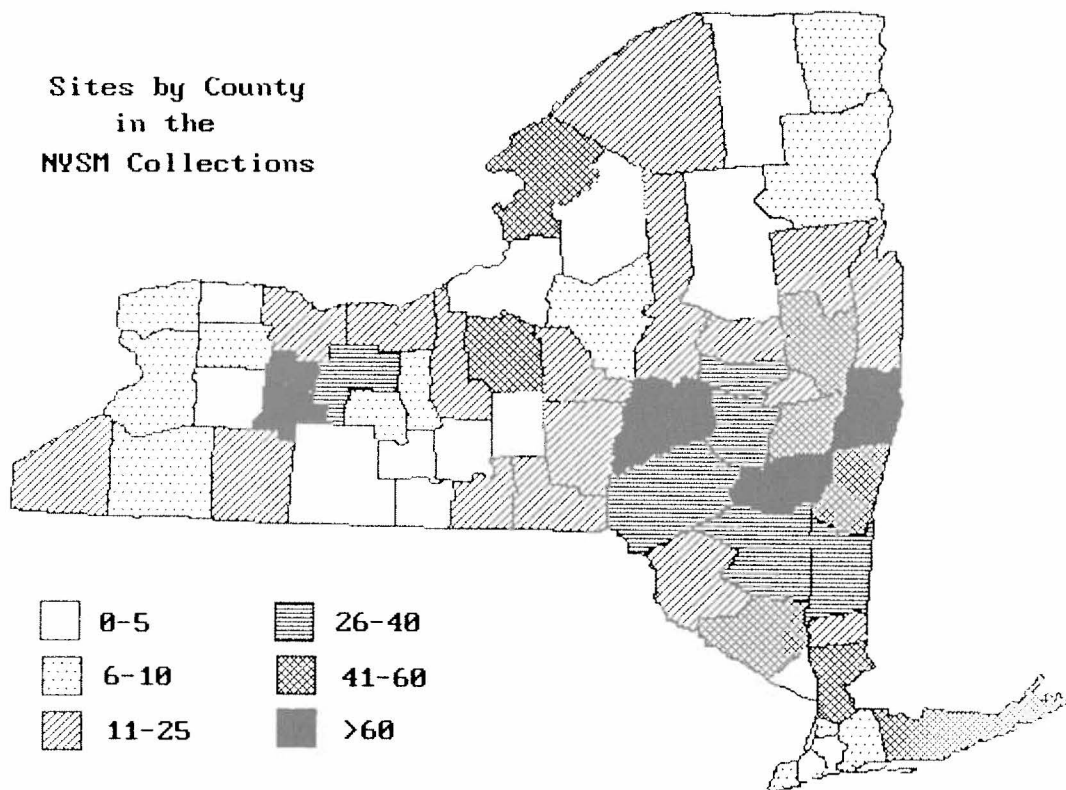


Figure 1. Distribution of sites by county as represented in the New York State Museum collections.

tions. First, as shown by Figure 1, a map of sites represented in the collections by county, the collections do not provide even geographical coverage across the State. Although potential distributional differences in site density in various areas of the State cannot be discounted, it is clear that the archeological resources from some counties and regions are very well represented and others are not represented at all.

The same kind of distributional pattern appears true for time periods, as shown in Figure 2. Although one would expect better representation for later prehistoric periods than for earlier ones because there are many more of the former, a graph of collections associated with general time periods indicates that certain periods are better represented than others.

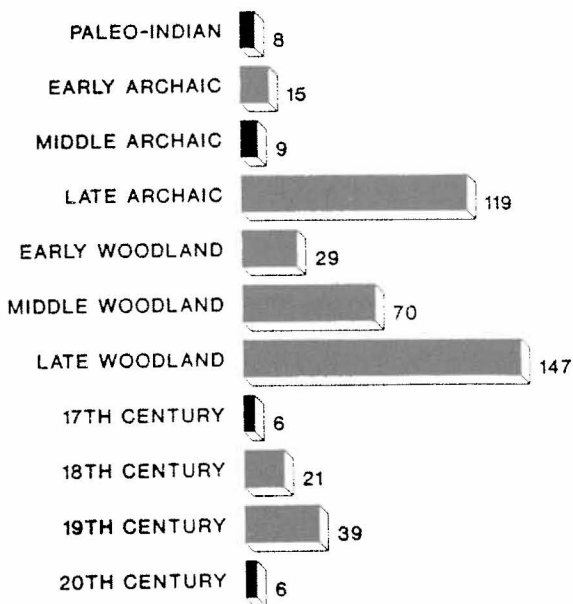
Another collecting pattern is indicated when Figure 3, a map showing the volumetric distribution of objects by county, is compared with the distribution of sites by county shown in Figure 1. Differences in these distributions generally are related to the level of intensity of investigation. Those counties with few sites, but many objects, are indicative of large scale excavations having been conducted at one or more sites. In contrast, those counties with numerous sites, but few objects, are indicative of areas where some survey work was done, but little

in the way of excavations. Thus the intensity of coverage also is variable across the State.

A fourth type of collecting bias was apparent in the course of the inventory work, but is difficult to illustrate quantitatively due to poor information about the nature of individual sites. This bias is related to kinds of sites that have been investigated intensively. By far the majority of sites that have been systematically and intensively investigated are large habitation sites or deeply stratified sites, the latter type usually being located in floodplain environments or rock shelters. Very little information exists in the NYSM collections from upland sites, lithic scatters, small habitation sites, and the like, even though such sites constitute the majority of the archeological record. There also is very little information from systematic regional survey. Instead, the collections are heavily biased toward those sites that are rich in terms of artifact content. This bias is largely a function of the history of the development of archeological research since stratified and artifact rich sites are necessary for building chronologies.

To summarize, the inventory of the State Museum's collections provides very basic qualitative and quantitative information about the representativeness of the present archeological database for New York State as contained in extant collections. Scrutiny of the areas of most com-

DISTRIBUTION OF COLLECTIONS BY TIME PERIOD*



*Number of Sites Represented

Figure 2. Representation of the New York State Museum collections by time periods.

prehensive coverage suggests that because the bulk of the NYSM collections was made by its in-house archeologists, the collections are more reflective of these scholars' personal research interests rather than actual distributions of archeological resources. For example, Arthur C. Parker (1907, 1922) conducted much of his field research in extreme western New York and the Finger Lakes area. William Ritchie and Robert Funk continued work in the Finger Lakes region and also spent considerable time in the Hudson Valley and southeastern section of the State (Ritchie and Funk 1973; Funk 1976). This assessment is not intended to be a criticism of pursuit of individual research objectives by archeologists, but, as has been discussed, preservation of a database that can be used for future research is an important consideration for cultural resource management (Dunnell 1984; Glassow 1977; Milner 1987; Salwen 1981).

In general, cultural resource management projects have not begun to fill in the gaps in areal or site type coverage that are characteristic of the older collections. The lack of intensive investigations of what could be considered small-scale sites is especially noteworthy. This finding is consistent with a recent assessment of all archeological work conducted in the Upper Hudson region of New York State (Bender and Curtin 1990). Even though such sites are extremely important for modeling regional human landuse patterns, these sites often are difficult to

interpret on an individual basis which makes case by case justifications for intensive investigations troublesome.

Other repositories may have collections that fill in some of the gaps observed in the collections curated by the NYSM. Data are not readily available to assess whether this may be the situation, although the New York Archaeological Council has made some progress toward a general inventory of extant collections for the State (Engelbrecht et al. 1988). Some of the gaps in areal coverage may correlate with the rate of modern development in certain regions. Areas with few archeological investigations may indicate areas with the least development activity. If this is indeed the case, then, in theory, the archeological record for these areas persists as intact sites.

The situation at the NYSM probably is typical in terms of the collections in its care vis-à-vis its area of coverage. The specific nature of biases in collections, however, may vary from institution to institution, and from region to region, depending upon the kinds of archeological problems historically investigated in specific areas and the local characteristics of archeological resources.

Mechanisms for Effecting Collections Management by Museums

In order to correct gaps in the curated data bank such as those observed in the collections of the NYSM, there must be coordination between archeological research, cultural resource management, and collections management. Even if an ideal goal of having comprehensive, well-considered plans for data collection and curation is reached, such plans must be compatible with museum policies or there is no guarantee that repositories will curate the resulting collections. Coordination with museums at the "front end" of decisions concerning management of archeological resources—those decisions concerning what to collect—would help ensure that repositories will accept the resulting collections and that these materials are appropriate for building regional data banks (Marquardt et al. 1982:413). When collections involve the cultural heritage of Native American tribes these groups also should be involved in the decision making process.

A requirement of Federal Antiquities Act⁶ and Archeological Resources Protection Act (ARPA)⁷ permits, and agency equivalents, is that prior arrangements must have been made with a repository to accept and curate resulting collections. In practice, since curation usually is regarded as a storage problem, decisions concerning project design already have been made by the time repositories are contacted. The logical links between project design, collecting strategy, long-term research value, and curation are either overlooked or unrecognized by those involved in making such decisions. Thus the critical parameters that control the kind of collections that will be made already are set without input from the repositories. In some cases repositories are contacted after collec-

tions are made. When either of these scenarios happens, repositories are placed in the unflattering role of critics rather than partners in resource management.

Museum collections management policies are instruments that can effectively coordinate involvement of repositories in archeological resource management, as well as shape the curated archeological resource sample. Collections management policies incorporate sets of policies for all activities a museum undertakes in regard to collections, including acquisitions, loans, research, exhibition, and deaccession. A major goal of these policies is to insure that activities related to collections are in accord with a museum's mission (Malaro 1979; Pearce 1990:67-68; National Park Service 1990). Museum boards of trustees, or similar administrative bodies, set the general parameters of a museum's collecting activities by setting the museum's mission. Generally, the mission statement embodies considerations of geographic area, subject matter, and time period, and how the collections will be used, e.g. education, research, exhibition. Museum staff must then take these general parameters and translate them into more specific plans for building the collections. These plans are articulated in collections management policies. Thus, individual institutions exercise a considerable degree of control over what they acquire, and the policies of individual institutions differ.

The scope of collections and acquisitions portions of such policies are of special concern if collections are to become appropriate for long-term research needs. These policies guide decisions concerning the kinds of materials an individual museum will accept and the circumstances under which they will be accepted (Pearce 1990:70-74). Codes of ethics, such as the previously cited codes of the International Council of Museums (1987) and the New York State Association of Museums (1974), guide formulation of such policies. Two ethics in particular have direct bearing on what an individual museum will collect. The most encompassing is that a museum should accept only those collections related to its mission. A second important ethic is that a museum should be able to curate properly those materials it accepts.

An *active* rather than *passive* approach is inherent in a good museum acquisition policy (Burcaw 1975:50). With an active approach, a repository makes conscious decisions as to how its collections will grow, based on long term goals, and seeks to obtain those materials that meet these goals. In contrast, passive collecting means that a museum merely decides what will be in its collections based on what it is offered. Collections management policies based on an active approach can thus shape the overall character of a repository's collections and even provide quality control over what is curated. Such policies can be specific, for example, as to the kinds of artifacts or specimens a museum will accept, the level of

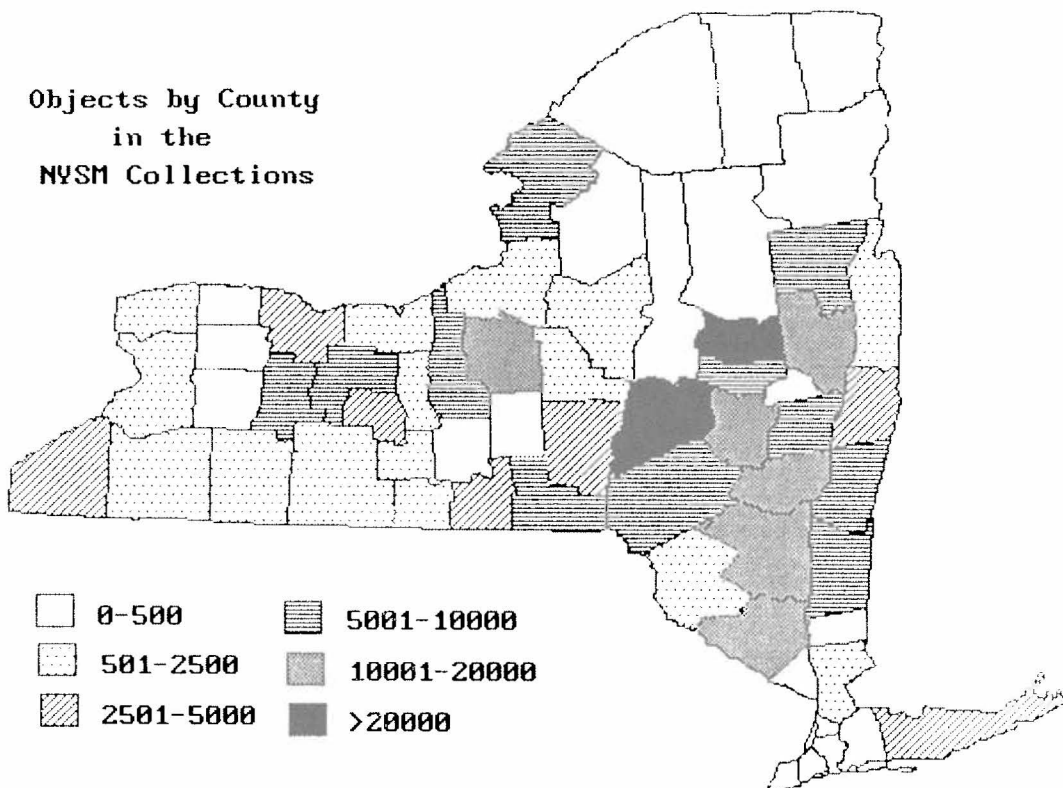


Figure 3. Distribution of objects by county as represented in the New York State Museum collections.

documentation required, or the kind of sites or projects from which collections can or should be accepted.

Development of such active collections policies is one response museums have made to pressures to become more accountable to the public for their activities. The recent controversy concerning the curation of Native American remains and funerary objects and controversies over art exhibitions, such as the Maplethorpe photographs, are two highly publicized examples of pressures being placed on museums to justify their activities. Explicit formalization of collections management policies is a very positive development, because it helps upgrade the level of professionalism of museums in general. Development of these policies by individual institutions is becoming standard museum practice. For example, in New York State existence of a collections management policy is required before a museum can be chartered by the State Board of Regents, and NPS requires its park units with museum collections to have such a written policy (National Park Service 1990).

Archeologists and other public officials employed in regulatory agencies should become familiar with collections management policies and the role of repositories, through these policies, to assist in managing archeological resources. If collections management policies are to be used effectively and positively, archeologists must become actively involved in policy formulation. The potential exists for these policies to be detrimental to future research efforts if the needs of archeological research are not principal considerations in policy formulation. Archeologists can neither afford to "leave off" when it comes to managing collections nor to invest often costly and scarce curation resources unwisely.

Steps Toward Coordinated Regional Planning

Regional variation in the archeological record suggests that the most logical arena for developing plans for collections growth is at the regional level. As discussed previously, State plans for managing cultural resources, which are required by Federal regulation,⁸ historically have not incorporated curated collections as elements of these comprehensive management plans. As has been argued here, the accumulating data bank in the form of curated collections should be considered explicitly in such planning efforts. Developing plans to manage better what is curated will require coordination between those Federal and State agencies charged with making decisions about which sites are to be excavated, the archeologists who make and use the collections, the public and private repositories that ultimately curate the collected materials, and Native American tribes whose cultural heritage may be represented in the collections.

The best coordination of regional planning efforts may be initiated by statewide, archeological professional organizations working in conjunction with State Historic Pres-

ervation Offices. Task forces that bring together the repositories and archeologists having long-term research and collecting interests in specific regions would be one means of accomplishing this synthesis. The repositories should solicit Native American involvement. Many museums now have or are in the process of forming Native American advisory groups. Representatives of Federal programs having major influence in the regions also should be included. For example, if the Forest Service, NPS, or Bureau of Land Management have major land holdings in a region, input from these agencies is necessary for coordination with their cultural resource management master plans. Such regional task forces may prove of benefit to collections policies in general, as a wider constituency becomes aware of and involved with collections issues.

A major goal of such regional task forces would be to work with the repositories to draft collections management policies that could be used to shape the sample of the archeological record that will come to be contained in curated collections. In some cases, inter-institutional agreements may have to be made where there is overlap in the geographic areas covered by two or more museums. Such plans would neither require nor preclude designation of regional repositories (Marquardt 1977) as it is the plans that would be regional in nature, not necessarily the repositories. Periodic review and revision of the plans and museum policies would also be necessary as collections grow, and as archeological knowledge expands and evolves.

A preliminary step in the planning process is to know what already is contained in curated collections. Repositories must inventory and assess their collections. Regional task forces potentially could assist with these inventories and assessments. The current repatriation concern may well prove to be a benefit to these steps, as repositories begin to form cooperatives with wider constituencies and to conduct required inventories and assessments of the collections in their custody. Once the strengths, weaknesses, gaps, and biases of existing information are known, particular kinds of collections that are needed can be identified.

In the interim, repositories must continue to make decisions about what to curate without benefit of such comprehensive plans. Since this is the case, it is in the best interest of both the museum and archeological professions for repositories to take an active approach to acquisitions. They must become critical collectors and seek actively those materials for curation that result from well-conceived and systematically conducted and documented projects. Repositories that do not have archeologists in positions of responsibility for managing collections should seek advice from archeologists about acquisitions. Archeologists should respond to such requests both with sensitivity to the problems of managing collections and thoughtful justifications for curating specific collections.

The following general guidelines for research collections acquisition are proposed for consideration:

- (1) Define the geographic area(s) that is encompassed by the repository's mission and accept materials only from that area;
- (2) Assess the present coverage of the area in terms of space, time, kind, and quality;
- (3) Define priorities for acquisition based on the present character of the collection, the institutional mission, and gaps perceived in the database;
- (4) Question whether potential new collections contribute to the information base being developed;
- (5) Refuse to accept collections that have severe spatial sampling, materials recovery, or documentation problems;
- (6) Develop standards and guidelines for collections preparation that must be followed by archeologists planning to have the repository curate collections; and
- (7) Stay informed as to projects being done in the defined collecting area while actively seeking those collections that fit identified priorities.

Developing plans to guide growth and content of curated archeological collections can be a complex process, but the lack of such plans will perpetuate the curation crisis. Some collections will be preserved to the detriment of others without regard to research needs and information potential. If there is to be a future for the past, research collections must be built with adequate and appropriate consideration of long-term information needs.

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Endnotes

1. The terms "museum" and "repository" are used interchangeably to indicate any facility as defined in *Curation of Federally-Owned and Administered Archeological Collections*, 36 CFR Part 79, Section 79.4(j).
2. It is important to note that fully one-third of the states have yet to enact some form of state-level curation legislation to ensure basic care for those collections which do not fall under Federal jurisdiction (Carnett 1991, Fig. 1).
3. Native American Graves Protection and Repatriation Act of 1990 (P.L. 101-601, 25 U.S.C. 3001-3013)
4. 36 CFR Part 79.5(d), 79.12, *Curation of Federally-Owned and Administered Collections*; Proposed Rule. Published in the *Federal Register* 55(177):37671-37672. (1990)
5. At present, there is no centralized site file that contains listings of all known sites that are recorded in various institutional (museums, universities, etc.) files for the State of New York.
6. P.L. 59-209, 16 U.S.C. 431-433 (1906); 43 CFR Part 3.
7. P.L. 96-95, as amended by P.L. 100-555 and 100-588, 16 U.S.C. 470aa-mm (1988), 43 CFR Part 7.
8. 36 CFR Part 61.4(b)(3), *Procedures for Approved State and Local Government Historic Preservation Programs*.

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