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# OCCASIONAL PAPERS

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## Collaborative Engagement: Working with Private Collections and Responsive Collectors

*Edited by*
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# OCCASIONAL PAPERS



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Project documenting private collections in Ross County, Ohio. Photos courtesy of Kevin Nolan for the Central Ohio Archaeological Digitization Survey (COAD), funded by the National Science Foundation (NSF) awards BCS 1723879 and BCS 1723877.

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# The Ethics of Professional-Collector Collaboration

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Across the midcontinent, merely the private collectors and collections that exist today are too many to count. Collectors and other nonprofessionals vary widely in motivations and standards, from near professional to irresponsible. In turn, professional attitudes to collaboration with collectors and nonprofessionals range from enthusiastic through indifferent to actively hostile. Correctly or not, some professionals perceive categorical ethical barriers to collaboration. Yet ethical concerns cut both ways; the reasonable standards of many collectors and the undeniable aggregate size and information content of private collections justify engagement with responsible nonprofessionals and opposition to irresponsible ones. Here, I consider ethical issues that counsel such engagement, propose serious study of collecting as a sociological phenomenon, and advocate documentation of private collections in research and conservation practice but also care in avoiding encouragement of irresponsible behavior.

**Keywords** Ethics; Private collections; Collaboration; Research; Preservation

Most midwestern archaeologists know that private artifact collectors are scattered in the thousands across the region. Collectors know the relevant properties of their local areas intimately and survey at optimal times. Collectors vary in their orientation toward professionals and in the quality of their records and degree to which they document their collections. Some document to professional standards and others scarcely at all. To any archaeologist with more than passing experience of conditions across the Midwest, this much is common knowledge.

We also know, at least broadly, that collectors hold many more diagnostic chipped- and ground-stone artifacts than we do. One recent study compared results of midwestern professional survey with what collectors found in the same tracts. By conservative estimate, collectors hold roughly 95% of diagnostics, and in most respects their data preserve more original spatial structure than do professionals'

(Shott 2017). Obviously, diagnostic artifacts are informative about past cultures. It is less obvious, at least to some of us, why professionals have treated the vast corpus of diagnostic data held in private collections with attitudes that range from indifference to open hostility, the latter a sentiment that some collectors return.

One answer, perhaps obvious to some, is the objection of collaboration with private collectors on the grounds of professional ethics. Somehow, collaboration is thought to taint us, making us complicit in the damage, sometimes illegal, that some unprincipled collectors wreak on the record. Of course, professionals should condemn such actions and work with responsible and responsive collectors (*sensu* Shott and Pitblado 2015) to minimize or eliminate damage. Ethical objections to egregious conduct are both sensible and unremarkable. But some professionals argue not just in favor of negative ethical strictures that we share but of positive ethical obligations that not merely permit but require us to collaborate with responsible and responsive collectors.

## A Closer Look at Ethics

According to its bylaws, the Midwest Archaeological Conference (MAC) serves in part as "a bond among those interested in" archaeology, promoting "the preservation of . . . resources . . . [and] the conservation of . . . data" (2017). Professionals and responsible collectors share the bond of interest in regional prehistory, making us natural allies. Considering the magnitude of private collection and the information residing there, it comprises a considerable portion of the aggregate record that MAC urges us to preserve. My reading of this statement is that it encourages professionals to promote preservation in part by the documentation and limited conservation of private collections. Practically then, MAC's bylaws *require* us to engage with responsible collectors in preservation and conservation of their collections and records.

Similarly, the Society for American Archaeology's (SAA) Statement of Ethics (1996), which presumably governs the practice of MAC members, not merely permits but enjoins professionals to collaborate with responsible collectors in documentation of records and, if possible, in preservation of collections (Shott and Pitblado 2015:12). Indeed, one of SAA's chief original purposes, animated by the common knowledge that undocumented collection degraded our collective material record, was "greatly encouraging an improved understanding and friendly cooperation between . . . professional and amateur" (McKern et al. 1935:1), thereby promoting conservation by "guiding [collectors'] . . . fieldwork" (McKern et al. 1935:3) and documenting collections public and private (McKern et al. 1935:4). The 80 years since witnessed a change in professional attitude that has neither stopped private collection nor made sufficient attempts to collaborate productively with collectors.

One response to earlier proposals for collaboration (Shott 2008) raised the specter of false foundation, that is, the possibility that collectors, from selfishness or malice, might deceive professionals about what they found where. No doubt such false foundation can occur, although in my personal experience it seems rare. But

such arguments are at best only half-right, failing to consider a different kind of false foundation that arises when we draw conclusions about the quality of assemblages that lack diagnostic artifacts or about areas considered insignificant because we found little there. These may be lacking only because the diagnostics already were collected, an outcome suggested in theory (Schiffer 1996:116) and documented in practice (e.g., LaBelle 2003; Nolan and Leak, this volume) by archaeologists who make the effort to document private collections from their survey areas. Yet this variety of "false foundation" rarely is acknowledged in either research or preservation studies. Arguably, state historic preservation office (SHPO) and federal standards should be revised to encourage, if not require, documentation of private collections from survey areas.

Historically, then, the profession has exercised its negative ethical scruples against collectors more readily than its positive ones to collaborate with them. Without for a moment proposing we relax our standards or countenance the damage and destruction that some selfish individuals continue to commit, contributors to this volume advocate a rebalancing of our professional ethical stance toward collectors. Rather than enemies or rivals, we argue that responsible collectors can be our natural allies in the preservation and conservation of the remaining record.

## Some Ways Forward

Collaboration with private collectors to document and, in the process, preserve collections and conserve information can take many forms. Donation of well-documented collections may overburden the already limited resources of archaeological curators, although in some cases this outcome might be sought. Detailed documentation of the many collections held by responsible or responsive private collectors can be completed in other cases. Several good examples are discussed here. One, currently implemented in south-central Ohio, stakes out a middle ground between the ideal of receiving collections for permanent curation and the questionable neglect of them. The Central Ohio Archaeological Digitization Survey (COADS) is a collaboration between the University of Akron, Ball State University, and dozens (or more) private collectors in seven Ohio counties.

Starting in fall 2017, COADS began documenting collections to the finest degree that available information allows and with suitable data security. It makes two-dimensional digital scans of all diagnostic chipped-stone tools and selected other artifacts and three-dimensional digital models of approximately 10% of samples of the former. COADS has research goals to which the magnitude of private collections is integral, chiefly to document the successive cultural adaptations that attended the processes of prehistoric domestication and sedentism and to use the models to study the range of variation in defined point types and the historical signals that link them by diversification or adaptation over time. But equally important is COADS's goal of serving as a pilot documentation program that larger, more systematic future efforts might partly emulate.

## The Symposium

This volume originated from contributions to the sponsored symposium at the 2017 Midwest Archaeological Conference in Indianapolis chaired with Kevin Nolan and Mark Seeman. The symposium was prompted by our productive experience with private collectors and a growing conviction that professional archaeologists insufficiently understood the virtues of collaboration. By ignoring the potential contribution of private collectors, researchers waste an opportunity to complement scarce resources by not recognizing the time, effort, and considerable local knowledge of private collectors to promote preservation and research. Thus, the symposium was designed to transmit that message and exemplify the benefits of collaboration.

Anderson discusses the sometimes competing but often complementary interests and motivations of professionals and collectors, underscoring the mutual value of collaboration from Illinois to Ohio and West Virginia. Bruechert describes a sustained program to engage collectors and landowners for preservation of southern Ontario's record. Seeman and Fulk analyze the appeal of collection and describe a prominent example of collaboration at the Nobles Pond site. Lovis chronicles the work of two Michigan avocationals, whose collections now reside in university museums. Redmond and DuFresne describe the challenges and value of northern Ohio legacy collections. Arzigian and colleagues document the value of private collections in completing Wisconsin regional site distributions and documenting major occupational trends in Illinois prehistory. McElrath and colleagues describe the long history of collaboration in Illinois. Wendt—nominally a nonprofessional—describes professional-caliber tool-stone sourcing and characterization, a subject that many nonprofessionals know well. Finally, Nolan and Leak document shortcomings in preservation practice that can be rectified only with serious attention to private collections from impact zones.

## Issues to Consider

We need research on, essentially, the ethnography of collectors to learn who is drawn to collecting and how, their methods and how they learn or develop them, their patterns of activity over decades, and why some are more inclined to collaboration than are others. We need forensic research on the fate of private collections after owners' deaths. How many are preserved and handed down in families or donated to local, county, state, or university museums? What factors contribute, and in what degree, to the myriad fates that collections may experience?

Despite the unquestionable value of collaboration, it remains possible that some irresponsible collectors may abuse it to rationalize their own activities. Professional-collector collaboration is not a blanket endorsement of irresponsible collectors; on the contrary, it substantially defines the parameters of responsible activity (Shott and Pitblado 2015:12). But if collaboration becomes common, we must be mindful of the possibility that some will use it for illicit purposes and be prepared to respond to such eventualities.

Collaboration even may stimulate more private collecting. Depending on how it is done, this not only may not be bad but could also be a positively good thing. But this too requires attention; we should work with responsible collectors to monitor the status, rate, and pattern of private collection and to seek evidence of possible stimulating effects of that collaboration.

## Conclusion

Ethics, like collaboration, is a two-way street. Professionals have clear obligations to preserve the archaeological record, to help educate the public, and generally to promote respect for and serious study of the past. Abuses acknowledged, most collectors are responsible or responsive. Professionals have the opportunity, arguably the obligation, to collaborate with them in service to our shared interest in the past and preservation of its evidence.

Libraries public and private house our collective memory, experience, and wisdom. We don't allow libraries or their holdings to fall into disrepair, be dispersed irreversibly, or molder away to dust. Archaeological collections public and private house the record's aggregate qualities. Why should we be blither about their care than we would be of libraries?

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## Note on Contributor

Michael Shott is a professor of archaeology at the University of Akron in Ohio. His research, including lithic analysis and how the archaeological record formed, has been conducted in the Great Basin, Mexico, and the Southern Andes but mostly in the American Midwest.

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# Dealing with Museum Legacy Collections in the Twenty-First Century: Three Case Studies from Ohio

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As curation costs rise, curators of archaeological materials find it necessary to pay increased attention to maintenance of their museum's collections, which most often include legacy collections, that is, materials donated decades ago. Proper commitment of funding, care, and space to collections is an ethical requirement for museum professionals; however, the often-unstated motivation for such effort is the belief that the collections maintain some degree of research value. To more fully examine this, case studies of three legacy collections at the Cleveland Museum of Natural History were prepared. These assemblages, collected by nonprofessionals between 1846 and 1950, include associated documentation of variable depth and quality. The case studies were compared not only to highlight the various curation challenges that such collections present but also to explore their utility for professional research. The results indicate that indeed such collections retain significant research value but of widely varying kind and degree.

**Keywords** Legacy collection; Curation crisis; Museum; Amateur; Ohio

For the past several decades, North American archaeologists have become aware of a growing *crisis* in the storage and curation of archaeological materials (Bawaya 2007; Crisis and Opportunity 2015; Marquardt et al. 1982). In fact, many archaeological repositories are bulging at the seams, due in part to the enormous influx of collections derived from CRM archaeology since the 1970s, as well as the steady accumulation of artifacts from traditional university and museum field

research. Furthermore, an often overlooked aspect of this crisis is the diminishing space available to properly organize and store the mountains of field records, photographs, paper inventories, and other primary data that support the material collections. The growing focus on digitizing such archival collections is important and necessary; however, it does not solve our immediate storage needs, since we will not dispose of the original documentation after scanning, nor should we.

Our objective for the present discussion, however, is not to offer solutions to this growing storage crisis, at least not directly, but instead to deal with what we view as one important issue generated by this dilemma. As museum storage space becomes more and more precious, curators are reassessing the scientific merit and utility of all collections in order to decide whether or not continued curation of material remains with less than optimal scientific or educational value is justifiable. In fact, most university, public, and private museums curate significant quantities of archaeological materials received via older donations. Consequently, curators are paying greater attention to such *legacy* collections, which consume much time, effort, and funding for their proper upkeep (MacFarland and Vokes 2016). Of course, such care and attention is an ethical requirement for museum professionals; however, the often-unstated motivation for such effort is that these collections still retain some degree of research or educational value. We view the most important criteria for assessing these collections to include the following:

1. the depth and precision of provenience information (i.e., What do we know about the locations from which the materials were collected and to what degree of specificity?);
2. the overall physical condition of the material remains (i.e., Are the remains sufficiently well preserved to allow useful scientific analyses?);
3. the degree of redundancy in the collections (i.e., Are there numerous examples of the same point type, bone tool, chert flake, etc., all with equivalent quality of provenience information? Do these provide any new or unique archaeological information?);
4. the potential research utility of the collection in regard to the stated research theme or focus of the institution (i.e., Can the collection address research questions that lie within the preferred research scope of the museum?); and
5. the educational value or teaching potential of a collection for educators and for educational exhibits (i.e., Is the collection useful for teaching students, the public, amateurs,[1] or other audiences about the past?).

Of course, some museum professionals may consider other important criteria for judging whether or not certain legacy collections should be retained, but the five listed above are thought to apply most readily to the majority of archaeological collections housed in North American repositories. A negative assessment in relation to one or more of these criteria could result in a range of outcomes, including transfer to "deep" storage within the institution or movement to off-site storage locations; transfer to another repository where the collections might find greater use; or possibly deaccession followed by sale or discard. Fortunately, this last, most drastic, option seems to be quite rare among today's North American institutions.

Collections accumulated by amateurs can offer special problems for curation and permanent retention once donated to a museum or repository. In many cases, such materials do not positively satisfy one or more of the criteria listed above. Nevertheless, many such groups of artifacts make up large proportions of some museum holdings, particularly those that were accepted when these institutions were young in order to provide material for new exhibits and fill empty shelves and storage cabinets. On the positive side, many older amateur collections contain rare, beautifully crafted specimens in states of preservation that are uncommon today due to intensive agricultural activity and destructive development. Not uncommonly, these and other groups of older materials represent the sole surviving objects from sites that no longer exist.

To more fully examine this important curation issue, case studies of three such legacy collections curated by the Cleveland Museum of Natural History (CMNH) were prepared. These assemblages were collected by amateurs between 1846 and 1950 and include associated documentation of highly variable depth and quality. The case studies are compared and contrasted not only to highlight the various curation challenges they present but also to explore their changing utility for professional research and education. The results of this study indicate that indeed such collections retain significant research or educational value but of widely varying kind and degree.

## The Chapman Collection

The Chapman collection is the oldest of the three assemblages examined here, both in historic time and in the history of the Cleveland Museum of Natural History, in fact, predating the museum itself. Nathan A. Chapman was born in 1842. He spent the first half of his life farming near Twinsburg, Ohio, and later worked as a carpenter and joiner. Over the course of his life, he acquired a collection of 2,962 artifacts and specimens. In 1917, he donated his collection and catalog to the Cleveland Museum of Art (founded 1913, opened 1916). He died the following year. The Cleveland Museum of Art retained the collection for a few years; then in 1924, it transferred the catalog and some portion of the collection to the newly opened Cleveland Museum of Natural History (founded 1920, opened 1922). Apparently, no listing of the transferred material was made at that time, and it was over 40 years later, when CMNH hired its first curator of anthropology, that the items were inventoried. Unfortunately, at that time only 1,647 specimens were listed in the CMNH catalog, and today only about 1,566 can be located.

The 2,962 items listed in Chapman's catalog consist of artifacts collected from 1854 until 1898. Almost all appear to have been found by Chapman himself in this 44 year span, and almost all his collecting was done in two areas of Ohio. The first area is in northeast Ohio and is centered on the family farm near Twinsburg. Most specimens from this area are from Summit County, with lesser amounts derived from the surrounding counties of Cuyahoga, Geauga, Lake, Portage, and Trumbull. Approximately 1,320 artifacts, or 45% of the collection, come from this area. The second area is on the southern Ohio border and includes Scioto, Adams, and

Pike Counties, Ohio, as well as Greenup and Lewis Counties in Kentucky. More than 51% of the total collection, about 1,521 items, was found in this area.

Although other collections assembled by amateurs can be as large, two things distinguish Chapman's collection. First, he inventoried his collection in a notebook, which still exists, titled *The Catalogue of the Indian and Mound Relics in the Cabinet of Nathan A. Chapman, Twinsburg, Ohio, 1894*. Second, he labeled each artifact with an individual, unique number. Chapman's catalog lists each of these numbers in sequence, together with a brief description of the artifact, some sort of provenience information, and often the year that the specimen was acquired. While the provenience information is not extensive, almost 100% of the items have state-level information, and 88% have town- or township-level designations. In addition, 49% of the items have a farm name or other locality designation potentially traceable to a known site. Importantly, of these 16 named locations, 87% (or 43% of the whole collection) are from a single locality in Scioto County. One of these is readily identifiable as the Feurt site (33SC06) based on a listing ("John Feurt farm") in the catalog. This Fort Ancient tradition mound and village locality is situated just north of Portsmouth along the Scioto River (Griffin 1966; Prufer and Shane 1970).

Chapman made no statement on how the artifacts were collected, but some inferences can be made by looking at the types of specimens, the organization of the specimens in the catalog, and the catalog itself. Chapman's catalog is dated 1894 and begins with artifacts collected in Scioto County at a single locality called the "Indian Village Site," or "Old Indian Village," and are designated as collected in January and February that same year. Altogether, there are 1,265 items attributed to this place and grouped together by artifact forms such as flaked chert points and other tools, ground-stone tools, pottery, and bone and shell tools and ornaments. Not all page listings for this material are marked with a collection date; however, it seems clear that this lack of specificity represents episodes of rapid accumulation of large quantities of artifacts. Such may have resulted from some sort of ground disturbance, whether from Chapman's own excavations or an earthmoving project. The high degree of preservation of the bone and shell artifacts remaining in the collection likely indicates that these materials were not exposed on the ground surface for any prolonged period of time.

Chapman's older collections, mostly derived from Summit and surrounding counties, were later added to his catalog. These entries have higher numbers and tend to list the year collected, with dates ranging from 1843 to 1898. Almost every year in that span is represented. The artifacts from the Summit County area most closely fit the profile of surface-collected items (i.e., lacking more perishable artifacts made from bone, antler, or ceramic), being 99% stone tools (73% flaked stone tools and 26% ground stone and slate; Table 1). Of course, this apparent bias toward stone tools may instead reflect deliberate selection on the part of Chapman. Currently available evidence is insufficient for determining which the case is.

## The Hecker-Koehler Collection

Ralph Hecker, the collector, was born in 1870 and died in 1952. A civil engineer and surveyor, he worked at various times for a real-estate company, a construction

TABLE 1

COUNTS OF ARTIFACTS IN CHAPMAN COLLECTION BY MATERIAL TYPE FOR SUMMIT AND SCIOTO COLLECTION AREAS.

| | Chert | Stone | Slate | Bone | Shell | Pottery | Hematite | Mica | Coal | Unid. | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SUMMIT CO. AREA | | | | | | | | | | | |
| 16 Farms or Named Loc. | 23 | 6 | 7 | 2 | — | — | — | — | — | — | 38 |
| Town or Twp Only | 740 | 223 | 110 | — | — | 4 | 1 | — | — | 2 | 1,080 |
| County Only | 200 | 2 | — | — | — | — | — | — | — | — | 202 |
| SCIOTO CO. AREA ID | | | | | | | | | | | |
| Village Site | 788 | 221 | 1 | 163 | 29 | 56 | 6 | — | 1 | — | 1,265 |
| 12 Farms or Named Loc. | 11 | 28 | 4 | 25 | 38 | 24 | 10 | 1 | 1 | — | 142 |
| Town or Twp Only | 34 | 12 | 1 | — | — | 1 | 1 | — | 1 | — | 50 |
| County Only | 53 | 9 | 1 | 1 | — | — | 2 | — | — | — | 66 |

company, and a village. Like Chapman, he probably spent much of his working life outdoors. Unfortunately, no details of his collecting activities exist in the museum's records, but it can reasonably be concluded that his collection was acquired between about 1880 and 1950. His collection remained in the family until 1979, when it was donated to the CMNH by his son-in-law, Allen Koehler (1907–2002). Hecker did not catalog his artifacts, and the little extant provenience information was taken from box labels at the time of accessioning. Of the 5,786 artifacts received, 3,646 (63%) have no locational information whatsoever, 2,020 specimens (35%) are from Ohio, and 120 artifacts (2%) were collected in 21 other states (Table 2). All the Ohio specimens have at least a county location, and most interestingly, 1,134 (56%) were collected from a single place, the Reeve site (33LA07), a known late precontact period (Whittlesey tradition) village site (Murphy 1974), located in Lake County, Ohio. Unfortunately, there is no within-site provenience information for any of these items from Reeve.

As with a large part of the Chapman collection, much of the Hecker-Koehler assemblage appears to be primarily the product of surface collection. The chert, stone, and slate objects, which make up 92% of the collection, are more likely

TABLE 2

COUNTS OF ARTIFACTS IN HECKER-KOEHLER COLLECTION BY MATERIAL TYPE FROM REEVE SITE AND OTHER COLLECTION AREAS.

| COLLECTION LOCALITY | Chert | Stone | Slate | Bone | Shell | Pottery | Other and Unid. | Totals |
|---|---|---|---|---|---|---|---|---|
| Reeve Site | 213 | 44 | — | 677 | 60 | 137 | 3 | 1,134 |
| Unspecified Lake Co | 725 | 9 | — | 7 | — | 3 | — | 744 |
| All Other Ohio Counties | 136 | 6 | — | — | — | — | — | 142 |
| All Other States | 117 | 1 | — | — | — | 2 | — | 120 |
| All Other No Provenience | 2,756 | 559 | 109 | 138 | 30 | 37 | 18 | 3,647 |

materials to be preserved on or near the surface for longer periods of time than are bone and shell items (5%) and are more easily recognized than potsherds (0.7%). There is insufficient evidence to establish a preferred collecting area for Hecker, and it is unknown if Hecker obtained all artifacts himself or if he bought or traded for specimens to add to his collection.

The artifacts from the Reeve site are of particular interest since the preponderance of bone and shell and the degree of preservation suggest that these materials were derived from excavation, whether by Hecker or someone else. If so, then the small numbers of flaked or ground-stone tools in the collection seem unusual. However, it is possible that the provenience for this portion of the Reeve collection has been lost and that the Reeve lithics are included in the large numbers of unprovenienced items in the collection. The comparatively small amount of pottery recovered from the site is also of interest. Village site assemblages of this time period (late precontact) generally include great quantities of potsherds. Sherds may have been less desirable to Hecker than artifacts made of other materials, perhaps because they were "broken" or had less aesthetic appeal.

## The Ochsner Collection

The Ochsner Collection is the most recent and best documented of the three presented here. It is also the smallest of the three legacy collections. Eugene E. Ochsner was born in 1905 in Cleveland, Ohio. Working as a chemist and chemical-plant supervisor throughout his life, he likely had less time to devote to outdoor pursuits than did Chapman and Hecker. Despite this, his enthusiasm for collecting began at an early age, as did his association with the CMNH. He is listed in the old CMNH accessions files as having donated a fossil and a concretion to the museum in 1922 and another fossil in 1934. Later in life, he made four donations of archaeological specimens to the museum over a seven-year period (1985–1991). Although he moved to Michigan sometime in the late 1930s, he maintained close ties with the Cleveland area until his death in 1998. He is the only collector of the three to have been personally known to the museum curator.

Like Chapman, Ochsner maintained catalogs of his finds and numbered his specimens. He selected artifacts from 11 locations, a total of 561 items, for donation to the CMNH. Eight of these localities are in Ohio and were visited by Ochsner in the 1930s. A total of 270 chert tools from five of these places are curated in the CMNH collections, along with only 4 potsherds (Table 3). At face value, it appears that his flaked stone–dominated assemblage from these locations is more likely derived from surface collecting than from excavation. Ochsner did excavate at the three remaining sites: Staas (33CU224), South Park (33CU08), and Burrell Farm/Orchard (33LN15), all located in northeast Ohio. As expected, the variety of artifact forms in these collections reflects the excavation of midden and pit deposits; however, the relatively low frequencies of artifacts (see Table 3) reveal that either his excavations were not extensive or additional material was collected but not donated to the CMNH.

TABLE 3

COUNTS OF ARTIFACTS IN OCHSNER COLLECTIONS BY MATERIAL TYPE FOR KNOWN SITES AND OTHER COLLECTION AREAS.

| SITES | Chert | Stone | Slate | Bone | Shell | Pottery | Unid. | Totals |
|---|---|---|---|---|---|---|---|---|
| Staas Site | 4 | 7 | 0 | 34 | 0 | 6 | 0 | 51 |
| South Park Site | 31 | 13 | 2 | 89 | 10 | 48 | 4 | 197 |
| Burrell Farm/Orchard Site | 19 | 16 | 0 | 1 | 0 | 3 | 0 | 39 |
| Other Five Ohio Localities | 53 | 0 | 0 | 0 | 0 | 4 | 0 | 57 |
| Other States | 217 | 0 | 0 | 0 | 0 | 0 | 0 | 217 |

The artifacts from Burrell Farm/Orchard have the least documentation, consisting of labels indicating that the items came "from the Peach Orchard" and a photocopy of a photo showing the site area. Of the remaining two sites, South Park has more artifacts but comparatively less information, with only two pages of notes and a sketch map. Overall, the best-documented artifacts are from Staas. They were accompanied by several photocopies of excavation photos, a separate listing with more detailed provenience information than in Ochsner's main catalog, a photocopy of a hand-drawn map of features, and two or more drafts of a six-page article written by Ochsner on his 1933 excavations at the site with handwritten edits by former CMNH curator David S. Brose. This article was eventually published in the *Ohio Archaeologist* (Ochsner 1986).

## Discussion

It should be clear from the previous section that the three collections under consideration possess attributes that provide some utility for professional researchers and educators yet other characteristics that limit such usefulness. Consequently, we see that the most systematic method of assessing this varying utility is by considering each collection in relation to the five curation criteria listed above.

### *Depth and Precision of Provenience Information*

As discussed above, each of the three collections provides provenience information that does not meet optimal professional standards. That is, they provide locational data that most often references large geographic areas, including states, counties, or townships. In other cases, more precise locations are given, such as parts of townships, family farms, or references to nearby lakes or drainages. Only rarely are site locations identified, such as the mysterious "Old Village" and Feurt sites of Chapman; the Reeve site of Hecker; and the Staas, South Park, and Burrell Orchard/Farm sites of Ochsner. Except for the "Old Village," these sites are well known to professional archaeologists and have been investigated to varying degrees through survey and test excavation projects (Brose 1994; Murphy 1974; Redmond 2017).

Unfortunately, the provenience information we have for the sites named by Hecker and Ochsner generally lack precise within-site locations, thus making these data rather incompatible with the professionally derived information we do possess. One exception may be the Ochsner collections from Staas. Although not contained in the accession paperwork, anecdotal information from CMNH staff employed at the time indicates that when this donation took place (1985) the museum was conducting field research at the site. At that time, the Staas site was owned by two different landowners. One owner allowed the museum to work on his property, but the second did not. Because Ochsner collected on what became the second owner's property, he was able to provide information on that part of the site not available to museum archaeologists.

As for Chapman's "Old Village," recent examination of catalog entries and late nineteenth-century plat maps for Scioto County, Ohio, may allow us to more precisely locate this important site. The first entry in Chapman's artifact catalog includes the following handwritten location: "From Indian Village Site, Chillicothe Pike, Briggs estate, Portsmouth, O." Examination of an 1875 plat map for Scioto County (Barton and Gibbs 1875) revealed a large property owned by a Hannah Briggs on the northern edge of Portsmouth, along the east side of the Scioto River, and on the main road to Chillicothe, Ohio (currently US Route 23). This may be the property from which the "Old Village" collection was made. Of course, additional corroborating evidence is necessary to confirm this identification, but this example does illustrate the potential to refine some of the generalized provenience information that often accompanies some legacy collections.

### *Physical Condition of Collection*

When compared to more recently acquired collections curated at our museum, the three assemblages considered here are, on average, in much better physical condition. In general, artifacts collected in the latter twentieth century, for example, are more highly fragmented compared with the older legacy collections. The Chapman and Hecker collections, in particular, contain many whole specimens of flaked and ground-stone tools, as well as surprisingly large and well-preserved assemblages of bone and antler implements. It seems likely that the rather pristine state of most of the stone tools has to do in part with the shorter period of time that these artifacts were exposed to the destructive effects of agricultural cultivation. The large proportion of complete artifacts may also be the result of selective collecting. For example, whole specimens were undoubtedly preferred by collectors over more-fragmented pieces. Or if the collection was acquired through purchase, the complete pieces were most likely the first offered for sale. Today, as in the past, such complete artifacts have the greatest utility for morphological and stylistic analyses of material culture assemblages. Many early seriation studies of precontact material culture in this country depended in large part on data derived from collections of complete or nearly complete projectile points (Broyles 1971; Chapman 1975; Thomas 1978, 1983). The same is true for more recent morphometric and stylistic analyses of stone-tool assemblages (Buchanan et al. 2014; Seeman 1992; Shott 2015; White 2013).

Although minimally studied to date, the large bone and antler implement assemblages in the Hecker-Koehler and Chapman collections hold great potential

for research on osseous artifact technology, function, and species utilization. These collections possess added significance given that many were collected at known localities, such as the Reeve and South Park village sites. In addition, these collections include unworked animal-bone remains, with some species represented by multiple specimens that are potentially useful for zooarchaeological and biogeographic analyses, particularly in regard to currently extirpated species such as elk.

### *Degree of Redundancy*

Comparing whole collections one to another, Chapman and Hecker-Koehler exhibit the most redundancy in that they contain a wide range of precontact stone tools and faunal remains of similar forms. Given, however, the disparate geographic proveniences of individual subcollections, (e.g., southern vs. northern Ohio), the apparent redundancy in, for example, assemblages of triangular projectile points or grooved axes may actually mask real morphological variation that is inherent in such spatial (social) separation. Conversely, less utility may be inherent in assemblages such as Ochsner's from sites for which much larger and systematically excavated collections of the same artifact forms are available (i.e., South Park or Burrell Orchard/Farm sites).

As is often the case with archaeological assemblages, redundancy is not necessarily a bad thing. For example, Chapman's "Old Village" and Feurt site collections include numerous triangular projectile points that are well suited to studies of morphological variation in late precontact period arrow points in the middle Ohio River valley (cf. Bebber et al. 2017). The same can be said regarding stone axes and celts in Chapman's collection from Twinsburg, Ohio. In addition, the multiple examples of drilled canine teeth, as well as bone awls, beads, and antler points found in the Chapman and Hecker-Kohler collections are equally useful for such studies of technological variation. Thus, redundancy in such instances can have great utility. This is not the case, however, with similar specimens in the Ochsner collection given the low frequencies of individual forms of stone and bone artifacts (see Table 3).

### *Thematic Research Utility*

This criterion relates to the compatibility of the collections with the accepted research mission and collection foci of the department or institution curating those collections. Given the long-term research orientation of the archaeology curation and scientific staff at the CMNH, the primary focus of study has been the precontact Native American archaeology of the Ohio region. And with few exceptions, our collections acquisition policy has centered on the material remains of the societies that inhabited this geographic region between circa 13,000 BP and 500 BP. Further, a large part of our collections has been acquired through field projects undertaken by CMNH Archaeology Department staff since the early 1960s. However, because the legacy collections of concern here were not derived from work initiated by museum archaeologists, their compatibility with the overall archaeology mission of the museum must be assessed.

Given the discussion up to this point, it should be clear that the three collections, for the most part, reflect the geographic and thematic foci of the CMNH

Archaeology Department. A majority of specimens in each of these collections are derived from the Ohio region and represent precontact material remains of indigenous Native Americans. A finer examination of the accepted research mission and collection foci of the department, however, reveals an underlying *intent* that all collections should include professional-level provenience documentation, which, of course, our three legacy collections do not. At least in the case of Chapman, this deficiency is undoubtedly related to the period when it was accepted, that is, 1924, just a few years after the founding of the CMNH. As stated earlier, during this early time, the museum was eager to accept collections of all kinds to provide material for exhibits and study. As such, the less than adequate provenience documentation of the assemblage was not likely of major concern to those (nonarchaeologists) in charge of acquisitions. But the same cannot be said for the Hecker-Koehler collection, which came to the museum by donation in 1979.

As with the Chapman, the Hecker-Koehler collection appeared to fit the Ohio-based collection focus. In addition, it contained some stellar examples of precontact Native American technology, particularly in bone and antler work, as discussed above. And it would seem that for such reasons it was accepted even without good locational data for many of the specimens. Perhaps more perplexing are the reasons surrounding the accessioning of material from Eugene Ochsner in the 1980s. These assemblages also fulfilled the basic requirements of geographic focus and research theme and perhaps had a more attractive attribute of supplementing collections from sites that had been or were currently being investigated by CMNH archaeology staff. As discussed above, this attractiveness is significantly diminished today by the low quality of documentation accompanying the material donation.

### *Educational Value of Collections*

Finally, we should consider to what degree these legacy collections support the educational and outreach missions of the archaeology department and museum at large. In recent times, selected specimens of complete stone tools, decorated pottery sherds, stone axes, and bone tools from each of these collections have been used for instruction and temporary exhibits. In particular, pieces with unknown or poor provenience (e.g., state or county level) have been preferred by curators for teaching students of all ages. The usually unstated rationale for this selection is that specimens with little associated data have less inherent scientific value and if damaged through handling are more readily replaced from the many poorly documented duplicates in the collection. For use outside our department, numerous artifacts have been molded and casts made available for use by our education division staff. Experience over several decades has shown that specimen casts make very useful tools for public instruction and hands-on learning.

As mentioned above, many complete and rare specimens from these collections are very suitable for educational exhibits in museum galleries. For example, the assemblages of large, complete, multicolored projectile points in the Hecker-Koehler collection are attractive to members of the public, who admire their technological sophistication, as well as their simple beauty. Sadly, very few examples from our legacy collections have made their way into our permanent exhibits. Still, some

have been used to great effect in temporary exhibitions dealing with local and regional archaeology and prehistory.

## Conclusions

The foregoing assessment of three important amateur-derived collections has revealed both the positive and negative aspects of each assemblage. In comparison to ideal modern curation standards, the significant lack of detailed provenience information for nearly all the objects in these collections is the greatest deficiency. Most unfortunate is that the find spots of a large number of artifacts remain unknown. Still, as discussed above for the "Old Village" locality of Chapman's collection, more precise identifications of a few collection localities may be possible with additional historical and archival research.

The high degree of preservation exhibited by many of the specimens is particularly significant and best demonstrated by the large assemblages of bone and antler implements found in both the Chapman and Hecker-Koehler collections. Not only the presence of compete specimens but also the redundancy in some artifact forms, such as bone tools and projectile points, should prove useful for future studies of material technology, as well as of raw material exchange. Assemblages of diagnostic artifacts with at least county-level provenience should also be important for tracing large-scale movements of populations over time and through space. Selected specimens in these collections also possess significant utility for teaching students and the interested public through curator talks, demonstrations, and exhibits.

Lastly, careful consideration of the pros and cons associated with these types of old, amateur-derived collections causes a curator to wonder: Would we accept donations of collections like those discussed here if offered to us today? Unfortunately, our answer would probably be "no" given the generally poor quality of associated data for many of the specimens, as well as tight restrictions on storage space. Instead, our current collection policy favors materials with adequate documentation, including site-level provenienced materials from amateur surface collectors. Nonetheless, we will continue to curate our legacy collections, which, as we hope this study has shown, can still contribute to modern archaeological research.

## Notes on Contributors

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Ann S. DuFresne (MA) is associate curator of archaeology at the Cleveland Museum of Natural History. Her research interests include lithic analysis and faunal analysis, focusing on prehistoric sites of northern Ohio.

## Endnote

1. For the current discussion, the label "amateur" is meant to include all private, nonprofessional people who collect and maintain personal artifact collections.

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# Preserving Michigan's Archaeological Heritage: A Collective Endeavor

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Effective working relationships involve hard questions and choices. With whom will you interact? What is the focus and intensity of the interaction? Are there shared perceptions of goals? Will there be mutually beneficial outcomes? All require a foundation of trust. Interactions between professional and avocational archaeologists pose no exception to this suite of necessities. Trust, personality, and ethical principles all figure into our decisions. Mutual distrust can be a major hurdle. Some professionals and avocationalists do not trust one another. Such notions may be transmitted intergenerationally. The net result is loss of archaeological knowledge and a further threat to the diminishing archaeological resource we both in our own, sometimes different, ways cherish. Transcending such barriers is a significant challenge. This personal case study discusses three avocationalists with whom I've worked, whose friendships I've enjoyed, and who have in different ways enhanced Michigan's archaeological record.

**Keywords** Michigan archaeology; Avocational archaeology; Conference on Michigan Archaeology; Michigan Archaeological Society; Butterfield Award

I was working in my home office one evening, cleaning up artifact images on a large monitor for a pending publication. I also had several local electricians working on various circuits around the house, one of which was not far from where I was sitting. One of the electricians looked up from the outlet he was rewiring, glanced at the screen, and nonchalantly offered, "Paleoindian, huh? . . ." Needless to say, this not only provoked surprise since he was spot on and it wasn't a readily evident identification but also launched a very extended conversation about his various interests in artifacts and archaeology.

Much like my electrician, many other members of the public harbor strong interests in archaeology, and some of them then pursue these interests diligently and in a variety of ways—and, at times, in a fashion that may be at odds with our own views of professional appropriateness. In my early years as a student and faculty

member, it was common for many such avocational archaeologists to be painted/tainted with the moniker "pothunter" or "collector" or at best "amateur." Fortunately, during my 50 years of archaeology in Michigan, and elsewhere in the world, I've encountered a broad spectrum of avocationalists, many of whom have not only proven my introductory generalization wrong but also in some cases have built personal relationships that have led to career-long friendships and interactions. I am, therefore, receptive to those more current arguments that provide the overarching theme for this collection of papers stemming from a Midwest Archaeological Conference sponsored symposium and a recent forum at the 2017 Society for American Archaeology annual meeting (Pitblado and Shott 2015; Shott 2017; Shott and Pitblado 2015).

The early archaeology of Michigan and its documentation were primarily carried out by interested members of the public committed to preserving the past (see Peebles 1978). The literature of individuals such as Cyrus Thomas, William R. McCormick, Harlan I. Smith, Fred Dustin, and others provides the strong foundation for much of what we know was present in the state in the nineteenth century—a legacy largely destroyed today. Thus, the current dialogue surrounding professional interactions with a suite of interested and committed nonprofessionals should not be at all surprising to Great Lakes archaeologists.

In part, my views on this topic are related to my various professional roles as Michigan State University (MSU) Museum curator for several decades. The outward public face presented by museums is often different from that of academic departments, and the difference between them was more marked in the past than at present. In my curator role, I was the contact members of the public accessed to answer questions about everything from Viking mooring stones and fossilized human hearts to prehistoric and historic artifacts to family artifact collections, site locations, and other topics. Consequently, I regularly interacted with a broad spectrum of the public. As it turned out, it was also the MSU Museum that hosted the monthly meetings of the Upper Grand Valley Chapter (UGVC) of the Michigan Archaeological Society (MAS), a group to which I was introduced early in my career by Charles Cleland and Moreau Maxwell, where I met numerous dedicated avocationalists and where over my career I became a functionary at both the local and state levels. I am, in fact, still the resident agent for the state organization.

Collaborative enterprises are difficult. Effective working relationships involve choices made by both parties about whom to interact with and the focus and intensity of that interaction. Those choices may also hinge on perceptions of shared goals, the potential for mutually beneficial outcomes, and a foundation of trust. I've also found that such decisions are rarely dictated by economics or degrees of education or professional training. Interactions between professional and avocational archaeologists ("amateurs" or "collectors") pose no exception to this suite of necessities. Trust, personality, and ethical principles all figure into decisions about those with whom we might choose to effectively interact. As noted earlier, some professionals and avocationals do not trust one another. The litany of often justifiable explanations for this distrust is long and needn't be re-aired here. Often, however, given the apprenticeship systems of both academic and avocational cultures, such notions may continue to be transmitted intergenerationally. And, as our friends in behavioral psychology point out, changing a person's mind once he

or she has made a decision is difficult, to say the least. The result, alas, is a loss of communication and archaeological knowledge and the effect is a further threat to the diminishing archaeological resources we each in our own, sometimes different, ways cherish and wish to preserve. Transcending such barriers is a significant challenge for both parties in this discussion.

In this personal case study, I discuss three very different people among the many with whom I've worked, whose friendships I've enjoyed, and who have in their different ways enhanced Michigan's archaeological record. It is as much autobiographical as biographical.

## The Honorable Ira W. Butterfield

***The Honorable Ira W. Butterfield*** was a lawyer and judge and had been exposed to mapping and the value of aerial photography during his WWII infantry service in the Philippines. He diligently applied these skills to several Saginaw River and drainage research projects and excavations he conducted over the years. I met Judge Butterfield in 1967 in Bay City and came to greatly admire his intellect, values, knowledge, and insights. Ira Butterfield often lent his substantial legal talents to the Michigan Archaeological Society and in that role was central to preservation of the Sanilac Petroglyphs site and park (Butterfield 1971; MAS 1969). He was a regularly elected state MAS official, published works on early archaeologists of the Saginaw Valley (Butterfield 1982, 1988), its archaeological sites (Butterfield 1979; Butterfield and Fitting 1971), and the evolutionary geology of the Saginaw drainage basin (Butterfield 1986); the latter a topic we discussed regularly. He saved the early twentieth-century Walter W. Schmidt collection from dispersal and sale at local antique shops, owned and allowed excavation at the Butterfield site (Wobst 1968), and ultimately willed his collections to Michigan State University and the University of Michigan. Ira Butterfield was a worthy and notable successor to the earlier generation of Michigan citizen scholars.

### *The Honorable Ira W. Butterfield Award*

To honor Ira Butterfield's many contributions to Michigan's heritage, the state professional society, in 1979 the Conference on Michigan Archaeology (initially COMA but in a revisionist history now CMA), established an award for regular and outstanding avocational contributions to Michigan archaeology, named "The Honorable Ira W. Butterfield Award" (Figure 1; Warner Pioneer Homestead 2016). Its intent was professional recognition of significant contributions to Michigan archaeology by nonprofessionals. As such, it differs from other awards conferred by state-level avocational archaeological societies. The award is not necessarily conferred annually but is based on nomination to the Ira W. Butterfield Award Committee, an assessment of the nominations' merit, and the committee's recommendation to the COMA voting body. The language of the award criteria reads:

> The Honorable Ira W. Butterfield Award of the Conference on Michigan Archaeology recognizes the contributions of an avocational archaeologist who,


**Figure 1.** The Honorable Ira W. Butterfield Award 2016 to Timothy and Kerry Bennett. (Image reproduced courtesy of Timothy Bennett, Warner Pioneer Homestead).

through their actions, has made substantial and sustained contributions to the archaeology of Michigan. In the spirit of Honorable Ira W. Butterfield such contributions may take many forms, such as publication of collections and field activities, the systematic reporting of archaeological sites, educational engagement with the public, activities directed at the long term preservation and management of significant sites for future generations, or other enhancements of the record of Michigan's past. The Honorable Ira W. Butterfield Award is by periodic nomination to the Conference on Michigan Archaeology by the membership through the Honorable Ira W. Butterfield Award Committee, and conferred as suitable candidates are identified. Recipients of the Honorable Ira W. Butterfield Award will receive a plaque recognizing their contributions at the Annual Meeting of the Michigan Archaeological Society. Integral with receipt of the award is a monetary stipend in an amount sufficient for a conventional radiocarbon date (Conference on Michigan Archaeology 2017).

In some respects, this award presaged the topic of this session since it recognized the at-times major contributions made to archaeological scholarship and preservation by members of the avocational community—publicly expressing the appreciation of the professional community through its conferral by a COMA representative at MAS state and chapter venues.

## Mr. Harold W. Thompson

Among the first recipients of the so-called Butterfield Award was ***Mr. Harold W. Thompson,*** whom, along with several other members of the Saginaw archaeological community, I also met early in my career. A foundry worker by trade, Harold Thompson's archaeology was largely self-taught, and his became an almost textbook example of the type of avocationalist behavior admired by professionals—people whom Peebles (1978) in his review of Saginaw Valley archaeology termed "citizen scholars." According to his obituary, Harold's interest in archaeology was

piqued at a young age by an artifact display at the Butman-Fish Library in Saginaw (Case Funeral Home 2009; Saginaw News 2009). Harold assumed a strong and lasting leadership role in the state MAS, was the long-standing treasurer of the Michigan Archaeological Society (beginning in 1969), and his home address, on the back cover of almost every early issue of *The Michigan Archaeologist*, is indelibly imprinted in my memory—2415 Hartsuff Avenue, Saginaw, Michigan. Harold was a regular volunteer at numerous excavations by both universities and local MAS chapters; he performed his own detailed and extensive survey fieldwork and collections documentation in Tuscola County, resulting in a large number of sites reported to the state archaeologist and collections deposited with MSU. Harold also published the results of his work regularly in *The Michigan Archaeologist*, including half a dozen survey and site reports (Thompson 1978, 1984, 1987, 1988, 1995, 1997), as well as too many artifact descriptions (in both the *Saginaw Valley Archaeologist* and *The Michigan Archaeologist*) to cite individually. Beyond the Butterfield Award, his contributions were further honored with a Citizen's Preservation Award from the Michigan Historical Preservation Network.

Harold was generous to a fault and one of the most brilliant gardeners I've met. He taught me a lot in both areas! My partner, Libby, would laugh when the phone would ring at 9:00 p.m. and Harold would ask if "her good-for-nothing husband" was around! When speaking to my partner, Harold refrained from using some of his more colorful phrases—Harold was, as some would call it, an acquired taste. His contributions to the profession, Michigan archaeology, and the preservation of our past, however, are too numerous to recount, and he became a very good friend indeed.

## Mr. Michael Rhodes

Unlike the generational differences I had with Judge Butterfield and Harold Thompson, ***Michael (Mike) Rhodes*** and I were not that far apart in age, and we shared a variety of outdoor interests in addition to his substantial personal interest in local archaeology. And, our relationship was shorter lived. Unlike the others, Mike was not a member of the MAS but rather a bit of a loner who would occasionally attend chapter meetings and who read archaeology voraciously. He had a small but well-documented collection from several locales north of my residence. We would visit sites he knew about in the field, and I assisted him in the inventory, identification, and recording of the surface materials. Also, unlike my other two examples, Mike never published anything on Michigan archaeology, preferring to think deeply and at times ponderously about the longer term implications of his collecting. However, he ultimately donated most of his collection to the MSU Museum, albeit only after one of his fears was realized and part of his collection had been stolen. It was Mike Rhodes who pointed me to a local property owner with a Paleoindian cache in his possession, interceded on my behalf, and provided the venue for me to undertake a single day of recording. This one day, thanks to Mike, led to many years of quantitative fodder for teaching my graduate analytic methods course at MSU and eventually a published report on this important cache (Carr and Lovis

2016). Yes, this is the same cache correctly identified by my knowledgeable electrician! Ultimately, Mike departed for the west where he could better engage in his rock-climbing passion. While we eventually lost touch, my guess is that he is still contributing to local archaeology—somewhere. That said, his contributions form a significant and tangible local legacy of detailed recording by a true, but largely invisible, "citizen scholar." Hopefully, he'll run across this short sketch in one of his library peregrinations.

## Retrospective on Avocational Interactions and Contributions

The three biographies I chose to present display the range of diversity in individuals who have made important contributions to Michigan archaeology, but they really are only a sample of a much larger cadre of people—MAS members, unaffiliated but interested public, property owners sensitive to the deep and tangible historic roots that remain for us to decipher, and while less so, even people who buy and sell artifacts—who create a cumulative knowledge base for access by future generations. At times these interactions present substantial tensions between our individual and/or professional values, institutional missions and protocols, professional ethics, and other facets of our complex enterprise. As a professional archaeologist and a museum curator, I am bound by disciplinary and national organizational ethics, as well as a substantial suite of state and national laws and international laws and accords and am privy to the continuing debate on who actually "owns" the past. We at times encounter individuals with whom and situations where we tread a fine line between being ethically bereft or potential felons (see Donnan et al. 1991 for interactions on documenting looted artifacts).

The three people I've discussed here presented no such conflicts for me: They were all honest, forthcoming, interested and interesting, and ethical people who shared many of my own personal and professional values. I chose to interact with them for those reasons. Two of them were role models for other avocationalists as well as community leaders, both for archaeology in Michigan and for the larger public. They inspired others by their contributions and educated their peers and larger society about the fragility of the archaeological record and the role they could play in its preservation and dissemination. Some of my colleagues have expressed the opinion that these three people and my relationships with them were unique, nonreplicable. I disagree, and given the younger generation of avocationalists with whom I interact I am optimistic about their future contributions. I'm glad that my professional life as well as Michigan archaeology was enriched by my interactions with these three exemplars.

## Acknowledgments

I thank Timothy and Kerry Bennett and the Warner Pioneer Homestead for permission to use the image in Figure 1.

## Note on Contributor

William A. Lovis is professor of anthropology and curator of anthropology at Michigan State University. He has conducted field research on hunter-gatherer mobility and the transition to horticulture in the Great Lakes and northern Europe, with a focus on human-environment interactions. He has engaged in collaborative experimental research on the formation, analysis, and interpretation of carbonized food residues on ceramic vessels, most recently emphasizing the Freshwater Reservoir Offset, as well as fieldwork on the taphonomy and preservation of floodplain and coastal dune archaeological sites. Throughout his career, Lovis has been active in both the Conference on Michigan Archaeology and the Michigan Archaeological Society.

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Midwest Archaeological Conference Occasional Papers No. 3, 2018, 29–36

# Who Is Interested in Archaeology? Building a Trusting Relationship among Landowners and Collectors in Haldimand-Norfolk County, Ontario, Canada

W. Lorenz Bruechert

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The agricultural landscape surrounding the rural communities of Haldimand and Norfolk Counties is the focus of a systematic archaeological regional project. The Haldimand-Norfolk Archaeological Regional Project (HNARP) began as an interdisciplinary survey to record settlement patterns, identify and interpret evidence of past human behavior in response to climate change, and analyze external cultural influences through exchange and bartering. However, the concerns of landowners and the general public on the impact of archaeological surveys in their communities and a dispute over a First Nations land claim in the area led to a new direction for the project: to promote community archaeology. This paper discusses a public outreach initiative by HNARP to strengthen relationships with landowners, collectors, and the general public and to reinforce the significance of archaeology in the protection of both the indigenous and historical heritage of their communities.

**Keywords** Community archaeology; Landowners; Public engagement; Preservation

In the past 10 years, the Haldimand-Norfolk Archaeological Regional Project (HNARP) has conducted archaeological surveys in Haldimand and Norfolk Counties, Ontario. This work began in 2007 in response to possible threats to archaeological sites and artifacts from land development, artifact collectors, and cultivation methods.

HNARP began in the mid-1980s, under avocational licenses from the Ontario Ministry of Tourism, Culture, and Sport. Haldimand and Norfolk Counties were

selected due to their high density of sites and the potential to recover data to support research questions regarding the peopling of the Great Lakes region and adaptations to postglacial environments. The region lies west of the Niagara Peninsula (Figure 1) and was intensively occupied throughout prehistory. The result is a region rich in data on settlement patterns, with frequent discovery and collection of prehistoric artifacts by researchers and the general public. HNARP encompasses about 1,500 km$^2$ of agricultural lands and depends heavily on the cooperation of landowners in rural communities. It can be considered a "macroregional" project capable of contributing a great deal of empirical data due to the area's extensive land mass (Kowalewski 2008).

While HNARP's original goal was to reconstruct past human behavior, this research goal became secondary in response to the Six Nations of the Grand River land claim that arose in Haldimand County in 2006. As a result, HNARP evolved into a public-relations effort to address landowner concerns about the impact of archaeology on their livelihood and the ownership of agricultural lands.

## Historical Background

In 1784, the British Crown issued the Haldimand Proclamation, authorizing Six Nations' possession of the lands within 10 km of each side of the Grand River from its mouth at Port Maitland to its source near the base of the Bruce Peninsula. This area comprised approximately 385,000 ha (Figure 2). The lands were granted in recognition of the loss of traditional Six Nations territory after the American War of Independence, during which they allied with the British. By 2004, the Six Nations Reserve occupied approximately 19,000 ha of the original land granted. Investigations into Crown management of these lands uncovered numerous examples of improprieties and mismanagement by past provincial and federal governments, resulting in the loss of territory (Six Nations Council 2006).

In order to create public awareness about their land claim, the Six Nations occupied the Douglas Creek Estates housing development in Caledonia, Ontario, leading to roadblocks and incidents of vandalism. In addition, they believed there were burials on subdivision lands, which raised concerns about the protection of ancestral remains. Investigations by archaeologists later confirmed that these claims were unfounded. The occupation increased tensions between the Six Nations and nonnative communities of Haldimand-Norfolk Counties. Landowners felt that past governmental inaction had left their communities and land vulnerable to crop loss and to occupation by the Six Nations.

Within the nonnative population, negative opinions toward the Six Nations, the protection of burial sites, and archaeology itself formed in response to the occupation. It was feared that farmlands could be subject to illegal occupations, affecting the landowners' ability to support their families and maintain their livelihood. As a result of the occupation in Caledonia, landowners became increasingly protective of their lands due to misinformation and suspicions of the intent of archaeologists conducting fieldwork in the region. This fueled rumors that archaeologists could limit landowner rights in the proclamation area if aboriginal archaeological sites

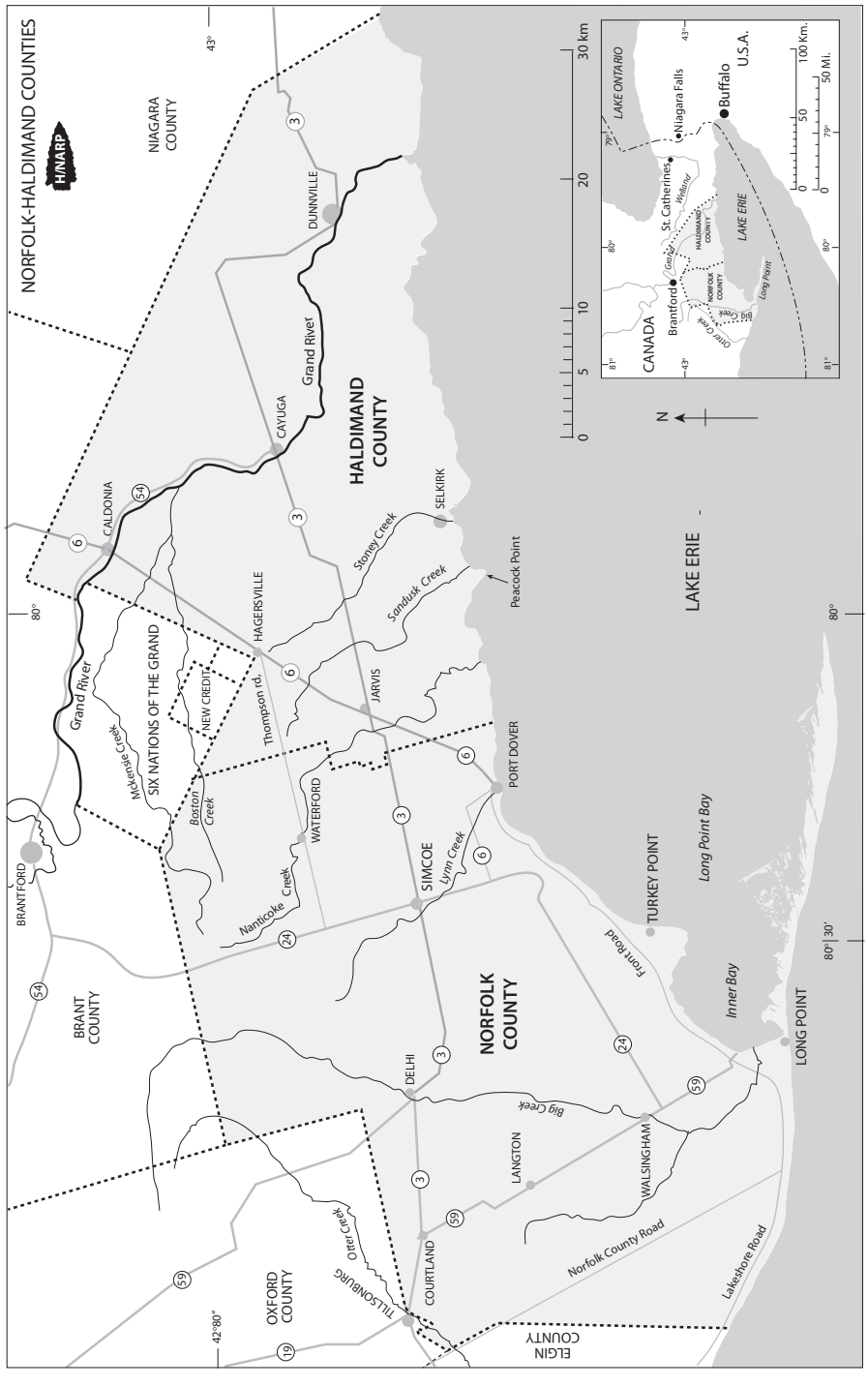


Figure 1. Location of the Haldimand-Norfolk Archaeological Regional Project.

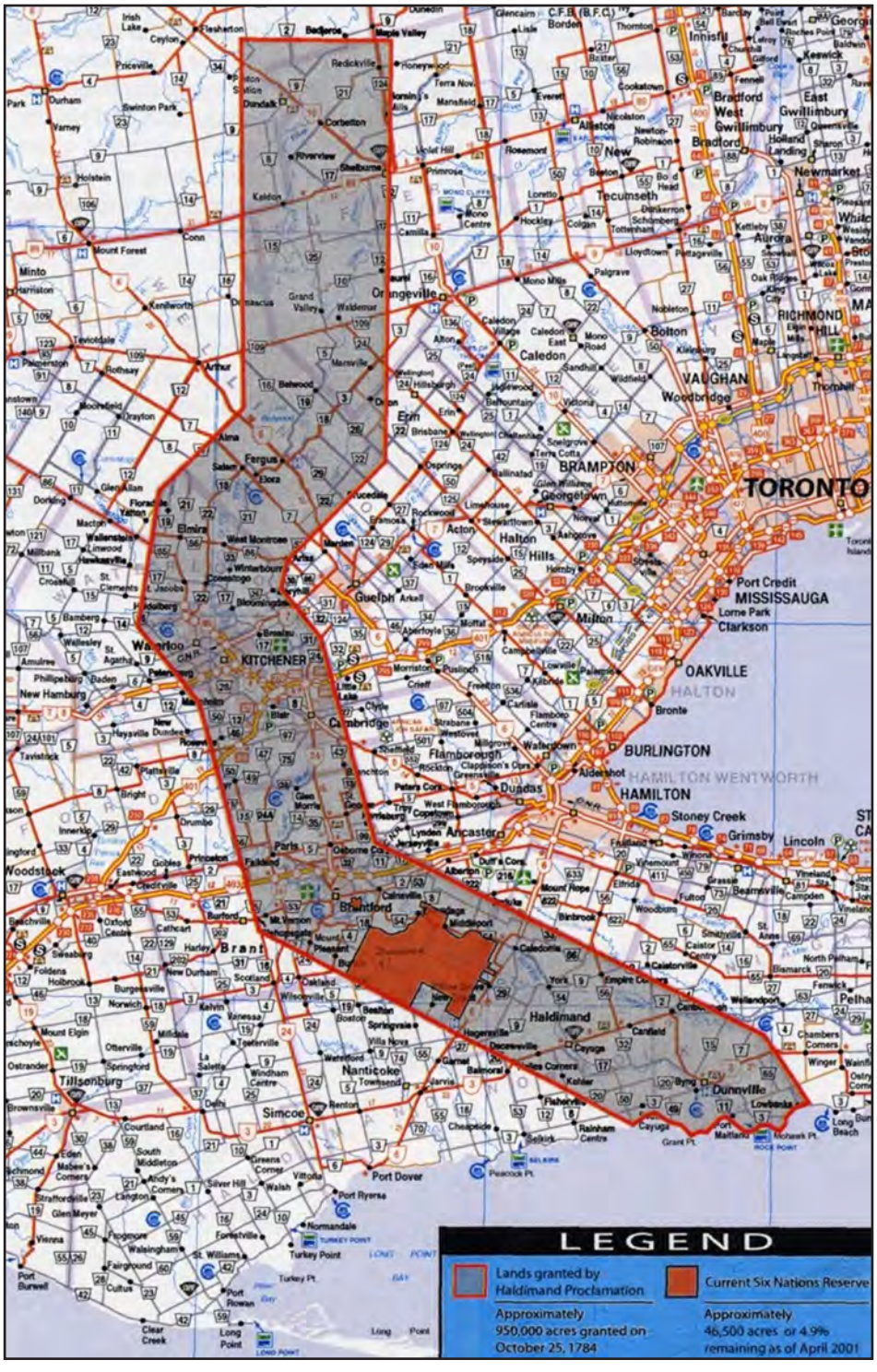


Figure 2. Six Nations of the Grand River Land Claim.

were discovered on their property. Archaeologists were viewed as supporters of the occupation as a result of publically voiced concerns about ancestral burials on a construction site in the area. Permission to access agricultural lands became a critical challenge within the two counties.

When the Caledonia occupation ended, it was clear that public outreach was needed to open a dialogue with landowners regarding their concerns about archaeology. While the provincial government worked with archaeologists to develop a closer relationship with Ontario First Nations, HNARP began to educate landowners on the intentions of archaeologists acting as consultants to developers, on conducting field research, and on the importance of archaeology in their community. This initiative opened lines of communication with landowners in face-to-face meetings to discuss their concerns.

Initial landowner reactions to the potential impact of archaeological survey on their properties were fearful and defensive. Their concerns came out of a desire to protect their ownership rights and livelihood. In particular, landowners expressed anxiety regarding the potential impact of burials if found on their land. Some flatly refused to allow any archaeological activity on their properties. In these meetings, landowners were able to discuss their concerns directly with archaeologists in order to find resolutions before further surveys were initiated. Contact with landowners became more frequent as the need to acquire permission to access private properties increased. These repeated meetings helped defuse the tensions that existed and dispel the misinformation that had spread in the community.

It was quickly recognized that both formal and informal communication was invaluable to developing and maintaining a professional relationship with landowners. Through this process, initial landowner concerns related to archaeological surveys and the identification of possible sites and/or potential burials on their lands transformed into an interest in their region's cultural heritage. Recently, landowners have collectively acted to protect archaeological resources on their properties and to deny artifact collectors access to their lands. Landowners themselves have agreed to recover and care for artifacts found on their lands in support of HNARP.

To improve communication with landowners and the community at large, a website was created to provide information regarding HNARP's mission and guidance in the form of answers to frequently asked questions and concerns about archaeology, sites, and artifacts. The website helped explain the need for farmers to become archaeological stewards, to support community archaeology, and to give greater protection to archaeological sites.

Information intended for landowners and the community at large was also disseminated through the media. A local newspaper, *The Silo,* offered to assist HNARP by publishing archaeological articles to foster interest in and around Haldimand and Norfolk Counties. The newspaper was distributed widely in southern Ontario, both in hard copy and online. The response by the general public and landowners was positive: It opened up communication within the communities and provided a better public understanding both of archaeology and HNARP, particularly its mandate to work with all members of the community. Additional information was provided in the form of yearly newsletter articles addressing and updating landowners on the latest developments of archaeological fieldwork in their community.

## Lessons Learned

HNARP evolved into a regional archaeological project that prioritized developing relationships of trust and respect between landowners, collectors, and persons with an interest in archaeology. The tedious work of archaeological reconnaissance on the landscape became a secondary priority. The public outreach effort created opportunities for landowners to improve and maintain the long-term management of archaeological resources on their properties in consultation with experienced archaeologists. This involvement of the farming community and the general public resulted in a changed view of archaeology and an increased interest to engage in archaeological activities through volunteering.

Many collectors, in a way, act as archaeological stewards. Some landowners began collecting through finding artifacts on their own property; in other cases, collectors lived in the region and had access to farmlands. Many collectors, whether landowners or the general public, have actively made an effort to improve their knowledge of archaeology and have learned to appreciate the history of the artifacts they find, at times working closely with HNARP or other archaeologists to share their knowledge of sites. Some collectors are registered with the provincial government as licensed avocationalists, are mentored by professional archaeologists, and are members of archaeological associations or societies in Ontario or across Canada.

Working closely with landowners and creating opportunities for them to share their concerns about archaeology have led to a community-wide appreciation for the development of HNARP. It also demonstrated that, when landowners are better informed and given the opportunity to participate, they have a stronger interest in supporting archaeology. The engagement of landowners and the general public has led to increased long-term support for HNARP. It continues to engage with landowners and collectors to support their interests and improve understanding of how their agricultural landscape and environment were historically exploited and how this encouraged the peopling of the Great Lakes region.

## Acknowledgments

I would like to thank the agricultural landowners of Haldimand-Norfolk Counties for their unending support for HNARP and the many companies that have generously provided or donated technical equipment and time to this project. Special thanks are given to Dr. Mark Collard, Dr. Sarah Walsh, Dr. Rob MacDonald, Wilrik Banda, John Benson, Don Weaver, Steve Timmerman, Randy Vanden Berghe, and Adam Hossack for their long and continued support for this project.

## Note on Contributor

Lorenz Bruechert is an anthropological archaeologist with research interests in hunting-and-gathering societies, barter and exchange systems, land-use strategies,

and stone-tool technologies. Current research is focused on tool-stone provenance and hunter-gather mobility based on long-term archaeological fieldwork in Haldimand-Norfolk Counties, Ontario, Canada.

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Midwest Archaeological Conference Occasional Papers No. 3, 2018, 37–44

# Experiences in Both Worlds: Balancing the Worlds of Collecting and Professional Archaeology

Jerrel C. Anderson

*West Virginia Archeological Society/Blennerhassett Island State Park Archaeology Committee*

Described is my lifetime involvement in archaeology, from Illinois and Iowa to Ohio and West Virginia. Although my professional career was spent in a different field, my collecting, documentation and excavation efforts, especially in southern Ohio and West Virginia, brought me into contact with a range of professional and especially nonprofessional archaeologists. As much as anything, my experience in and contribution to midcontinental archaeology demonstrates the need for all of us, strictly professional or not, to collaborate in recording evidence of the past and to share in whatever credit is deserved.

**Keywords** Collections documentation; Hopewell habitations; Whittington Mound

## The Beginning

The first artifact I collected was a Table Rock point found among a scatter of white flint chips arrayed down the slope of a road cut in East Moline, Illinois. I was about 4 years old and in uniform; barefoot, bareback, and wearing a pair of old jeans. Later I found a black flint knife blade and I showed both artifacts to my father, who told me they were Indian arrowheads. By the second grade, my twin brother, Ferrel, and I had begun searching fields for arrowheads. My avocational collector period started then.

## Accumulation of Artifacts and Knowledge

A neighbor, Burton (Bud) Hanson, was a professional collector who even had an artifact museum in one of his sheds. Whenever we found artifacts, we would show

them to Bud and he would tell us about them. A frequent bonus to showing him our finds was that he would invite us to visit his museum, with its many fine artifacts and other natural history items such as snakes twined in fruit jars filled with formaldehyde. It was always a learning experience.

To increase our "education," Bud invited us to spend a day excavating a site lying on a terrace above the Mississippi Valley in Mercer County, Illinois. He told us to bring our rifles for we were not his "slave labor," so if we grew bored with digging we could explore the surrounding countryside as much as we liked. The site was on terrace just below the Mississippi bluff line that contained a deep Late Woodland midden. Bud discovered this site, working in association with the Davenport (Iowa) Public Museum's archaeologist, John Bailey. Here is where Bud Hanson obtained his knowledge of excavating techniques and discipline. This was our first experience in excavating an archaeological site. After we obtained our driver's licenses, we continued excavating there on our own, obtaining several almost complete and restorable vessels.

## Formal Training

Mr. Hanson was a valuable resource for archaeologists working in our area of Illinois, and in this role he recommended us to Dr. Elaine Bluhm of the Illinois Archaeological Survey for her excavation at Crawford Farm. This historic Sauk village was located along the Rock River near its confluence with the Mississippi River. We were hired and spent the hot summer of 1960 working alongside Dr. Bluhm and her crew of budding professionals: Mike and Peggy Hoffman and Gloria Fenner. It was a rich site that required detailed mapping and exacting excavation techniques. We learned a lot about excavation techniques, discipline, patience, and the proper recording of results and labeling of artifacts.

From that experience, my brother and I recognized the value of our personal collection and proceeded to catalog our artifacts and to record their find locations (Figure 1). All the fields we hunted as youths are today covered by urban development, and there is no longer any chance of finding ancient artifacts in their natural positions in this area. We are organizing all our artifacts and knowledge in preparation for publishing the invaluable information before all is lost. Others' collections will be used as resources as well.

I completed a bachelor's at Augustana College and a PhD at Kansas State University, both in chemistry. During this hiatus from archaeology, I read the latest *Scientific American* issue that included Prufer's "The Hopewell Cult." That article and its contents interested me immensely; I still have it. What happened next is remarkable: In 1967, I took a position with the DuPont Company at the Circleville Research and Development Laboratory and took residency in Circleville, Ohio, located just 20 miles north of the McGraw site.

## In the Midst of the Ohio Hopewell Heartland

I cut my teeth on Ohio archaeology at the feet of such avocational archaeologists/collector luminaries as Alvy Mcgraw, Donald McBeth, Bob Biddle, Robert Har-


Figure 1. Dovetail points found in East Moline and Silvis, Illinois, in the 1940s and 1950s. Their find locations with the GPS coordinates are labeled on the artifacts. Every find location is now in an urban setting.

ness, Mrs. Stanhope, Norman McKnight, Tom Porter, and Emmett Barnhart. The Mound City Chapter of the Archaeological Society of Ohio met monthly at the Ross County Courthouse in Chillicothe. Every meeting was an adventure, with people bringing in their recent and past finds. They were all generous with their information, and I soon found myself consumed in searching for sites in Pickaway and Ross Counties. My searches were rewarded in this fantastically rich archaeological area, including over 90 sites, many never previously recorded with the Ohio State Historic Preservation Office (SHPO).

Of special interest to me were Hopewell habitation sites around the Circleville and Chillicothe Hopewell ceremonial centers. My collecting (Figure 2) and knowledge of others' collections from the area combined to form a working body of knowledge for forming opinions and workable hypotheses. Hopewell habitation sites, some quite substantial, were found in the uplands but mainly in the Scioto Valley about every 3 miles in the stretch between Circleville and Chillicothe. I also recorded earthworks, some previously unknown (Figure 3).

It being a time of career and family development, I conducted no excavations during my 10 years in Ohio. Instead, I spent as much time as possible conducting surface surveys, often accompanied by my wife and daughters—in fact, my wife, Cynthia, found our (er, *her*) first Clovis point there. I also tried to view and photograph as many local private collections as possible. All the artifacts I found are labeled and the many sites I discovered were given site numbers; the more notable sites were registered with the Ohio SHPO, a process that continues today.


Figure 2. Artifacts collected from Pickaway County, Ohio, site 33Pi484. This site was discovered by me and is a substantial Ohio Hopewell habitation site, one of many found around Circleville, Ohio.

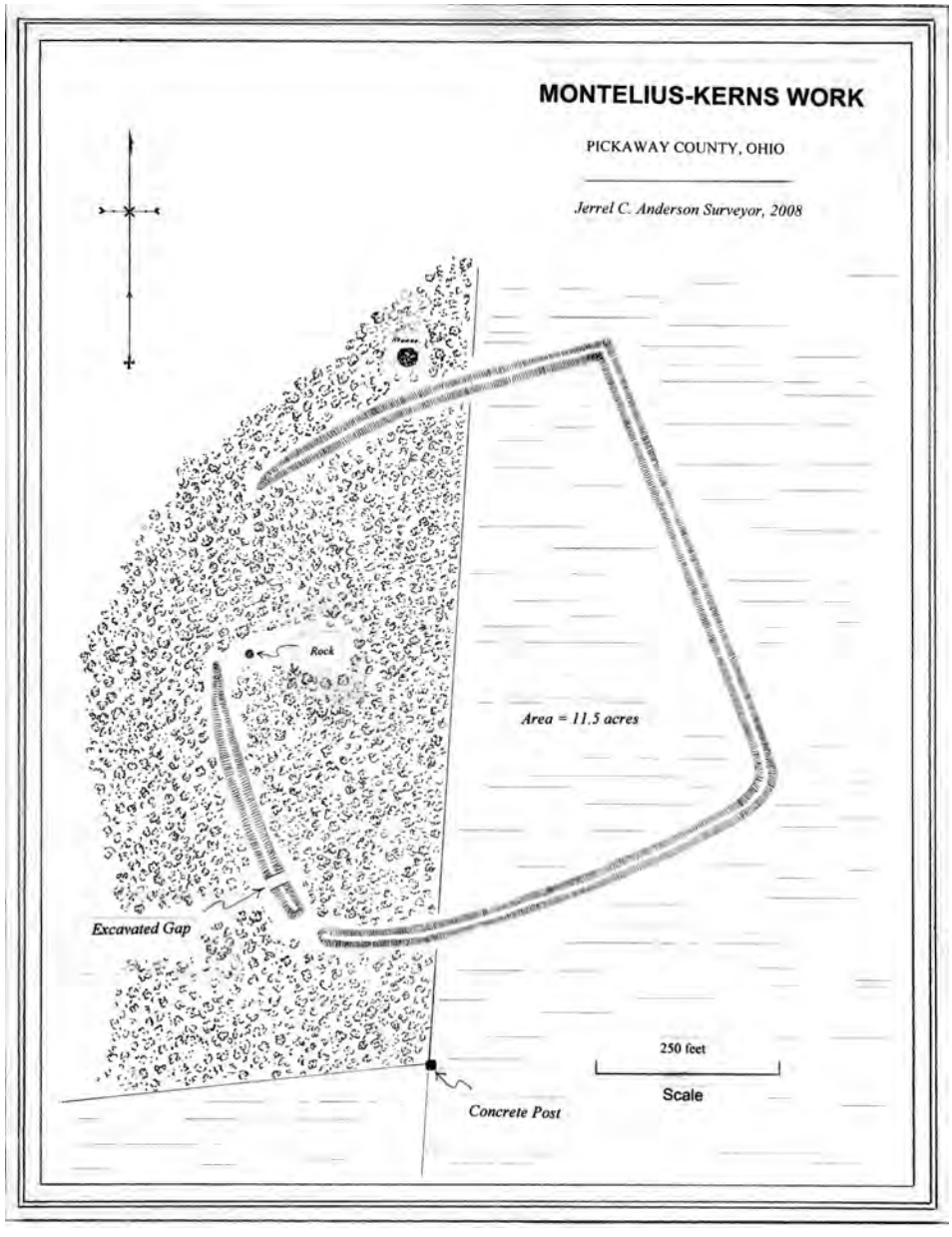


Figure 3. The Montelius-Kerns Earthwork located in southern Pickaway County, Ohio. This earthwork was first mapped and recorded by me, and three other previously unknown earthworks have recently been discovered and registered.

During my time in Pickaway County, I had little interaction with professional archaeologists but was on friendly terms with Raymond Baby and Martha Potter Otto. In fact, there was very little interaction between collectors and professionals. This was sad, for many sites had been destroyed with no recorded information about them. Today, that situation is changing thanks to the work of William Dancey Jarrod Burks, Paul Pacheco, Dr. Jonathan Bowen, DeAnne Wymer, and other professionals who work in close association with local collectors. The rewards to both parties have been great.

## The West Virginia Experience

In 1977, I was transferred to Parkersburg, West Virginia, a rich archaeological area on the Ohio River between the mouths of the Muskingum, Little Kanawha, and Hocking Rivers. In fact, the famed Marietta Earthwork is located just 11 miles upriver from our home. And here my interaction with professional archaeologists was frequent. I joined the West Virginia Archeological Society (WVAS), a pleasant amalgam of collectors and professional archaeologists. In fact, I was privileged to serve as president of this excellent society for two terms. This society was scientifically oriented and published a juried journal, *The West Virginia Archeologist*.

West Virginia employed eight professional archaeologists in the 1970s, including James McMichael and Bettye Broyles. However, the situation had changed by the time I arrived. As a result, much of the archaeological work in West Virginia is carried out by contract firms and avocational archaeologists. Under my direction, the Little Kanawha Chapter of the WVAS conducted intensive mitigation projects within the city limits of Parkersburg: the Early Archaic Memorial Bridge site and the Late Archaic Marrtown site. My training under Elaine Bluhm came of use here. These two important sites would have been erased from memory if not for our efforts.

Many of the WVAS members registered sites with the SHPO—the relations among professionals and amateurs were good. Relations between us professionals and collectors and the state bureaucracy became strained, however, during the Cotiga Mound project. WVAS and the United Cherokee Tribe of West Virginia, an organization of blacks of Cherokee lineage, sued the WVDOT and WVSHPO over the terms of the project. Although we were unsuccessful in overturning all the conditions, we did eliminate the most objectionable proscriptions.

West Virginia passed a comprehensive burial protection law (H.B. 2951) in 1990 that covered Native American burial sites located on both public and private properties. Recently, a burial mound located in Vienna, West Virginia, that I had registered with SHPO was destroyed by the landowner. The SHPO would not investigate the case, and relations still are strained. The law requires anyone who carries out an excavation to have an excavation permit; SHPO issues the permits, one of which was given to me for WVAS work at the Marrtown site.

I am a member and chair of Blennerhassett Island Historical State Park's Archaeology Committee. We have worked with professional archaeologists who conducted geophysical surveys as well as several significant excavations on the island.

Whittington Mound, located just north of Marietta, Ohio, was going to be destroyed in 2010 by new property owners. The Washington Historical Society

intervened and negotiated a mitigation project directed by a professional archaeologist, Dr. Wesley Clarke. I helped supervise a group of dedicated volunteers who excavated most of the mound before being expelled by the landowner. Here was an excellent example of cooperation among professionals, collectors, the landowner, and the local historical society resulting in the successful mitigation of a site.

## Some Thoughts

Most collectors, and indeed many archaeologists, started their archaeological journeys by collecting arrowheads in cultivated farm fields. Now the fields are no longer turned over with moldboard plows, and surface collecting as a hobby is dying. As a result, there are fewer and fewer collectors being spawned, and the knowledge now residing in the old-timers' heads will be lost for all time. There is a mutual desire among serious collectors and professional archaeologists for preservation—in the form of physical preservation of sites and /or the knowledge about them. It is incumbent, then, that we publish or at least record our knowledge of those sites we are intimately familiar with.

I started out as a collector. But because of my curiosity and experience with knowledgeable collectors and professionals, I found archaeology a much more rewarding experience than that gotten from merely collecting artifacts—the artifacts and their locations and cultural connections told a much more enthralling story.

Preservation of sites and associated data depends on the good faith of collectors, professionals, and property owners. Education plays a large role in preservation efforts. If states really want to preserve sites on private lands, then they should aggressively identify such properties, provide signage, and generously pay the owners to maintain them and to preserve them. Tax set-asides will not work well, but a check to the owners each year will work wonders. And where possible, important sites should be purchased—witness the work of the Archaeological Conservancy. And in all of this, collectors can be of great value for many of them have good relations with property owners and can serve as ambassadors between owners and professional archaeologists.

And a word of advice for professionals about their relationships with collectors: Attribution is a very important thing. When a professional gets help from a collector in the form of information, artifact sharing, tips, and the like, she or he should be generous with thanks and appreciation. This does not happen enough.

And lastly, all collectors bear a heavy responsibility to share their knowledge with the wider community. They can do this by registering sites, publishing their information, and working with professionals to identify site locations and to share their documentation. This generation of collectors is really the last of the breed and we need to be generous with our knowledge right now.

## Note on Contributor

Jerrel C. Anderson is retired as a research scientist from DuPont. He is a member of the West Virginia and Ohio Archaeological Councils, the Archaeological Society

of Ohio, and the West Virginia Archeological Society, for which he served two terms as President. He has been active in midwestern collection and archaeological preservation for decades.

Midwest Archaeological Conference Occasional Papers No. 3, 2018, 45–50

# Informatics for the Stone Age: Knowledge-Management Approach to Lithic Raw Material Identification

Dan Wendt

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Lithic raw material identification has been a foundational approach to telling the story represented by a stone tool. Minnesota has over a hundred lithic material varieties that occur on archaeological sites. This diversity is due to a complex bedrock geological history, glacial history, and human activity. A subjective macroscopic approach to lithic analysis has been the realm of experts with years of experience. Practices and nomenclature are inconsistent and the approach is fallible. New informatics approaches are needed to manage knowledge and information and make it available to those who apply it. New knowledge-sharing approaches and tools have been developed and assessed.

**Keywords** Lithic sourcing; Informatics; Collaboration; Knowledge management; Avocational

The term *informatics* broadly describes the study and practice of creating, storing, manipulating, and sharing information. Knowledge sharing occurs within a community of professional archaeologists and avocational communities with an interest in studying lithic raw materials and their sources. The two-way exchange of samples and information invites participation and learning. Professional archaeologists, avocational archaeologists, collectors, and flint knappers benefit from and enrich their experiences by learning more about lithic raw materials and their sources.

The lithic material comparative collection in the Minnesota Historical Society (MHS) has been built over decades with the contributions of many people. Bakken (2011) covers the breadth of background information and archaeological community contributions to understanding Minnesota lithics. Many samples were provided by professional archaeologists or were acquired by exchange from other regions.

Collaboration between professionals and avocationals is an effective way to gather information on lithic raw materials. The collection today has over 3,000 samples from Minnesota, adjacent states, and provinces of Canada, representing 402 materials. The avocational community has provided 365 samples from 48 different individuals with information on provenience and context. The author contributed over 1,500 samples.

The scope and complexity of the comparative collection is warranted. A typical Minnesota site may contain dozens of different raw materials due to the near absence of high-quality resources in the state and the many sources imported through human and natural processes (Figure 1). Often the author has learned about a new material and almost immediately started seeing it in archaeological collections. This had led to the conclusion that without awareness of the possibilities an analyst is blind to materials they do not recognize. A second observation is that obsidian occurs on sites across Minnesota from sources in the Rocky Mountains 1,250 km away (Hughes 2007). Awareness of possible source options needs to extend far beyond Minnesota.

## Discussion

The success of the sample-gathering phase created a challenge and an opportunity to make the collection easier to use and access. In 2010, the Office of the Minnesota State Archaeologist and MHS sponsored the first of four biennial lithic material workshops that have brought together archaeologists and avocational communities from across the Midwest and nearby Canada. At the first workshop, the drawers were literally opened for viewing, samples were offered for exchange, and a CD of photos of key materials was distributed (MHS 2010). The CD was well received, but identifying a raw material by similarity to a photo is ambiguous.

At the 2012 Lithic Material Workshop, a full attribute assessment was added to the catalog of samples, with attribute description methodology documented in a guide (Wendt 2013). A new method was highlighted to simply and inexpensively measure the magnetic susceptibility of a sample. The resulting data set could be used to search, filter, and sort the long list of materials (Wendt and Kurth 2013). Two or three criteria could narrow the identification options. Selected attributes can be specific to a type's distribution or a member or bed within a formation. Also highlighted at the conference was the study of source variation in Knife Lake Siltstone (Wendt and Mulholland 2013). Detailed attribute descriptions of samples from different strata and outcrops were used to uncover the targeting of specific grades of material for quarrying and knapping.

The 2014 Lithic Material Workshop reported on a blind trial to test five experienced analysts on the identification of 20 typical Minnesota lithic materials (Wendt and Doperalski 2015; Wendt et al. 2014). Results highlighted familiarity gaps for identification of some materials but more surprisingly the gross overapplication of a few familiar material identifications to other less familiar materials. The application of a blind trial with statistical analysis, including a confusion matrix and a receiver operating curve (Dawson and Trapp 2004:313–314), provided a rigorous assessment of the sensitivity and specificity of visual identification of each material and a road map for improving identification.

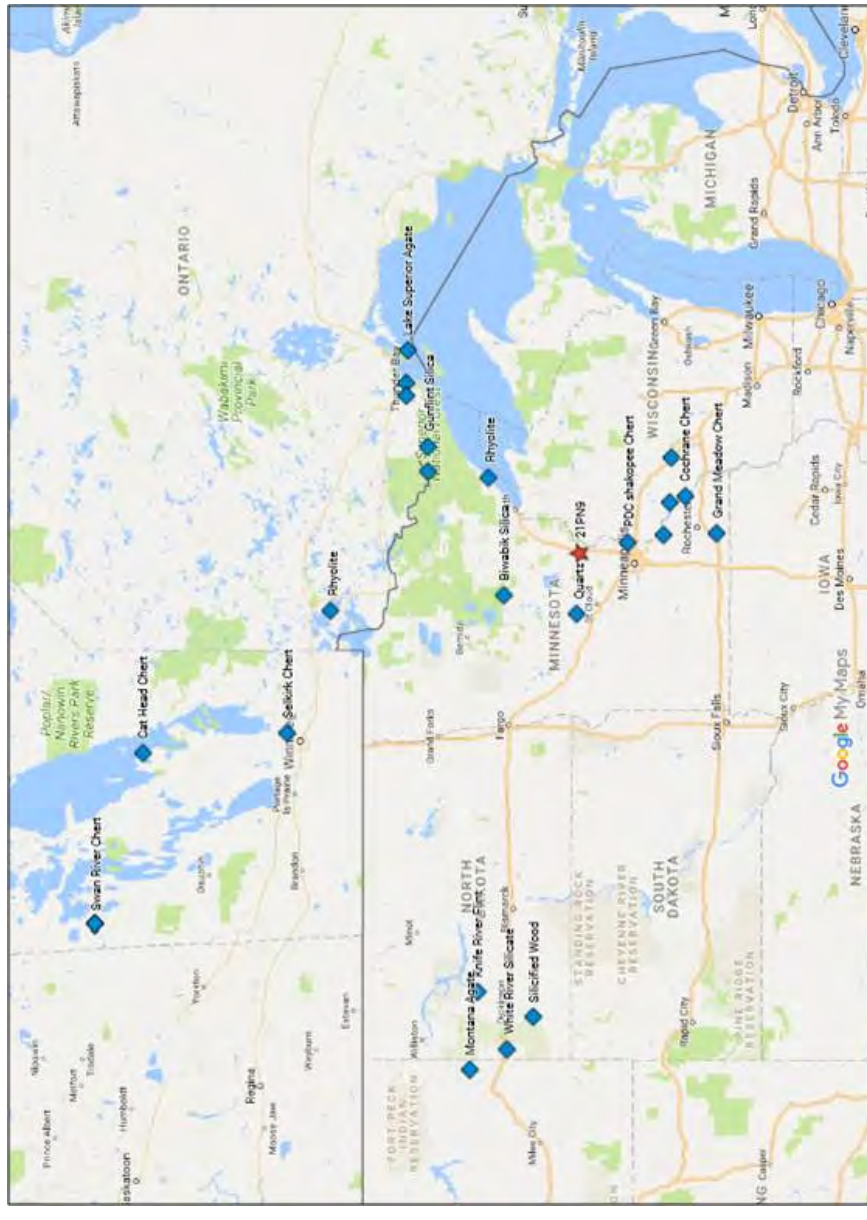


Figure 1. Source locations for 22 lithic varieties found on a typical Minnesota site, 21PN009.

The 2016 Lithic Materials Workshop was a forum to present a GIS map of material sources in the MHS comparative collection (Kurth and Wendt 2016). To aid mapping, georeferencing was added to the comparative collection catalog for each sample. The conference was also used as a forum to share the results from a survey of sources and stratigraphic variation of Prairie du Chien group cherts (Wendt 2014a, 2014b, 2014c). The highest quality chert found in the highway survey led to identification of a 1-mile diameter quarry and workshop complex.

The 2017 Lake Superior Basin Workshop was a forum to present a user-friendly searchable version of the Minnesota Lithics map of primary sources organized by rock type through tabular lists with their approximate provenience (Wendt 2017). Linked photos show bulk samples, photomicrographs, secondary distribution maps, and sample artifacts. The secondary distribution of chert in glacial till was generated as a result of collaboration and data sharing with Canadian archaeologists, including Clarence Surette at Lakehead University in Thunder Bay and Kevin Brownlee at the Manitoba Museum in Winnipeg. The mapping resource has been shared with 18 archaeologists and has been visited over 400 times since sharing a year ago, far more often than the physical comparative collection at MHS.

There is growing awareness that regional collaboration is needed to understand the complex record of trade, travel, and resource utilization that is represented by stone tools. Cloud-based digital tools can provide access to the information stored in physical comparative collections in different states and provinces. Digital collaboration will require standards of consistency and agreements on how information is shared and how sensitive information is protected (M. Anderson 2017; S. Anderson 2017). There are opportunities to expand collaboration by interacting in new ways, to the mutual benefit of all analysts.

## Conclusion

The journey of information sharing and collaboration has led to an expanding group of partners and more effective tools for promoting awareness of lithic materials and their sources. The Lithic Material Workshop platform has allowed the collaboration of the professional and the avocational communities to share samples, knowledge, and ideas. The goal of future lithic material workshops will be to pull together an expanding group of partners. Collaboration in the future can be magnified by digital information—sharing approaches that are available today online with shared collaborative drives or shared collaborative maps, allowing for potentially many interstate or international partners.

## Acknowledgments

I would like to thank the volunteer program at the Minnesota State Historical Society and the Office of the Minnesota State Archaeologist for supporting this long-term research opportunity with space, funding, and energy. I would also

like to thank a list of key collaboration partners, including Bruce Koenen, LeRoy Gonsior, Kent Bakken, Susan Mulholland, Mark Doperalski, Andrew Kurth, Clarence Surette, Kevin Brownlee, Grant Goltz, Mark Anderson, and Susan Anderson. Thank you to everyone who has collaborated with the exchange of samples and information. I would like to make a special acknowledgment in memory of Dr. Tony Romano, who inspired me with his example of contributions to Minnesota archaeology as an avocational archaeologist.

## Note on Contributor

Dan Wendt is an avocational archaeologist currently affiliated with the Minnesota Historical Society Volunteer Program, in Saint Paul, Minnesota. A long-term research focus of his has been to build, maintain, and share information on the Minnesota Historical Society's regional lithic comparative collection. Wendt was the 2016 recipient of the Wisconsin Archaeological Society Increase Lapham Award and the 2017 recipient of the SAA Crabtree Award.

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# The Single-Pass Survey and the Collector: A Reasonable Effort in Good Faith?

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Regulations implementing the National Historic Preservation Act (NHPA 1966) require federal agencies to "make a reasonable and good faith effort to carry out appropriate identification efforts" (36 CFR § 800.4[b][1]). This mandate has given rise to the cultural resource management (CRM) industry, where single-pass surveys are the norm in efforts to identify historic properties. Long-term private collection can make such surveys unreliable indicators of the true distribution of archaeological materials. Even substantial habitation sites can be missed or mischaracterized by a single-pass survey in heavily collected areas. Furthermore, areas with few or no professional surveys are particularly susceptible to the mischaracterization and overlooking of significant archaeological resources. We present case studies that illustrate the cost of failing to engage with private collectors. First, we report a detailed, repeated survey by a landowner that documents significant resources in areas where they are not considered likely. A professional survey targeting these sites failed to accurately characterize their nature. Second, we analyze how typical CRM Phase I surveys would fail to identify a multicomponent site including a terminal Archaic habitation and a Late Prehistoric village due to prior extensive collecting. Only by studying the private collections could the true significance of these sites be discovered. These examples raise the question of what constitutes a "reasonable and good faith effort" to identify and evaluate archaeological remains within project areas. Given the limitations of single-pass survey and the extent of private collecting, continuing to rely on single-pass surveys as the main, or even sole, identification tool in CRM

cannot be considered reasonable or in good faith. Federal and state agencies must establish standards to fill this gap in the appropriateness of our current CRM practice.

**Keywords** Section 106; Survey methods; Significance; National Historic Preservation Act; CRM

Private collections contain vast quantities of information about and artifacts from significant sites. Estimates of the proportion of the archaeological record that professionals have access to can be as low as 2% (Shott 2008, 2015). This is a very important issue to deal with for all research into, especially, the precolonial past of the United States. As a reminder of the scope of collecting and the prevalence of those who are not responsible or responsive (sensu Shott and Pitblado 2015:12) a less than 1 minute search of Ebay, using just the first Google-suggested terms, reveals tens of thousands of artifacts (Ebay 2017). Then there are the explicitly "arrowhead" auction sites (e.g., Arrowheads.com 2017; Caddot Trading Company 2017). Given the money involved, it is hard to blame those who inherit collections for cashing in. This does not include all the estate auctions, face-to-face sales, artifact show sales, fundraising sales, etc. that happen every day across the US. We are losing each day tens of thousands, if not hundreds of thousands, of artifacts.

## Regulations

The issues of the scale and fate of private collections come to a very pointed head in CRM. The National Historic Preservation Act (NHPA) of 1966 created both State Historic Preservation Offices (SHPOs) and the National Register of Historic Places (NRHP). Implementing regulations (36 CFR § 800) defined criteria for eligibility of historic properties for the NRHP and the responsibilities of federal agencies as they "take into account the effects of their undertakings on historic properties." Federal agencies must "make a reasonable and good faith effort to carry out appropriate identification efforts" (36 CFR § 800.4[b][1]).

The regulations do not specify what constitutes "reasonable and good faith." The Advisory Council on Historic Preservation (ACHP 2011) has attempted to clarify what constitutes a reasonable and good faith effort. ACHP identifies several aspects, but the keys here are that efforts must include seeking "information from others who may have knowledge of historic properties in the area" (ACHP 2011:1) and that the identification effort must be "logically designed" but not excessive or inadequate (ACHP 2011:2). Adequacy assessment should take into account the numerous studies on the effectiveness of different survey methods under specific conditions (see Shott 1992 and references therein).

NHPA assigned SHPOs 10 responsibilities (54 U.S. Code § 302303[b]), of which 1 and 5 are most relevant here. Subsection (b)(1) instructs SHPOs to, "in cooperation with Federal and State agencies, local governments, and *private organizations*

*and individuals*, direct and conduct a *comprehensive* statewide survey of historic property and maintain inventories of the property" (54 U.S. Code § 302303[b][1], emphasis added). Thus, SHPOs must catalog properties in advance of any federal undertaking. This allows consideration of a full cultural context in background reviews and evaluations when a federal undertaking mandates "tak[ing] into consideration" the effects of actions on historic properties. Further, the SHPOs shall "advise and assist . . . Federal and State agencies and local governments in carrying out their historic preservation responsibilities" (54 U.S. Code § 302303[b]([5]), thus granting them a role to play in determining and monitoring identification efforts in good faith and to assist in doing so.

## Cultural Resource Management Phase I Survey

NHPA and governing regulations engendered a three-phase approach to CRM practice. Phase I's focus is identification with surveys usually accomplished either by pedestrian survey in cultivated fields or shovel test pits in noncultivated settings. In some situations, agencies and SHPOs only require a records review, depending on the "comprehensive statewide survey of historic property" and the associated inventory. Where sites are unknown, or deemed unlikely based on the extant inventory, a field investigation may not be conducted at all. Thus, any supposed gaps in the inventory become permanent.

Where surveys are required by SHPO and agency staff, almost always they involve single passes in which archaeologists do not choose survey condition or plan for the best approach to identifying historic properties in context and often involve very small budgets and tight schedules. These constraints, among others, miss or overlook significant resources and some artifact classes. Some of these are the result of the commodification of applied archaeological services. As Shott (1992:13) states, "Under these circumstances archaeologists are working harder than they need to and accomplishing less than they can."

## Case Studies

We present two case studies that highlight limitations of current practice and the importance of private collections. The first involves an area deemed unlikely to yield significant sites due to a near absence of knowledge of the surrounding landscape. The second illustrates the problems with CRM surveys in heavily collected areas and how this may result in the mischaracterization of the underlying archaeological record. Both highlight the difference between single-pass survey results and the knowledge contained in private collections.

### *Case Study 1*

This case involves the farm of coauthor James Leak, in Warren County, Indiana. Warren County is a "data deficient" area with fewer than 300 officially recorded

sites (Division of Historic Preservation and Archaeology 2007; see also Figure 1a). Leak collected his fields for 48 years and identified more than 20 sites (Quimbach et al. 1992:1; Leak personal communication, 2017). The area is a poorly drained prairie and was once wetlands (Figure 1a and 1b). Such wetlands present special problems in survey, with low-density clusters (sensu Dunnell and Dancey 1983) scattered around largely unoccupied flats. Contours less than 10 ft are not recorded on USGS 7.5 Minute Series Quadrangle Maps.

The historic Warren County atlas (Beers & Co. 1877) shows a marsh of approximately 60 acres occupying the survey area (see Figure 1a). By 1904, the marsh is no longer present and the stream was shoveled into its current tributary form. Soils are characterized as a poorly drained black, silt loam to clay loam (Soil Survey Staff 2013). At a glance, such "flat land" might not be considered conducive to prehistoric settlement.

### *Case Study 1: Surface Collections and Previous Archaeological Investigations*

However, Leak's 48 years of surface collecting show the contrary, documenting at least 20 distinct artifact concentrations including dense scatters from the Paleoindian through Late Woodland periods. In the early 1990s, Quimbach (Quimbach et al. 1992; Quimbach and Denton 1993) conducted systematic surveys of four Leak sites, all of which occupy till plain "rises" less than 5 ft in elevation. These sites (and others that Leak documented) may have lined the shoreline of prehistoric wetlands (see Figure 1a). Leak site 1 (L-1) yielded two Hi-Lo points and one Quad point. Leak found a Clovis point northwest of L-1, at the Bivouac site (Quimbach et al. 1992; see Figure 1b). The systematic survey recovered dozens of lithic artifacts, including FCR and a Kirk Corner Notched point (of Attica chert) and 20 historic artifacts. No indication of Paleoindian occupation was encountered during the survey.

The Leslie site (L-2), no more than 2 ft higher than the surrounding elevation, is a multicomponent lithic campsite (Quimbach et al. 1992). Survey recovered several likely Late Archaic points, including a Matanzas (Quimbach et al. 1992:10–11). However, Leak's collection contains a Kirk Corner Notched, Raddatz Side Notched, MacCorkle stemmed, Elk River Stemmed, Lake Erie Bifurcate, several Matanzas and Breweretons, Lowe Flared Base, and many fragments of untyped bifaces (Quimbach et al. 1992:10–11).

Wayne Thomas (L-3) is a multicomponent campsite of both chipped- and ground-stone tools. Of particular interest are three atlatl weights in Leak's collection; no ground-stone tools or diagnostics were discovered during survey (Quimbach and Denton 1993:5–10). However, Leak's L-3 collection contains Lost Lake, Kirk, Wabash Diagonal Notched, Raddatz Side Notched, Matanzas, Brewerton, and contracting stemmed (cf. Gary Contracting Stem) bifaces representing occupation throughout the Archaic period.

David James (L-4) is a multicomponent lithic campsite that produced 10 kg of fire-cracked rock during a four-hour systematic reconnaissance. It includes Middle Archaic, Late Archaic, and Middle/Terminal Woodland occupations. Reconnaissance yielded a single Brewerton and dozens of other lithic artifacts, including a slate flake (Quimbach and Denton 1993:16–17). Leak's collection there yielded

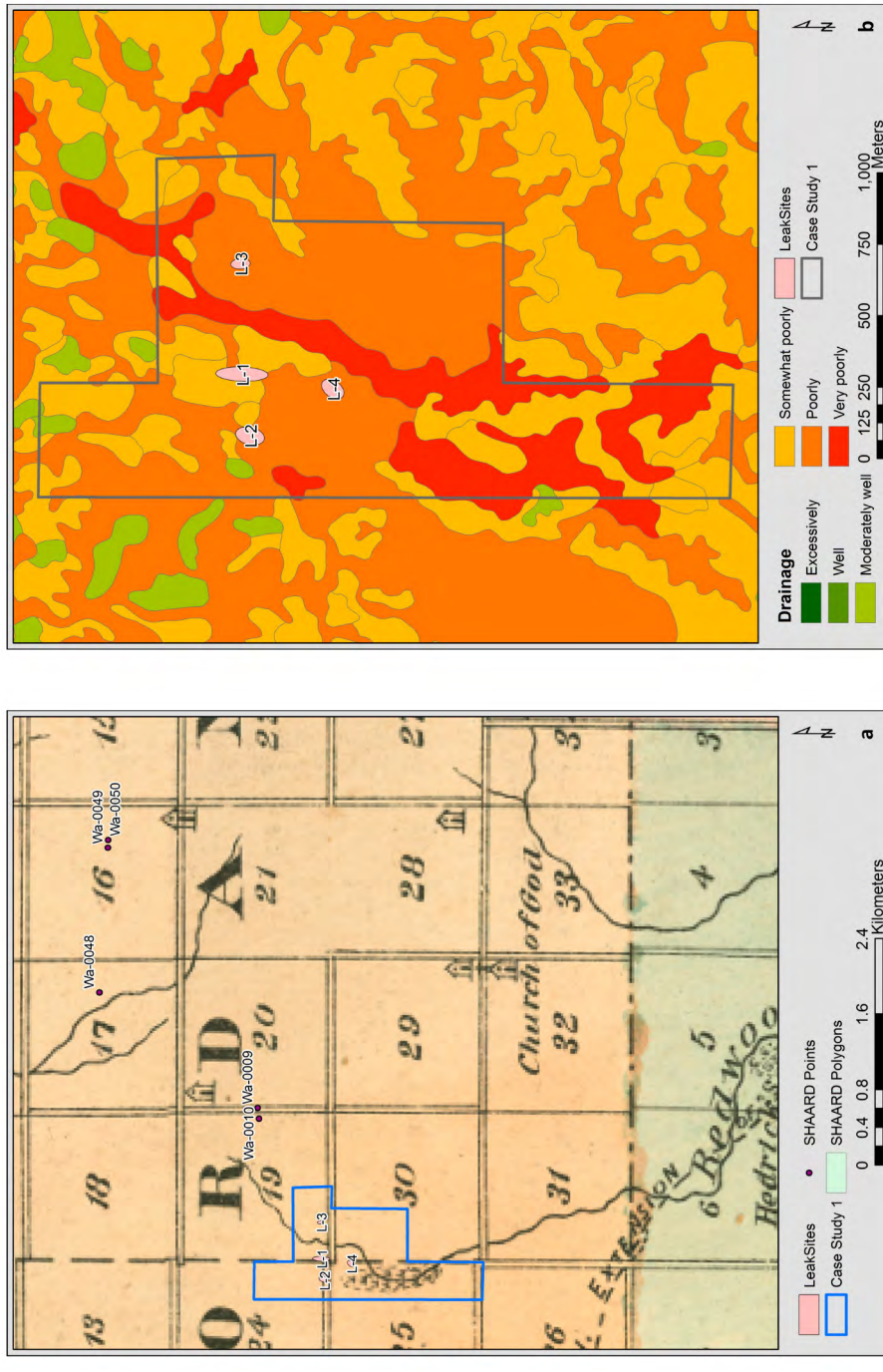


FIGURE 1. (a) Case Study 1 over 1877 atlas of Warren county; and (b) map of soil drainage for Case Study 1 area.

at least 68 bifaces, including types that range from Late Paleoindian to early Late Woodland (Quimbach and Denton 1993:18–20).

Leak's collection documents at least nine additional sites, which can be described as multicomponent lithic scatters or isolated "finds" with chipped- and/or ground-stone tools, on his property. Coupled with this physical evidence, campsite selection seems focused primarily on the north and east sides of the former marsh.

### *Case Study 1: Summary*

This case shows that areas of low relief and poor drainage could have been intensively occupied and that single-pass professional surveys are very unlikely to characterize the full nature of any of these locations, even when highly productive areas are targeted (see Quimbach et al. 1992; Quimbach and Denton 1993). Therefore, it is imperative that professionals examine so-called flat regions of Indiana and collaborate with local collectors. In this landform, one cannot predict site frequency, as there have been no comprehensive surveys conducted.

Although available data are limited, they reveal that prehistoric peoples occupied the landforms 5 ft or less in elevation in the poorly drained till plains. Marshes are biologically productive areas, and the north and east sides of these areas also provided protection from fire and thus were favorable settings for both humans and trees. Reber and colleagues (2017:23–24) make a similar observation in Illinois, indicating that prairie Archaic adaptation is represented in western Indiana. This reinforces previous conclusions about the nature of occupation and the requirements for survey in these data-deficient regions of western Indiana (Balough et al. 2016, 2017; Leeuwrik et al. 2016, 2017; Macleod et al. 2015, 2017; Surface-Evans 2015).

### *Case Study 2*

The second case further explores the implications for CRM practice of the disparity between the professional survey and the private collection. Its field component comes from a Historic Preservation Fund grant (Swihart and Nolan 2014; Swihart et al. 2017), using survey methods identical to Phase I norms. The case provides a hypothetical opportunity to evaluate the potential effect of CRM practice on significance evaluation and documentation of the archaeological record.

The area lies in Harrison Township, Dearborn County, Indiana. Nolan chose this parcel due to a collector report of a multicomponent site on its northern edge along the Whitewater River; the southern edge lies at the base of a steep terrace rising 100 m above the floodplain (Figure 2). The region is rich in archaeological resources. However, only about half the known sites are from modern CRM survey (Swihart et al. 2014:Figure 16); the rest are from either historical documents or collector reports.

### *Case Study 2: Survey*

A total of 3.12 ha were surveyed. Initial passes found little due to the difficulty field crews had recognizing fire-cracked rock (FCR). Identification of FCR is a perennial problem in archaeology (see, e.g., Rapp et al. 1999). This is likely exacerbated by


FIGURE 2. (a) Case Study 2 survey area and chipped-stone distribution; and (b) chipped-stone distribution with hypothetical 20 m area of potential effect (APE).

guidelines that disincentivize its collection or analysis. This real problem provides a realistic variable that can be adjusted in hypothetical scenarios below.

### *Case Study 2: Field Results*

Flakes ($n$ = 26), core fragments ($n$ = 14), and shatter ($n$ = 15), but no diagnostics, were found scattered among 11 clusters; density was inversely proportional to distance from the Whitewater River (see Figure 2a). Given the sparse nature of the recovered materials (2.9 artifacts/ha), particularly the lack of diagnostics, and dependent on the PI, or the area of potential effect (APE) of the federal undertaking, probably none of these clusters would be recommended for further investigation. Instead, these sites would be destroyed.

If this were a road-widening project with a 30 m wide APE, up to eight artifacts would have been included (see Figure 2b). This APE would give us 4–5 sites each consisting of 1–4 artifacts. Again, no such sites would be recommended for additional work and the undertaking would destroy all intact deposits.

The discrepancy between the expectation from the collector report and our initial recovery caused a resurvey of the first few transects and greater focus on nonchippable lithics for the rest of the survey. Figure 3a shows the distribution of types among the 130 artifacts (but no diagnostics) found. The 11 debitage clusters now form seven sites, the largest comprising over 1.03 ha that roughly corresponds to 12-D-480 documented from collector interviews (Parrish and McCord 1995). Artifact density rises to 6.8 artifacts/ha, 57.7% of which came from these two less reliably collected categories (i.e., FCR and ground-stone fragments). If FCR and ground stone are recognized in the field, most PIs would recommend 12-D-480, as documented in this survey, as potentially eligible.

However, if this were a 30 m wide road APE, only 34 artifacts would have been recovered from three distinct clusters (Figure 3b). At least the easternmost would be recommended for additional assessment. This scenario depends on both the ability of field technicians to recognize and PIs' willingness to collect and do additional, closer interval transects (halved interval around positive STPs or surface finds; see, e.g., DHPA 2008:6; OHPO 1994:70–71; a.k.a. radials) around FCR in the field. This is not always the case.

### *Case Study 2: Private Collection*

Parrish and McCord (1995) conducted many collector interviews in the area of our second case study. Of particular relevance was the definition of 12-D-480, which included Late Archaic, Mississippian (a.k.a. Late Prehistoric), and Woodland components. Parish and McCord's informant reported "dense concentrations of burnt earth, fire-cracked rock and charcoal" when the field was plowed (Parrish and McCord 1995:39). The collection reported for 12-D-480 contains diagnostic points ranging from the Late Archaic through the Late Woodland/Late Prehistoric and a number of celts. It was donated by the current landowner to the Applied Anthropology Laboratories, Department of Anthropology, Ball State University, who reported that she knew of only one collection location for its many artifacts, an Adena Stemmed projectile point that she herself collected south of the area

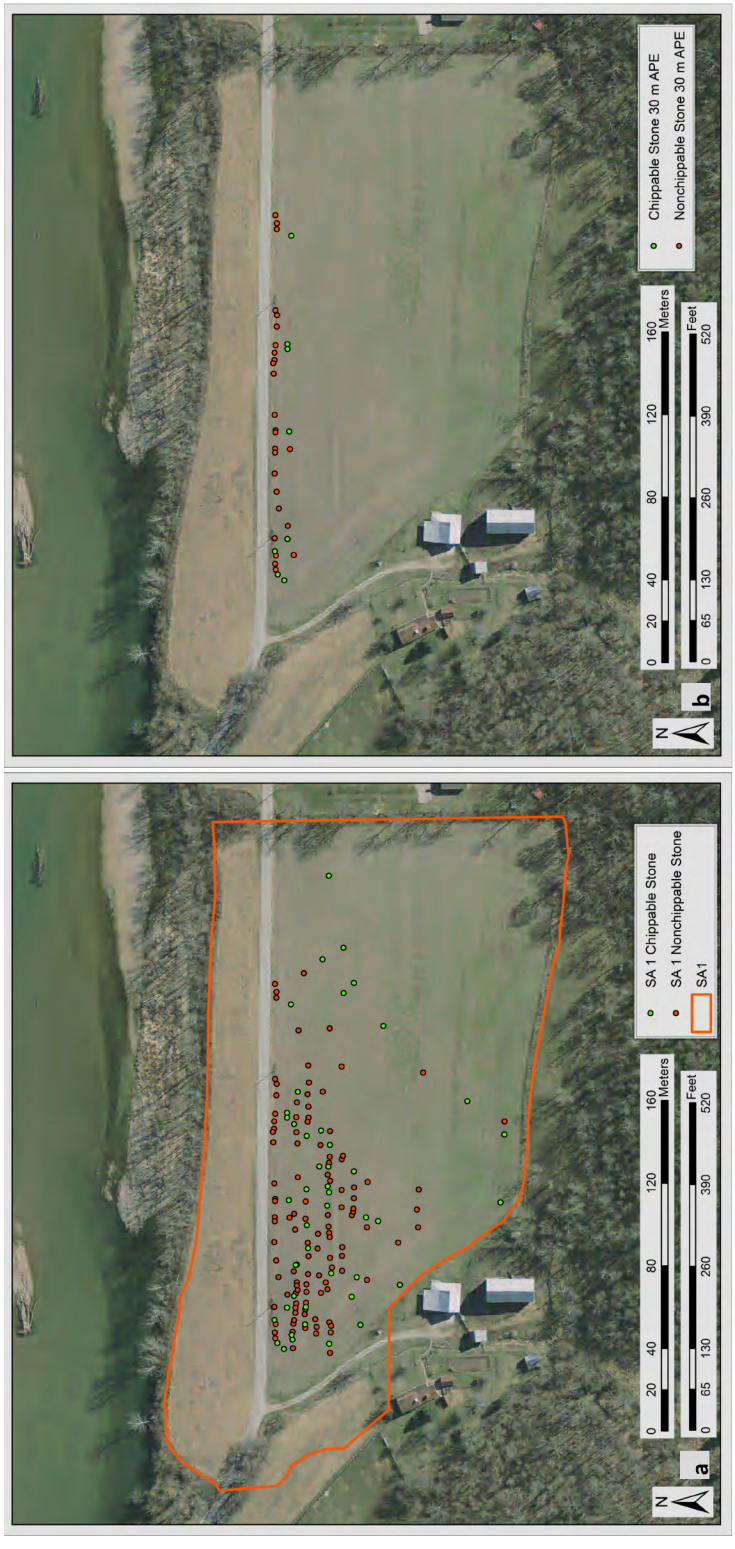


FIGURE 3. (a) Case Study 2 distribution of all artifacts; and (b) all artifacts within hypothetical 30 m APE.

previously designated as 12-D-480. Accompanying this specimen were over 100 other points (Table 1), most of Late/Terminal Archaic and Early Woodland age, along with several Late Prehistoric triangular points.

The private collection has similarities to professional survey results. Notably, the prevalence of ground stone is strongly confirmed in the collection. Further, both collections are dominated by Silurian (Liston Creek and Laurel) and Devonian (Jeffersonville) cherts (Table 2). What is missing from the survey results is any hint of extraregional connections that are present, especially during the Late Archaic, in the private collection. The only Flint Ridge points and nearly all Wyandotte points are Late Archaic forms; the single Burlington specimen is an Early Archaic point. Late Woodland triangles are almost exclusively made of local Laurel or unknown cherts. The single ceramic is a shell-tempered sherd associated with a Fort Ancient occupation (see Swihart and Nolan 2014:Appendix B).

### *Case Study 2: Discussion*

Survey of the entire 3.1 ha area, of the hypothetical 30 m APE, and the private collection tell different stories about the historic properties on the parcel. The 30 m APE, depending on crew experience and the PI, would not have captured its true significance. The full context is only really revealed with the combination of the larger area survey *and* the private collection. We cannot build a robust case for eligibility based on survey alone. Neither survey of the hypothetical 30 m APE represented the true structure of the archaeological record or even all the "information from others who may have knowledge of historic properties in the area" (ACHP

TABLE 1

TEMPORAL DISTRIBUTION OF BIFACES AND DIAGNOSTICS FROM THE SA PRIVATE COLLECTION

| Period | *n* | % | |
|---|---|---|---|
| Early Archaic | 6 | 5.17 | |
| Middle Archaic | 0 | 0.00 | |
| Middle/Late Archaic | 2 | 1.72 | |
| Late Archaic | 65 | 56.03 | Includes Terminal |
| Late Archaic/Early Woodland | 9 | 7.76 | |
| Early Woodland | 5 | 4.31 | |
| Middle Woodland | 0 | 0.00 | |
| Middle/Late Woodland | 2 | 1.72 | |
| Late Woodland | 1 | 0.86 | |
| Late Woodland/Late Prehistoric | 9 | 7.76 | |
| Late Prehistoric | 1 | 0.86 | Shell-tempered sherd |
| Unidentified Woodland | 2 | 1.72 | |
| Unknown | 14 | 12.07 | |
| Totals | 116 | 100 | |

TABLE 2

COMPARISON OF RAW MATERIAL COMPOSITION OF THE SURVEY AND PRIVATE COLLECTIONS

| Material | SA1 | % | Meyers | % |
|---|---|---|---|---|
| Laurel | 8 | 15 | 61 | 53.04 |
| Jeffersonville | 11 | 20 | 23 | 20.00 |
| Liston Creek | 19 | 35 | 2 | 1.74 |
| Holland | 2 | 3.6 | 5 | 4.35 |
| Fall Creek | — | — | 1 | 0.87 |
| Kenneth | — | — | 1 | 0.87 |
| Indian Creek | — | — | 1 | 0.87 |
| Harrodsburg or Allen's Creek | — | — | 1 | 0.87 |
| Wyandotte | — | — | 12 | 10.43 |
| Flint Ridge | — | — | 2 | 1.74 |
| Burlington | — | — | 1 | 0.87 |
| Delaware | — | — | 1 | 0.87 |
| Unknown | 15 | 27 | 4 | 3.48 |
| Total | 55 | 100 | 115 | 100 |

2011). Only when considering the full collection and survey information can we understand the property's significance. However, this also leaves another question unanswered: Where is the Late Archaic/Early Woodland site and where is the Late Prehistoric site?

Site 12-D-480's artifact distribution reveals a semicircular form with a lower density in the center reminiscent of a typical Fort Ancient village (cf. Cook 2007; Heilman et al. 1988; Nolan 2010; Nolan and Cook 2010; Pollack and Henderson 1992, 2000). If so, an apparent Fort Ancient village accounts for most survey artifacts, but most of the collection is Late Archaic. Where do the earlier materials come from? That is, in Section-106 context, where would we put Phase II trenches to explore one of the major components here?

Perhaps the Fort Ancient village overlies earlier occupations. However, this does not account for the owner's discovery of an Adena point directly northeast of the barn. This area yielded a single chippable-stone artifact in survey but did have FCR and ground-stone debris. With the artifact information, this question cannot be resolved.

However, we also conducted a soil phosphate analysis of part of the area subjected to pedestrian survey. Results reinforce the FCR and ground-stone distribution but also highlight an area of interest that is not indicated in the artifact distribution from survey (Swihart et al. 2017:Figure 7). The highest phosphate peak in the plow zone is even more pronounced in the subsoil (35–45 cm bgs; Swihart et al. 2017:Figure 8), indicating a possible hidden component not recorded in the survey and only hinted at in the collector interview. All this information is necessary to

make a logical hypothesis as to the true nature of the parcel's archaeological record. None of this is possible with the hypothetical APE surveys alone.

## Conclusions

These case studies of professional survey following collector-reported sites beg the question, Are current CRM standards reasonable and in good faith? Returning to the ACHP guidance, we should ask, "Is it logical?" Considering the evidence here, and elsewhere in this volume, the answer is a resounding "no." Knowing the scale and scope of collections, especially at traditionally "significant" sites and seeing how a typical CRM project articulates with a roughly known archaeological sequence, it is hard to argue that the current approach is a reasonable effort to identify historic properties affected by federal undertakings. This is brought into stark focus by the contrast between the contents of the private collections and those of the professional surveys. Does the current process "seek information from others who may have knowledge"? As King (2011) points out, ACHP guidelines could easily include talking to collectors knowledgeable about the local area. However, the current process does not often leave time for this.

With the knowledge gained, what constitutes reasonable effort, with "adequate funding" and "initiated in a timely manner" (ACHP 2011)? Where do talking to landowners, finding and interviewing collectors, and documenting their collections come in the process? Are they responsibilities of the CRM consultant? Should this be on a project-by-project basis? Given the time constraints of many projects, it is unreasonable to expect consultants to build this effort into their research designs. Those who do it would be at an instant economic disadvantage (Shott's [1992] commercialization). Minimally, reform requires implementation of new federal and/or SHPO guidelines that are uniformly enforced and for which compliance is verifiable. This solution, while perhaps ideal in the long run, will do nothing to benefit client relations and will put CRM professionals in the place of "impeding development" even more than is already perceived.

Technically, it is the federal agency's responsibility to reconcile current standards with the kind of effort called for in the guidelines. However, we can all (collectors, amateurs, and professionals) be part of the solution as people "who may have knowledge" about and/or "demonstrated familiarity with the range of potentially historic properties that may be encountered, and their characteristics." Our solution draws on ACHP guidance related to "adequate funding" in a "timely manner." To accommodate current practice in a timely manner, a new step cannot be inserted (at this time) before Phase I survey. This would introduce delays and complications for clients on a deadline.

ACHP's "adequate funding" encompasses "other necessary resources" and not "ignoring evidence." We have abundant evidence that the single-pass survey is not sufficient to reasonably identify properties (Banning 2002:39–74; Dunnell and Dancey 1983; Shott 1992). Identification plans that do not take account of these facts should de facto be considered not in good faith. However, we have the instruction for agencies, in consultation with SHPOs, to carry out plans for

identification with adequate funding and *resources*. The solution is for federal agencies and SHPOs to expand efforts to "direct and conduct a *comprehensive* statewide survey of historic property and maintain inventories of the property" (54 U.S. Code § 302303[b][1]; emphasis added) to include documentation of private collections. Where agencies and SHPOs already fund projects to fill gaps in survey coverage (e.g., Historic Preservation Fund, Certified Local Government, or Survey and Planning grants), they could prioritize rigorous, systematic documentation of private collections either through competitive grants or by agency or SHPO staff. We have already seen examples of states taking this responsibility on themselves (Evans et al., this volume). Systematic research can also demonstrate the value of collections documentation. As an example, Shott and Nolan (2016) initiated a project to digitize tens of thousands of artifacts in private collections in the *Central Ohio Archaeological Digitization Survey*. Recording such data takes thousands of person-hours; however, the gain in knowledge and preservation and accuracy of agency stewardship of resources is unparalleled.

Finally, to reiterate a point made over and over in this volume, time is running out to compile this "comprehensive statewide survey of historic property," which absent SHPO and agency involvement will not be maintained.

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## Notes on Contributors

Kevin C. Nolan is an archaeologist with a research focus on the Ohio River valley, especially late precontact period cultures. Dr. Nolan received his bachelor's in anthropology and computer science at Heidelberg University, Tiffin, Ohio, and then went on to complete a master's in anthropology at Kent State University and a PhD at Ohio State. He is currently the Director of the Applied Anthropology

Laboratories (AAL) in the Department of Anthropology at Ball State. Dr. Nolan and the rest of the AAL staff prepare undergraduate and graduate students for careers in anthropology by providing high-impact, experiential learning opportunities through real service and research projects.

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James Leak is a graduate of Purdue University with specializations in soil science and botany. As a farmer and a teacher, Leak has shared his knowledge and experience for the past 35 years. He has nearly 50 years of surface-collecting experience (acquiring arrow points, ground-stone tools, chert, etc.). His many passions pertaining to surface collecting include studying marshland settings and the prehistoric occupations therein and the surrounding soil types and topography of his collection sites. Leak's goal is to connect archaeology and chert-type studies, collaborating with local landowners to register exact site locations where surface points and prehistoric materials are found.

Cameron Quimbach studied archaeology and anthropology at Indiana State University. After graduating in 1985, he worked for various organizations including the Center for American Archaeology, the U.S. Forest Service, and The Children's Museum of Indianapolis. As a sole proprietor and independent archaeologist, he created d.b.a. Archaeological Communications, which promotes archaeology through education. He currently teaches at a private Montessori school in Warren County, Indiana.

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# Addressing Private Collections and the Results of Avocational Archaeology as a Cultural Resource That Enhances Our Understanding of Archaeological Landscapes

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Documenting private collections, and reporting the associated sites, provides a means of enhancing the archaeological database that results from CRM-driven work. From one perspective, private collectors have explored geographical areas that have not been and may never be subject to archaeological compliance work. In this way, the information obtained through collaboration with private collectors and avocational archaeologists helps mitigate biases in our understanding of the archaeological record. Researchers from the Mississippi Valley Archaeology Center at the University of Wisconsin–La Crosse provide GIS maps generated with and without information provided

by collectors to demonstrate the enhancement of the database through collaboration with nonprofessionals. Researchers from the Illinois State Archaeological Survey and the Illinois Department of Transportation provide an analysis of the data recorded from a single collection as an example of the value of large well-documented collections from repeatedly visited sites. The common thread that runs through both case studies lies in the value of collaboration with responsible collectors as a complement to current, standard CRM investigations.

**Keywords** GIS; Avocational archaeology; Settlement patterns; Landscape; Headwater marsh

Often, archaeological organizations make efforts to record data generated by private collectors and to include this information in databases representing the archaeological record. While archaeologists may recognize the importance of information held by private collectors, a unique set of problems is inherent in the documentation process due to the conceptualization that privately held collections are outside the purview of cultural resource management (CRM) projects when, in fact, they are an essential, nonrenewable, and rapidly disappearing cultural resource. Recording collections is typically time consuming, unfunded, and voluntary. There is no consensus on the need—or an appropriate way—to integrate the information collected into existing databases, so the information may be treated as private research. Tensions in the process arise from owners' concerns about sharing information while protecting both privacy and private property; from uncertainty about what constitutes valuable information when data does not fit the site location structure around which our professional databases are developed or may be redundant with previously recorded information; and from questions of how much effort professionals should reasonably expend to obtain this information. These are resource-management issues worthy of exploration.

The following case studies, originally presented by Arzigian and Dowiasch (2017) and Evans and colleagues (2017), provide evidence for the value of collaboration with avocational archaeologists as a complement to current CRM requirements. Researchers from the Mississippi Valley Archaeology Center (MVAC) at the University of Wisconsin–La Crosse focus on broad patterns of survey coverage and site reporting. They offer statistics indicating that private collections and other independent information sources have enabled the geographic extension of the southwestern Wisconsin database into parts of the landscape that have not been a focus for CRM-driven study, away from urban/infrastructural development. Illinois State Archaeological Survey (ISAS) and Illinois Department of Transportation (IDOT) researchers offer an in-depth examination of the information potential from a single well-documented collection in a rural area largely unaffected by urban and transportation development. Data from this collection, including site assemblages and landscape profiles that would not likely result from standard single-visit Phase I pedestrian survey, constitute a valuable addition to the regional

database in a part of the state where professional work is almost entirely lacking. Both studies emphasize the value of private collections for alerting professional archaeologists and regulatory agencies to the presence of resources that might never be located or adequately sampled via CRM practices. Today, these resources may be invisible owing to changes in land use.

## Avocational Archaeology: Expanding the Archaeological Record beyond CRM in Wisconsin

### *(Constance Arzigian and Jean Dowiasch)*

The Mississippi Valley Archaeology Center (MVAC) at the University of Wisconsin–La Crosse (UW–L) has a long history of interaction with local residents, collectors, and avocational archaeologists and records of sites documented by nineteenth- and early twentieth-century archaeologists and surveyors. This body of non-CRM archaeological investigations has accounted for 49% of the approximately 4,800 known sites in a seven-county region, with 23% (~1,100) of those sites being first reported by local residents and nonprofessionals (Table 1).

But the numbers are not the whole story. The sites reported by collectors, local residents, and other nonprofessionals are not randomly distributed across the landscape and do not mirror those reported through other means, such as through CRM or by early archaeologists such as T. H. Lewis. Local residents who collect on their farms and avocational archaeologists who intensively survey "their" regions cover areas that encompass a range of landscape settings unique to those otherwise examined by typical CRM projects, and their work serves to complement that done by many others. The resulting data sources, when joined together, bring us a more complete understanding of native landscape utilization and regional site distribution patterns.

Situated in the heart of the upper Midwest's Driftless Area, southwestern Wisconsin's landscape varies from the terraces along the Mississippi River to the bluffs above and from the spring-fed interior valleys to the upland ridges, with the Wis-

TABLE 1

TOTAL SITES, TABULATED BY FIRST INVESTIGATOR.

| Nature of Investigator | Number of Sites | % |
|---|---|---|
| Antiquarians and early archaeologists | 412 | 8 |
| Charles E. Brown, SHSW | 106 | 2 |
| Cultural Resource Management | 2,478 | 51 |
| Independent nonprofessionals | 1,108 | 23 |
| Regional Archaeology Program | 388 | 8 |
| Research | 371 | 8 |
| Totals | 4,863 | 100 |

consin River and the sand plains of central Wisconsin on the east. Outcrops of chert and silicified sandstone were sources for prehistoric quarries, and rock shelters carved into limestone and sandstone bluffs served as winter occupations because of the extreme temperatures in Wisconsin. This diverse landscape has been differentially investigated, with compliance archaeology efforts focused on specific niches subject to modern development, such as highway infrastructure and urban expansion. But other landscape settings, such as bluffs harboring quarries, rock shelters, and rock art or wetlands and large expanses of agricultural fields, are not being developed and therefore have seen few CRM investigations in past decades.

## Methods

In this study, we examined information from seven counties in southwest Wisconsin, including Buffalo, Jackson, Juneau, La Crosse, Monroe, Trempealeau, and Vernon. The area included a parcel of land roughly 66 miles east–west and 80 miles north–south covering 5,305 square miles (13,740 $km^2$). A total of 4,863 sites have been reported in the region (see Table 1). Using Wisconsin's online Archaeological Site Inventory (ASI) database, each site was coded for the nature of the initial discovery effort or the earliest report, to reflect who initially reported the site. Using this ASI list of references for each site, six categories were identified and all sites classified. These data were added to the ArcGIS shapefile of site locations for this region, and a series of maps were generated and statistics run in Access and Excel (See Figure 1).

## Sources of Site Reporting

1. *Antiquarians/early archaeologists* such as Theodore H. Lewis, Increase Lapham, George Hull Squier, and Stephen Denison Peet worked predominantly in the late 1800s and early 1900s and were heavily focused on mound sites, though some other important sites were reported, including the Little Bluff Platform Mounds (47TR32) from the Mississippian culture and the Silver Mound (47JA21) quarry site.
2. *Charles E. Brown,* first director of the State Historical Society of Wisconsin (now the Wisconsin Historical Society), worked during the 1930s. Brown systematically solicited information from local residents and other professionals on finds across the state, and his correspondence and maps were subsequently used to report hundreds of sites. Many of these have not been field verified and may have poor locational information, but they are important for alerting current researchers to potential sites.
3. *Cultural resource management (CRM)* reports come from government-mandated investigations performed by contract archaeologists—mostly post 1960s.
4. *Regional Archaeology Program* grants during the 1990s from The Wisconsin Historical Society funded regional offices to conduct surveys and prepare reports on cultural contexts. MVAC was responsible for Region 6 in western Wisconsin and conducted a series of surveys focused either on specific types of sites (rock art) or specific landscapes, such as a stream valley.
5. *Independent* nonprofessionals, collectors, avocational archaeologists, and so forth identified many sites. MVAC sometimes facilitated the reporting of

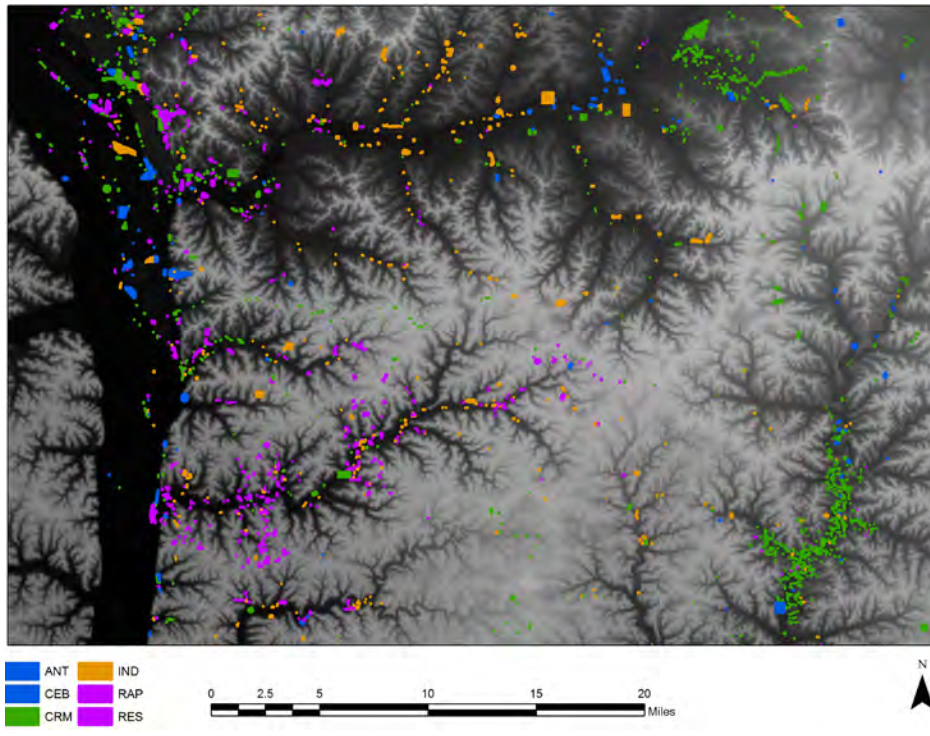


FIGURE 1. Regional distribution of sites first reported by CRM projects. Note the tight clusters of areas completely surveyed by CRM (Kickapoo Valley [*bottom right*] and Fort McCoy [*upper right*]). Regional distribution of sites first reported by independent investigators and avocational archaeologists; note the wider range of landforms represented, particularly the many stream valleys, such as those for the Black and La Crosse Rivers. Both CRM and independent investigations converge along the Mississippi River at La Crosse (*left*).

these sites and provided assistance in appropriate site collection and identification efforts.

6. *Research* includes sites first reported as a direct result of deliberate research efforts by modern archaeologists, including work by Will McKern with the Milwaukee Public Museum, or graduate student dissertation regional surveys, such as along Coon Creek, as well as sites being reported as a result of professional archaeologists pursuing specific research projects not associated with any compliance activity. In our area, many of these independent research efforts have focused on rock art, lithic quarry sites, or specific drainages.

### *Site Documentation*

Archaeologists throughout the nineteenth century varied greatly in their recording practices. Early nineteenth-century investigators tended to focus on mounds and other visible earthworks and sites that produced interesting artifacts but produced limited information on things not readily apparent from the surface. Modern

archaeologists are most often involved in contract work that is legally mandated. Most work is conducted in conjunction with proposed road construction. In the Driftless Area, the roads often follow the high ridges across the landscape, resulting in investigations along a relatively unique narrow corridor (Figure 2). Other contract work tends to focus on waterways the U.S. Army Corps of Engineers manages, monitoring other water/dam management projects, or investigations on public lands.

Nonprofessional investigators often limit their collection focus to diagnostics artifacts, with the majority recovering projectile points over pottery or lithic debitage. Pedestrian survey is limited to cultivated fields or sand blows in undeveloped areas, such as family farms or eroding shorelines. These sites may also be recorded from collections handed down through families from areas subsequently destroyed, resulting in less-detailed documentation.

These collectors represent a highly varied population, ranging from farmers whose collections are recovered solely from their property to schoolteachers in-

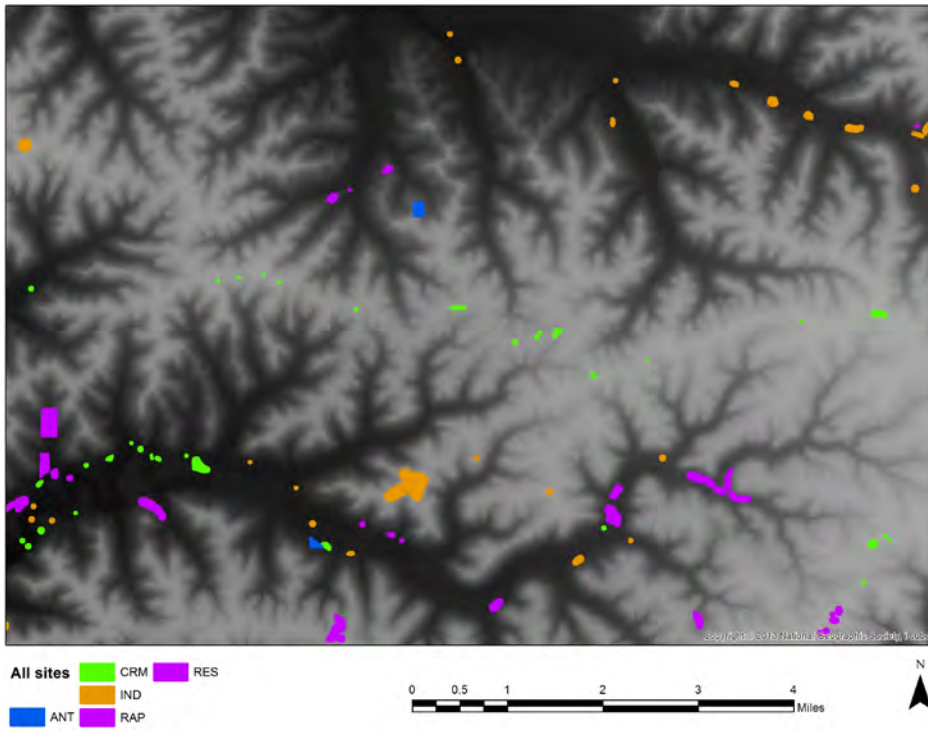


FIGURE 2. Closer look at two stream valleys in La Crosse County: Mormon Coulee (south) and Bostwick Creek (north). CRM projects were most common along the hilltops (lighter shades), particularly along Highway 33, which follows the upland drainage divide between the two valleys, as well as in the mouth of Mormon Coulee, along State Highway 61. Independent investigators have examined the lower elevations (darker shades) within the two stream valleys, finding sites along the stream terraces and lower slopes.

terested in teaching their students about archaeology and Native Americans in a hands-on way to avocational archaeologists who want to learn as much as possible about "their" region. These collectors know all the landowners, know the region's resources, and may well hunt and fish the same territory, so they know the land intimately and are fascinated about who was there before.

Avocational archaeologist Milan Quall recorded just under 50 archaeological sites with MVAC over the span of about 15 years. Mr. Quall lived on his family farm at the end of a gravel road winding through a narrow coulee. An intermittent stream led from the farm to a tributary of the La Crosse River, which feeds into the Mississippi River in the city of La Crosse. The majority of the sites Mr. Quall reported lie within 12 miles of his farm, and most of the properties surveyed appeared to be those of family and friends.

Schoolteacher Harland Stone covered a larger area than Mr. Quall and that ranged around the city of Arcadia, where he taught middle school. As residents of one of the larger cities in Trempealeau County, Arcadia's students were bused to school from the surrounding farms. Mr. Stone got to know the parents of his students and these landowners permitted him to survey their properties throughout the district. The Trempealeau River flows through Arcadia, and Mr. Stone focused on collecting along several valleys of its tributaries. Harland reported more than 50 sites with MVAC, including the Gail Stone Paleo site (47TR351), named after his wife and co-collector. The Stone family collected portions of 8 fluted points from this early Paleoindian campsite/village. MVAC conducted additional investigations at the site with Mr. Stone as part of its Regional Archaeology Program. Additional artifacts recovered include gravers, scrapers, and microflake tools, including glossy Cochrane Chert debitage and projectile points.

Gary Steele lived near Silver Mound, the source of Hixton Silicified Sandstone, and spent several decades collecting artifacts from the floodplain agricultural fields surrounding Silver Mound. He accumulated an impressive assemblage of Clovis points, as well as evidence that every other culture known from the region visited Silver Mound. His paleo points were studied by archaeologists who published the results in the *Midcontinental Journal of Archaeology* (Hill 1994). Mr. Steele notably recognized and systematically collected exotic raw materials, both flakes and tools, so that his collection reflects the great distances from which early native visitors came to the Silver Mound quarry area.

Perhaps the most prolific collector MVAC worked with was Todd Reichert, who reported over 130 archaeological sites. Weekend shifts at a Wisconsin State Correctional Institute allowed Mr. Reichert time during the week to survey a 15-mile radius surrounding the facility, located in Black River Falls. The archaeological significance of the Silver Mound site (47JA21) was first reported by Charles E. Brown in 1932, and it has long been a mecca for collectors in western Wisconsin. Mr. Reichert has reported 10 previously unrecorded sites within the immediate area of Silver Mound and many more in the area surrounding the village of Hixton, where Silver Mound is located along the Trempealeau River. Todd initially reported an orthoquartzite workshop complex in 2005, which led to additional investigations by MVAC and the subsequent listing of the Walczak-Wontor Archaeological Complex (47MO252) on the National Register of Historic Places in 1999 (Boszhardt 1994).

### *Discussion*

There are striking differences in the areas surveyed and completeness of coverage between compliance and other survey efforts. Compliance projects have focused on roadways and urban development, leading to multiple site reports but only in limited areas, particularly near urban areas. Survey for the Great River Road along the Mississippi River reported many sites but only along a narrow corridor. Special projects that are the exception to this rule include the Kickapoo Valley, with nearly complete survey coverage prior to proposed flooding by a dam (not completed), and Fort McCoy, a United States Army installation on which a multiyear project to completely survey the base resulted in a wide range of site types in a variety of landscape settings (Figure 1).

Some areas are completely unrepresented by CRM, notably first- and second-order stream valleys and hillsides or floodplains, except when examined as part of bridge projects. Collectors reported sites within a wider range of habitats within these smaller valleys. Regional archaeology surveys and dissertations also covered large contiguous geographic areas, providing information both on site location and absence. Both types of information are essential when creating a landscape utilization model of the region.

Site documentation is also biased by initial reporting (Table 2). Sites with a Paleoindian or Early Archaic component were more commonly first documented by independent researchers, reflecting an interest in finding these earliest sites. Later sites with less "sexy" finds are more commonly reported as a result of CRM projects. Woodland and Oneota sites may be overrepresented in the CRM category versus in the collector category because private collectors have tended to focus on projectile points rather than ceramics. Many of the later-period sites are artifact-poor small encampments that would likely not have been identified except during systematic survey and shovel testing. Sites with only an unknown prehistoric component (small lithic scatters predominantly) are most commonly reported by CRM projects, though independent collectors also identified quite a few.

### *Case Study Conclusions*

Avocational archaeologists, researchers, and compliance archaeologists together have created a much more complete view of the past than any one group alone would have provided. Though CRM identified many sites, there is a systematic bias against some landscape settings that is countervailed by the work of local interested individuals who report sites. Working together, with the professional organizations facilitating appropriate site documentation, leads to a greatly improved archaeological record.

Further, working with the collectors has greatly increased their knowledge and awareness of the value of documenting context for finds and appropriate survey strategies, with a strong emphasis against digging. Even when collectors will not work directly with archaeologists, they often work with other collectors, and ethical collecting practices can be communicated to an even wider audience. Once assured that we will not take their artifacts, only the information and photos, most collectors have been eager to collaborate.

TABLE 2

REPORTED SITES WITH DIFFERENT CULTURAL COMPONENTS, SORTED BY NATURE OF THE FIRST INVESTIGATOR.*

| | First Investigator | Number of Sites | % of That Category |
|---|---|---|---|
| PaleoIndian Component | Antiquarians | 2 | 1.0 |
| | Cultural Resource Management | 63 | 31.5 |
| | Independents* | 111 | 55.5 |
| | Regional Archaeology | 11 | 5.5 |
| | Research | 13 | 6.5 |
| | Total | 200 | 100 |
| Archaic Component | Antiquarians | 15 | 2.7 |
| | Charles E. Brown | 5 | 0.9 |
| | Cultural Resource Management* | 256 | 45.6 |
| | Independents* | 205 | 36.5 |
| | Regional Archaeology | 37 | 6.6 |
| | Research | 44 | 7.8 |
| | Total | 562 | 100 |
| Woodland Component | Antiquarians | 203 | 17.4 |
| | Charles E. Brown | 29 | 2.5 |
| | Cultural Resource Management* | 515 | 44.1 |
| | Independents | 255 | 21.9 |
| | Regional Archaeology | 75 | 6.4 |
| | Research | 90 | 7.7 |
| | Total | 1,167 | 100 |
| Oneota Component | ANT | 17 | 6.2 |
| | Charles E. Brown | 2 | 0.7 |
| | Cultural Resource Management* | 128 | 46.7 |
| | Independents | 58 | 21.2 |
| | Regional Archaeology | 46 | 16.8 |
| | Research | 23 | 8.4 |
| | Total | 274 | 100 |
| Unknown Prehistoric | ANT | 35 | 1.6 |
| | Charles E. Brown | 29 | 1.3 |
| | Cultural Resource Management* | 1,223 | 54.8 |
| | Independents | 558 | 25.0 |
| | Regional Archaeology | 184 | 8.2 |
| | Research | 202 | 9.1 |
| | Total | 2,231 | 100 |

*Indicates major reporter for each component.

## Documenting Collections in East-Central Illinois: The Robert Reber Collection

*(Madeleine G. Evans, Brad H. Koldehoff, and Thomas J. Loebel)*

Researchers in Illinois have gathered data from private collections for decades. At one time, these efforts were largely driven by research agendas or proximity to an ongoing compliance project. But, as time and again we observed meaningful patterns in population movement, land use, or technology distribution by examining data from private collections (e.g., Evans and Fortier 2013; Koldehoff and Loebel 2009; Koldehoff and Walthall 2004, 2009), ISAS and IDOT staff moved to intensify, systematize, and standardize our recording of private collections in the early 2000s. Ultimately, we established the Harvesting the Past initiative (https://www.isas.illinois.edu/UserFiles/Servers/Server_260627/File/pdfs/harvesting_the_past.pdf), engaging county AG extension offices to publicize our project and attract local collaborators. Goals deriving from the Citizen Science movement (Smith 2014)—making partners of community members in our efforts to assemble data by seeking contributions and input from private individuals for the examination of large-scale trends—underlie this project. Challenges that lie ahead revolve around data compilation and accessibility as we build a centralized database for the use of both professionals and the public. These goals are shared by other contributors to this volume (see McElrath et al., this volume; Shott, this volume; Wendt, this volume).

Finding collections and collectors and vetting their integrity can be a difficult task. It is a rare opportunity when we find and can develop a strong working relationship with a "citizen scientist." And it is even rarer when they donate their collections. We appreciate the opportunity to record any carefully documented family or personally found collection and respect the owners' personal property rights, but we feel this point is critical—collections not donated to institutions with good curation programs are likely to be dispersed (see Koldehoff 2013:2–4). The future of donated collections, on the other hand, is secured. The material will be available for study in perpetuity, so as we develop new techniques for analysis or gain insight into the nature of particular classes of artifacts, they can be accessed whenever the need arises by any cooperating professional or institution. Private collections, including two donated by John Henry and Jerry Ransom of Danville, Illinois, have played a critical role in ISAS compliance projects, filling the gaps in survey coverage left by inaccessible property (Calentine et al. 2009; Koldehoff 2005).

Ideally, our work with collectors is a collaborative effort: The goal is information, not objects, and the information flows in both directions. After what is often decades of visiting and revisiting the same sites, a collector's detailed familiarity with the landscape is a valuable resource, and he or she often brings to the table insights based on personal areas of expertise. As an example, Dr. Robert Reber, a retired biochemical nutritionist and editor of *The Illinois Steward* magazine, amassed a considerable collection of personal finds, including over 7,000 items, over more than 60 years living in and studying the headwater landscape of his family's farm in southern Ford County, Illinois. His in-depth understanding of the enhanced biological energy production afforded by the environmental conditions of headwater marshes provided a powerful lens through which to view his collection (Reber

2017:20; Rocha and Goulden 2009) as detailed below. Reber not only gave us the opportunity to record his artifact collection, most of which is assigned to one of 72 sites, but he also detailed on a case-by-case basis which sites had midden deposits, where he had observed plowed-out pit features, which sites were scattered with abundant FCR, and which sites included large quantities of flaking debris. There is no doubt that he is the authority on Ford County archaeology. His memory is the archive, and he has been a one-man repository. Fortunately, he was meticulous about recording provenience and he wants to share his findings; we have worked closely with Bob to record his observations and inventory his site collections. Many of his ideas, revolving around landscape and settlement fire sensitivity as well as transportation routes, relate to site distribution and will be well served by the inclusion of his collection in a large-scale database.

Reber's collection provides an excellent case supporting Shott's (2017) recent assertion that considering material recovered by private collectors is essential when using projectile-point samples to mark and measure time and perhaps cultures within the time-space systematics of a given area. Four thousand eight hundred diagnostic projectile points and type-specific knives and preforms were among the material we recorded from the Reber collection. In the event that professional investigations are undertaken in the area, a typical single-visit CRM survey would not gather a similar sample. In virtually all cases, the site summaries Reber provided greatly exceed the level of information typically obtained from archaeological survey. His work sheds light on a part of Illinois prehistory that has failed to catch the attention of professional archaeologists and where little CRM-driven work has taken place. Before ISAS researchers recorded this collection in 2008, only 31 Ford County sites had been recorded in the Illinois Inventory of Archaeological and Paleontological Sites. Reber's efforts identified 43 sites, more than doubling the number known in Ford County.

At the heart of Reber's collection area is an expansive kettle depression near the divide between the Illinois and Wabash watersheds. The feature was mapped as a lake covering nearly 2,000 acres by General Land Office surveyors in the 1830s (General Land Office 1823a, 1823b). Reber recorded 18 sites on low rises inside the basin that yielded a consistent suite of projectile points, numbering as many as 600 from a single site. Most of these sites also produced ground-stone axes, adzes, and/or celts and in many cases gorgets, bannerstones, or pipe fragments, all signs of relatively intensive or stable occupations. The presence of Clovis points on a few of the sites indicates that the lake had formed and that the rises were periodically exposed as early as 11,000 BC. With the exception of a few small wetland patches that remain today in spite of the large-scale drainage that began in the 1860s (Wiley et al. 1987), this kettle and the surrounding area are entirely used for agricultural purposes, with decades of tillage having affected archaeological deposits.

The size of the Reber collection allows for a reasonably confident assessment of land-use trends along the Vermillion River and its headwaters. When the number of projectile points assigned to each of 21 styles or style clusters is standardized according to the number of years in the time span generally attributed to the production of those particular projectile points (see Reber et al. 2017), the area appears to have been occupied throughout prehistory, beginning in the Paleoindian

period. This model has been used previously to examine trends associated with surface collections in the uplands adjacent to the American Bottom (Koldehoff 2013; McElrath et al. 2009). Three dramatic spikes in the point frequency curve suggest considerable increases in the intensity with which this landscape was used by populations who produced Kirk cluster points, Riverton points, and Adena points (Figure 3).

The area that Reber collected is fortuitously close to Chatsworth Bog, a kettle that produced pollen and other climate proxy data used to reconstruct the historical sequence of climate shifts and vegetative assemblages in the local area (King 1981; Nelson et al. 2006). According to this record, the first Kirk-associated intensity peak occurred in the course of a general warming and drying trend, after oak-hickory forest had become dominant but before an initial, relatively brief, pulse of prairie expansion into Illinois from around 7200 BC to around 5700 BC (Nelson et al. 2006). Significantly, wetland resources in the area would have been altered as well, with the likely incision of streams and a drop in the level of postglacial lakes. This may have led to the establishment of marsh resources around the edges of the kettle depression (see Poiani and Johnson 1993), possibly making this location extremely attractive to human populations between 8500 BC and 7600 BC. The second dramatic increase in standardized point frequency occurred more than 6,000 years later and is related to the area's use by Late Archaic people who made small projectile points of the Merom, Trimble, and related Riverton styles. Local pollen records show that prairie vegetation had been dominant in the area for more than 2,000 years but also indicate amelioration in the local aridity index and somewhat cooler conditions after a peak that lasted from around 3000 BC to 2000 BC. This is essentially the end of the hypsithermal interval in the Midwest,

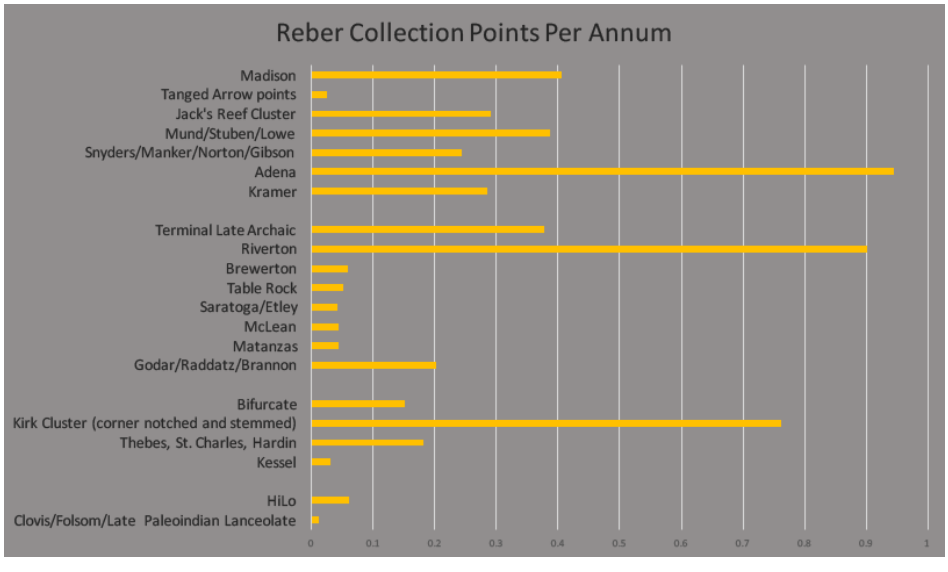


FIGURE 3. Frequency of projectile points in the Reber collection standardized by the accepted length of production period.

and it is reasonable to expect changes in settlement along the Vermillion River and in the headwater marsh with the associated increase in rainfall and higher water levels. By the time the third, Early to Middle Woodland intensity peak occurred, climatic conditions had cooled to approximate those of modern times. The marsh or lake level was likely similar to that encountered by General Land Office surveyors (United States General Land Office 1823a, 1823b), suggesting that only during warm, dry seasons would the elevated landforms inside the lake boundaries have been exposed.

This model, using standardized projectile-point frequency as an indicator of land use intensity, is obviously sensitive to evidence of hunting and changes in hunting patterns in the area (see Figure 3). However, it is not equipped to detect differences in site function. This is relevant to the unremarkable representation of Godar-Raddatz and Brannon style projectile points, while other lines of evidence hint at the possibility of increased stability in the area's use by associated populations. The fact that these projectile points were produced over an unusually long span of time, perhaps more than 2,500 years, undoubtedly also affected the visibility of land use during this period according to this model. The Reber collection included several dozen large grooved axes and a handful of bannerstones and bannerstone fragments. Of the point types that are well represented in our sample, these artifacts are most likely associated with the Godar and Raddatz points. They also suggest a certain level of occupation stability (Boydston 1989). With the evidence that we have, the precise temporal placement of these occupations is elusive, but they were during the height of the hypsithermal around the time that full and permanent prairie expansion into this area took place. The lake or marsh would have been at a low level, but most other wetlands in the area may have been dry at this point. The recovery of dozens of axes here in the heart of the Illinois prairie speaks to the timing of these occupations (prior to prairie expansion) or to the likelihood of a vegetative mosaic with woodland patches and groves. Intriguingly, there was an abrupt increase in charcoal inclusions in the Chatsworth bog cores corresponding to the 500–1,000 year period prior to the prairie expansion, and this could potentially relate to human activities in the area.

Overall, the examination of this area in isolation is fairly compelling, but the meaning of observable shifts in land use will be better understood relative to the record of nearby areas with both similar and divergent landscape features and resources. This is one reason that the inclusion of Reber's collection in a broader systematically assembled database is important. The simple reporting of these sites will go a long way toward protecting them from being developed without prior investigation, and documenting his site-by-site collections provides an unparalleled view of what has been lost to the plow and to random, undocumented surface collecting in other areas. It is Reber's personal observations on midden deposits, pits, and FCR accumulations that offer the best indication of where there is potential to add significantly to our understanding of the prehistory of the area. If we had not undertaken this collaboration with Bob, we would have missed an opportunity to peer through a window into an unrecorded and vibrant part of the state's archaeological record. We are currently working with Bob to publish the results of our collaborative efforts.

## Conclusion

The case studies presented here, performed at very different scales, offer one very strong, common conclusion. Each demonstrates that recording private collections brings to light resources that otherwise have been out of reach via standard CRM practices. As Arzigian and Dowiasch's findings indicate, a reliance on information from private individuals regarding site locations is evident from the earliest days of keeping state site files. Although a schism exists in some regions between professional archaeologists and collectors or avocational archaeologists (Emerson et al. 2017; and see Lovis, this volume; Seeman and Fulk, this volume), issues of prioritization and funding, along with organization and long-term information access have proven to be strong limiting factors as well. A great deal of the information potential of private collections has been stripped by removing artifacts from their original context. The urgency of CRM-driven fieldwork does not affect private collections, and so perpetually postponing the documentation of a seemingly stable collection is perhaps to be expected. Their status, though, is not as stable as we often assume it to be. With the passing of collections between generations, they are often dispersed, and their utility for alerting professional archaeologists and regulatory agencies to the location of important resources is compromised or destroyed. The issues that have brought the authors of this volume together to address and, in some cases, advocate the value of professional/avocational collaboration are complicated and diverse, but there seems to be good reason to treat well-documented collections as a cultural resource, with inherent management needs.

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Jean Dowiasch is a research archaeologist and education coordinator with the Mississippi Valley Archaeology Center at the University of Wisconsin–La Crosse. Ms. Dowiasch specializes in public education, sharing information on Midwest archaeology with students in all grade levels, from pre-K–12, and adults. She has worked with avocational archaeologists in recording their sites in western Wisconsin for over 20 years.

Madeleine Evans has been a lithic analyst for ISAS and its predecessors since the 1990s. She has published on lithic assemblages from large settlements dating to the Late Archaic, Late Woodland, Upper Mississippian, Mississippian, and protohistoric periods, as well as smaller sites spanning the ancient occupations of Illinois. She has also been active in working with the public to document private collections across the state.

Brad H. Koldehoff is the Illinois Department of Transportation chief archaeologist and cultural resources unit chief, and he is a research associate at the Illinois State Archaeological Survey and at the Illinois State Museum. Koldehoff has written numerous technical reports about Mississippi Valley archaeological sites, including Cahokia, as well as journal articles and book chapters.

Thomas J. Loebel (PhD) is the senior cultural resource coordinator for the Illinois State Archaeological Survey. His research specialties include lithic analysis, microwear, and geophysics. He has published extensively on the Late Pleistocene and Early Holocene archaeology of the midcontinent and has worked with the collector community for over two decades to advocate for cooperation and the preservation of the archaeological record.

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# Illinois Archaeologists' Legacy of Learning from Collectors

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The field of natural history, with which archaeology in the United States developed, was initially advanced by self-taught individuals who shared a passion for exploring the world and studying and collecting natural and cultural objects and an eagerness to share their findings with the public. In the Midwest, numerous academic societies, and eventually public museums, promoted the knowledge of native history by collecting "objects" that romanticized that past as part of the natural world. With the emergence of professional archaeology, avid practitioners who were not deemed professionals were slowly sidelined. However, as we demonstrate, collectors and avocational archaeologists not only played an essential role in promoting archaeology to the public but also provided important scientific information to the professional community. Their support was also critical in emplacing the laws that provide public funds to advance our knowledge, preserve the past, and educate the greater populace about our findings. The Illinois State Archaeological Survey embraces the need for professional/avocational interaction and has undertaken a number of public outreach efforts in order to promote

that interaction—a primary goal being to record the large surface-collected artifact assemblages from the Prairie State before they become forever lost.

**Keywords** History of artifact collecting; Antiquities Act; Illinois Highway Archaeology; Professional/avocational interaction

Over the decades, a seemingly irreversible divide has arisen between collectors and professional archaeologists. This unfortunate situation is rooted in events, circumstances, and decisions that shaped our discipline starting in the early part of the last century. In many ways, it mirrors rifts that developed in recent years, especially between academics, museum staff, and cultural resource management (CRM) archaeologists. In these cases, the tensions pertain directly to competition for limited resources, contested research goals, and a too often unstated debate over who should control the production of knowledge and who should be the intended consumers on whose behalf publicly funded archaeology in the United States is conducted. In this paper, we briefly (1) explore the development of "collecting" objects and their ownership; (2) address the historical importance of collector/professional partnerships in the rise of academic societies and public institutions, with special reference to Illinois and the Midwest; (3) examine how this shaped the public sentiment for the development of preservation laws; and (4) identify how the Illinois State Archaeological Survey (ISAS) has endeavored to honor our discipline's legacy of learning from things by "bridging the gap" with the artifact-collecting community to document the rapidly disappearing legacy collections that constitute a critical aspect of the material record of Illinois's past.

## From Private Curio Cabinets to Public Museums: "[F]or the increase and diffusion of knowledge"

The idea of collecting and displaying objects was deeply ingrained among the eighteenth- and nineteenth-century scientific community. A tradition of exploring natural history and non-Western cultures through the collection of "objects" went hand in hand with European acquisition of colonial empires. This period also firmly established the Eurocentric perspective that placed the study of all non-European societies into the natural sciences (thus ensuring the placement of archaeological collections in natural history museums). Dozens of learned societies were established, attracting primarily self-trained natural scientists, often employing new scientific innovations and instruments, who gathered specimens for numerous private museums, often called "Cabinets of Curiosity" and the like (Alexander 1987:337).

In Europe, the museums were invariably sponsored by elites, that is, royalty, governments, scientific societies, or religious institutions like the Catholic Church, and were not generally available to the public, except through special invitation or on a fee basis. The British Museum, which opened in 1759, in large part due to donated

private collections, was the first true public museum free to the populace (Alexander 1987). The European tradition of "members only" museums was paralleled in eighteenth-century America but was largely reenvisioned and reshaped by uniquely American political and cultural forces in the nineteenth century (Orosz 2010).

By the early nineteenth century the American political movement that historians commonly refer to as "Jacksonian Democracy" encouraged scientific academies to broaden their outreach efforts beyond the elite and wealthy and to educate the broader citizenry (Orosz 2010). These philosophical underpinnings influenced developing natural history museums. For example, the Smithsonian Institution became the "attic of the nation," not a scientific center that celebrated technical science or the popularizing of the Industrial Revolution as had been envisioned (Orosz 2010).

Government interest in natural-science research was established early when Congress designated the Smithsonian Institution as the official repository for the first government-sponsored scientific expedition, the United States Exploring Expedition (1838–42; Adler 2011). This survey eventually amassed a collection of over 60,000 natural and cultural specimens. Interestingly, based on a recent review of acquisition records, it has been established that the majority of the cultural artifacts brought back were actually collected by the expedition's naval officers and ordinary seamen (Isaac and Isaac 2016).

The development of the relationship between scientists and the military commander of the expedition set the tone for much of the government-sponsored work that followed. The naturalists attempted to establish a proprietary interest over the collected specimens, often because they had preexisting connections and allegiances to various private museums, not to mention formal and informal specimen exchange agreements with multiple individuals and institutions (Adler 2011). The conflicts that ensued over ownership and control of the collections (a conflict that continues to resonate) eventually resulted in the decision to publicly exhibit many specimens at the newly built United States Patent Office Museum (construction begun 1836), which was one of the few federal buildings at the time (i.e., 1842) with adequate display space. In 1858, after years of wrangling, the materials were transferred to the Smithsonian Institution (opened 1856), thus establishing the public "ownership" of these collections (Adler 2011).

In the Midwest, there were over a dozen academic societies established by the 1850s (Hendrickson 1973), each with its essential natural-history object collections. Those influential in Illinois included the Chicago Academy of Sciences (1856), the Illinois Natural History Society (1858), the Western Academy of Sciences of St. Louis (1836), the Academy of Sciences of St. Louis (1856), and later, the Davenport Academy of Science (1867). The members of all of these societies communicated with like-minded academies in Cincinnati, Milwaukee, Flint, Cleveland, and Grand Rapids (Hendrickson 1961, 1973). As Hendrickson (1973:333) points out, the "fact that the academies were located at or near areas where new rocks, fossils, plants and Indian artifacts waited to be collected and identified, determined the natural history emphasis of the academies and their members." Thus, scientific collecting became firmly embedded in the Midwest at the onset of American settlement and expansion.

## 1906 Antiquities Act—Ethos Becomes Law: "[W]ith a view to increasing the knowledge of such objects"

As American control expanded across the continent, it was accompanied by large-scale destruction of native monuments, often to collect "Indian relics" for commercial sale. Public alarm at the rampant looting of archaeological ruins on federally controlled lands in the Southwest prompted the U.S. Congress to pass the Antiquities Act, signed into law by Theodore Roosevelt in 1906 (Harmon et al. 2006). This act became the foundational text for the many laws, acts, amendments, and policies that successively shaped the modern framework for current historic preservation and CRM work (see historic basis of the final 1906 act in Lee 2006). The wording of the Antiquities Act was brief, as legal phrasing often was at the turn of the century, but the specific words chosen were laden with meaning that would have incontrovertibly conveyed much more to the scientific community at the turn of the twentieth century than modern archaeologists may fully appreciate.

Besides noting the importance of archaeological "ruins," the act's emphasis on the "gathering of objects of antiquities" (Section 3; 16 U.S.C. 432) explicitly acknowledged the value of objects that were the focus of scientific and avocational collectors during the preceding century; one only has to refer to the many founding documents of the various scientific societies devoted to natural history to see the importance that learned members placed on collecting and classifying objects of the natural and cultural world. For example, the constitution of the newly established Illinois Natural History Society (formed at the urging of Cyrus Thomas of southern Illinois prior to his interest in archaeology), stipulated that a "General Agent"—who was to be elected annually—"shall visit different portions of this and other States: make collections of specimens, attend to exchanges with various societies, establish a system of co-operation and labor to incite a general interest in the study of Natural History" (Wilbur 1859:639).

Among the first papers to be published in the transactions of the newly formed Illinois Natural History Society, was Blodgett's (1861) "Object Lessons," which extolled a new or "reformed method" of education that recognized the inherent educational value of "objects." Blodgett argued that the mere physical presence and the ability to handle such objects themselves would serve to instruct, stimulate, and enlighten the minds of young students. The teaching of natural history, à la objects, was deemed essential to a proper scientific understanding and considered relevant to the moral instruction of students in how the universe was designed by the Creator (Blodgett 1861).

In Illinois, the study of natural history was set on a fairly secure footing in the latter part of the nineteenth century. Important in this process was the founding of the Natural History Museum in the "Old Main" building on the State Normal University in Bloomington, Illinois, in 1858 (Figure 1), just two years after that of the Smithsonian Institution. Under the direction of Charles D. Wilbur, and with the help of learned volunteers, the museum amassed a collection of over sixty thousand specimens within two years' time (Hendrickson 1961:255).

In 1871, the legislature passed a law mandating the teaching of natural history in all public schools (Hendrickson 1973:265). As a direct result, a master plan was

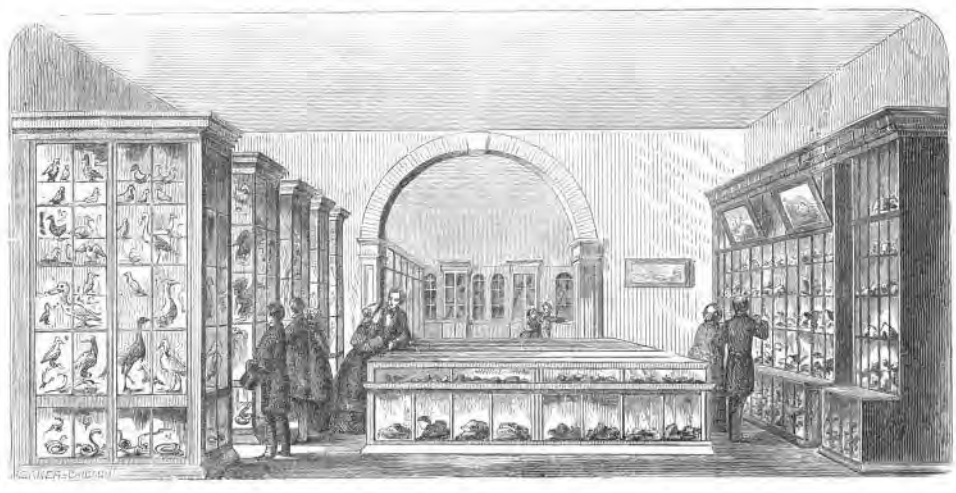

**Figure 1.** Natural History Museum, Bloomington, Illinois (1858). An engraving showing the interior of the Illinois Museum of Geology and Natural History located at the State Normal University. Published in the *Transactions of the Illinois State Agricultural Society,* 1861 (Vol. 4).

developed by influential natural scientists involving the collecting and exchange of natural specimens between high schools scattered throughout the state. Although only about 30 high schools had the resources to enter into such an arrangement, these were charged with collecting duplicate natural (and likely cultural) specimens from their immediate region to be exchanged with schools from other regions, efforts that were to be coordinated by the Illinois Natural History Museum (Hendrickson 1973).

Two subsequent events that spurred the interest of citizens of Illinois as well as the nation in objects of native life near the turn of the century were the Columbian Exposition at Chicago in 1893, which featured displays of archaeological artifacts from throughout North America, and the Louisiana Purchase World's Fair at St. Louis in 1904, at which indigenous peoples engaging in day-to-day activities that showcased their material culture were prominently featured; these included several tribes from North America as well as many from around the world. These so-called ethnographic expositions (or more aptly [and repugnantly] human zoos) can be seen as an unfortunate but "logical" outcome of a Western vision of non-Western cultures as part of the natural world and distinct from civilized humanized societies.

## Archaeology and the University of Illinois at Urbana

Two individuals associated with the Chicago exposition would be instrumental in shaping the course of natural-history studies at the University of Illinois (UI): Stephen Alfred Forbes (in charge of zoology exhibits) and Warren K. Moorehead

(in charge of archaeology exhibits from Ohio). Forbes who had been active in the Illinois Natural History Society at Bloomington eventually oversaw transfer of this society to the University of Illinois, when he was hired in 1888 (Forbes 1907; Howard 1931; Pease 1930).

In the mid-1870s, UI established the Museum of Natural History, which included extensive collections of native artifacts. A strong involvement in archaeological activities by the museum took place under the leadership of Frank Collins Baker from 1918 to 1939. Baker carried out the analysis of mollusk remains from the extensive mound excavations conducted by Moorehead's 1927–1928 "Illinois Valley Mounds Survey" (Farnsworth 2004). These large collections were subsequently dispersed to UI's newly formed Department of Anthropology in the 1960s and, in 2001, to UI's Spurlock Museum of World Cultures and, over the last decade, to ISAS.

Moorehead was the first archaeologist at UI. Like many of his generation, his formal training was limited, having been largely self-taught, partly by his association with prominent individuals and museums. In Illinois, he is famous for his work at Cahokia and Middle Woodland sites in the lower Illinois River valley (Farnsworth 2004; Moorehead 1923, 1929; Taylor 1929). Typical of their time, Moorehead's goals were to collect artifacts through survey and excavation, to determine the cultural context of materials acquired, and importantly, to make these artifacts accessible to the populace through publication and public display. Like virtually all scientists before him, Moorehead actively traded "duplicates" with other museums and even sold artifacts to subsidize his investigations. This would earn him scorn in later years by professional archaeologists but was largely in keeping with the scientific norms of his day.

The distinction between avocational and professional archaeologist seems to have developed at the turn of the twentieth century. In fact, the term "professional" archaeologist may have been coined by Moorehead himself (Christenson 2011) in *Prehistoric Implements* (Moorehead 1900). According to Moorehead, the book was aimed at the "student and beginner" and the "professional archaeologists of the museums will understand that this book is not for them" (Moorehead 1900:iii). He went on to suggest that there "are 27 men who may be considered scientific archaeologists. There are 23 others connected in various capacities with the museums" (Moorehead 1900:iii). Moorehead further argued that there were 5,450 people in the United States and Canada "more or less" interested in archaeology, and of these "89 per cent make collections for their own amusement" (Moorehead 1900:1).

The distinction between professional and collector seems not to have been based on formally educated versus self-taught status but, rather, turned on whether the individual held a formal position at an institution versus collected merely in an avocational sense. It is apparent that Moorehead did not include himself among the ranks of professional archaeologists when his book was published, presumably because he was unemployed at the time. From the 1930s onward, as more archaeologists were formally trained, the credential for a professional status became a formal university degree (Christenson 2011, 2013).

Moorehead left UI by 1930, having made a lasting impression on collectors in Illinois. He was a prominent member of the Illinois State Archaeological Society (henceforth the "Society," not to be confused with our own ISAS), founded in 1936

(Latchford 1986). When Moorehead died a few years later, Douglas Byers honored his treatment of collectors, suggesting that Moorehead had, in his words, resented the "aloofness" of academic archaeologists, noting that they continued to invent jargon that was "unintelligible to the general reader" (Byers 1939:299).

A. R. Kelly, a Harvard-trained physical anthropologist, was the first formally trained archaeologist to be hired by UI in the Department of Sociology. He continued UI research at Cahokia but was forced to leave UI in 1933 (Muller 2002). Following the departure of Moorehead and Kelly, John B. Ruyle (a Champaign dentist) and Cary C. Burford (an Urbana banker) kept the fires of archaeological interest burning in central Illinois. Although the two had no direct position with UI (Burford was a UI alumnus and Ruyle eventually enrolled in courses taught by McGregor), they played important roles in furthering the cause of Illinois archaeology. Ruyle excavated local sites with the Champaign County Archaeological Society and promoted the creation of a state archaeological society (Latchford 1986). He and his friend Byron Knoblock created the Society in 1936, which actively lobbied in support of the Illinois State Museum (Burford 1948) and is still active today.

The Society also initiated and provided the first systematic publications on Illinois archaeology. Its journal, begun in 1937, was the primary conduit for the dissemination of both avocational and professional archaeologists' articles. In its early years its pages were the place to go for information on the research efforts of the nascent University of Chicago archaeology program. Burford served as the editor for the journal throughout the 1940s; the Society had an ambitious schedule of four meetings a year along with four issues of the journal. The membership was made up of both professionals and collectors and included all the prominent individuals involved in archaeological research or collecting in the state, along with public luminaries such as Governor Dwight H. Green. Although professional archaeologists today largely underappreciate the Society's role in the development of archaeological research, much of the development of public interest in archaeological matters is owed to this organization. The quarterly journal published by the Society provides the only record of yearly activities of prominent archaeologists in the critical WWII period and its aftermath (1940s–1970s).

For example, most of the biographical information available concerning the founder of the Illinois Archaeological Survey (IAS), John McGregor, is located in the pages of this journal. This includes a short but informative biographical sketch on the occasion of McGregor's appointment to UI for the purpose of developing a department of anthropology (Burford 1946, 1948). Clearly, the Society's was the "journal of record" for archaeology in Illinois prior to the creation of the IAS in 1956; this latter organization, which is constitutionally limited to professional archaeologists, did not create its own archaeological journal (*Illinois Archaeology)* until 1989.

The beginnings and importance of the IAS, the state professional organization, in the development of archaeology in Illinois has been previously chronicled (Emerson 2006; Muller 2002). It was the brainchild of McGregor in direct response to the Federal Aid Highway Act of 1956. McGregor achieved with this organization what he had largely failed to do earlier by cooperating with Society members to create a statewide archaeological database (McGregor 1948). The Federal Aid

Highway Act provided a mechanism for funding archaeological surveys for proposed highway construction. The creation of a statewide site database proved crucial to the development of robust CRM programs in Illinois.

## The University of Illinois and Collector Engagement in the Era of CRM

Many senior staff at ISAS can trace their beginnings in Illinois archaeology to the FAI-270 Project (Bareis and Porter 1984; Emerson et al. 2006; Emerson and Walthall 2007; McElrath 2016). This was the first large CRM project to be initiated in the state of Illinois that fell directly under the series of preservation laws that culminated in the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469-469c-1). FAI-270 began in 1975 and it and the many highway-related projects that followed set the groundwork and standards for much of the CRM work of recent decades (Emerson 1993, 2010; Emerson et al. 2006; McElrath 2016; Muller 2002). In truth, little effort was made to solicit the help of collectors during initial survey, subsequent excavation, or even during final write up for the many sites affected by this massive highway undertaking. This is remarkable given the fact that there were a number of well-known collections from this archaeologically rich corner of the state.

In several instances, landowners did show us the collections that they had acquired, and a few regional collectors made contact with project personnel, but no systematic effort was expended to record or document artifacts collected by others from the affected corridor. Why the project leaders did not encourage such efforts is unclear, and we can identify no discussion of this issue in the many published documents that both preceded and followed this closely monitored project (cf. Bareis and Porter 1984). It may simply be attributable to the overwhelming emphasis placed by project directors on the importance of project completion. They may have viewed the pursuit of relevant collections as a time-consuming task and, in the long run, irrelevant to the interpretation of well-contextualized subsurface archaeological remains. The artifacts on the surface were simply viewed as cultural indicators of what to expect in terms of more abundant and, hopefully, better-represented subsurface cultural deposits. We do know that John Henry, a well-known and published collector from eastern Illinois, inquired in the 1960s about pursuing graduate studies at UI, only to be told by Bareis that he would have to not only abandon artifact collecting but also rid himself of his collection (John Henry, personal communication 2003).

Systematic efforts to engage with the collector community resumed at ISAS in the 1990s, to some extent as a practical response to changing agricultural practices. For years, archaeological surveyors operating in rural Illinois could rely on the availability of large tracts of land planted in row crops, with adequate ground visibility during much of the year. By 1990, however, many farmers had shifted to no-till planting of new crops in the previous season's stubble. This practice, combined with the use of more efficient pesticides, herbicides, and fertilizers, which allowed a continuous cover of crops that had been previously planted in rows, and the enrollment of land in emerging federal subsidy programs that encouraged the planting of

cover crops to be left fallow for several years, inhibited traditional reconnaissance techniques. Because the time allowed for CRM archaeological survey is typically short, these new practices encouraged surveyors to contact collectors who had been active in the area. One of the first large surveys that incorporated collections made by landowners and collectors was for the proposed South Suburban Airport near Peotone (Harris 1997). Less than half of this 17,000-acre footprint was accessible to pedestrian survey during the period allowed for Phase I investigations. Fortunately, we were able to use collections made by others over the years to supplement our understanding of native landscape use. Today, we make a concerted effort to contact local collectors and record their collections for all projects involving large-scale land impacts such as road corridors or airport projects.

Importantly, such activities are performed in conjunction with IDOT's Cultural Resources Unit. Both partners understand the value of broad data collection that ultimately enhances CRM. Recording of collections has provided a more complete understanding of native landscape use and has expedited field surveys, allowing us to incorporate information from site locations that do not necessarily yield subsurface cultural deposits or that would not have been a focus of investigation based on our previous experiences.

Our experience in documenting legacy collections has provided insight into issues that archaeologists sometimes use to disparage the value of avocational collections—that is, the context and the integrity of the assemblages. Some believe that collections have little value without site-level provenience, but depending on the scale of the research questions employed, that is not necessarily true. By carefully documenting collecting practices, we have been able to establish to our satisfaction the integrity of collections (i.e., identify those individuals who did not purchase or trade artifacts). Even collections that only have county-level provenience can provide valuable data on point distribution. For example, using American Bottom excavation data, along with a statewide examination of well-documented private collections, Evans and Fortier (2013) traced the distinctive and uneven spatial distribution of Jack's Reef points across the state, which they correlate with the introduction of bow-and-arrow technology to Illinois. This innovative study would not have been possible without the assistance of the collector community.

One of the more pivotal events in working with collectors occurred when Robert Reber solicited our help in developing a short popular chapter on the archaeology of Illinois in a curriculum guide for the Master Naturalist Program at UI. This master naturalist program, sponsored by the College of Agricultural and Consumer Economics, is a major land-grant university outreach effort aimed at reaching interested citizens of Illinois to acquaint them with critical aspects of Illinois natural history. The program is administered through various UI Extension offices and reaches between 600 and 800 individuals throughout the state every year.

Little did we know that this would be the beginning of several cooperative efforts involving various ISAS staff members and the talents of Reber and graphic designer and illustrator Lynn Hawkinson Smith of the Natural History Survey. Because Reber was also at that time the editor of the *The Illinois Steward*, a popular natural history magazine that had become informally known as the "National Geographic of Illinois," he quickly seized on the opportunity of having a dozen senior archaeologists

within his grasp from whom to solicit articles on Illinois archaeology. An article by Brad Koldehoff on Paleoindian occupation of Illinois (Koldehoff 2008) was quickly followed by articles on prehistoric use of the prairies (McElrath and Simon 2009a) and ones on Early (McElrath and Simon 2009b), Middle, and Late Archaic (McElrath et. al. 2010) and Early Woodland (Emerson and Fortier 2010) cultures. Our goal was to cover the entire period of Illinois history through the French occupation; however, upon Reber's retirement, the *The Illinois Steward* ceased publication before this could be accomplished.

Meanwhile, during this process the Survey's director, Thomas Emerson, encouraged the development of a poster on the various projectile-point types of Illinois, aimed at the collecting public. This effort culminated in our well-known poster, *Projectile Points of Illinois* (Reber 2011). To date, a complete run of 1,500 copies has been sold or distributed gratis; it has been distributed at artifact shows, through our regional field offices, and provided to all 77 county UI Extension offices for display and to many K–12 classrooms. This poster was the inspiration for the popular Illinois point guide, *Projectile Points and the Illinois Landscape: People, Time, and Place*, which was published in 2017 (Reber et al. 2017). This book, which relied heavily on the cooperation of private individuals to supply examples of different point types from across the state, sold out the first printing of 500 copies in a matter of weeks, while the second printing should be exhausted by the end of 2018. These efforts, and a major outreach initiative entitled "Harvesting the Past" promoted through UI Extension Services, have substantially increased our visibility among collectors and resulted in the donation of numerous collections and the recording of many more.

## Conclusion

The gathering of information in the hands of avocationals has visibly demonstrated that legacy artifact collections, carefully harvested and curated by collectors in past eras, are disappearing as this last generation of collectors passes on. As we know from our field experiences, 200 years of artifact collecting has seriously diminished the surface yield of artifacts. As contributors to this volume have argued (e.g., Evans et al., this volume), it is critical we make a concerted effort to record this disappearing information and educate new generations of collectors about the impacts, both positive and negative, that their actions can have. Given the poor record of completion of reports for the many sites excavated under salvage conditions in the years leading up to development of CRM programs, it is not surprising that modern CRM programs pat themselves on the back when significant reports are finally made available to the academic community. Scholarly publication is an important responsibility of CRM practice. But, we must not delude ourselves into thinking that we have thereby completed our mission. While presentation of papers at regional and national conferences and publication of timely reports and articles is professionally important for those involved in CRM archaeology, it does not satisfy either the letter or spirit of the law (e.g., Jameson 2000; McGimsey and

Davis 1977; McManamon 1994). The tradition behind the wording of the laws recognizes the importance of archaeological sites and the gathering of objects as significant for the increase in knowledge *on behalf of the public*.

## Acknowledgments

We would like to thank Michael Shott, Kevin Nolan, and Mark Seeman for the invitation to contribute to this timely volume highlighting the practical basis for engaging with the collecting community; such interaction can only serve to advance the goals of both professionals and avocationals. As always, we are indebted to the Illinois Department of Transportation for over 60 years of support for successive UI programs of highway archaeology. In particular, John Walthall, IDOT chief archaeologist (1978–2010), and more recently Brad Koldehoff (2009–present) have both ensured that IDOT's efforts on behalf of CRM are shared with the professional community as well as the public. We gratefully acknowledge the support of our many colleagues at ISAS and recognize it is because of their dedicated volunteer work with collectors that the present article is possible. The contents of this report reflect the views of the authors, who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or the policies of the Illinois Department of Transportation.

## Notes on Contributors

Dale McElrath (MA) is a retired associate director of the Illinois State Archaeological Survey, having served as statewide coordinator for 30 years. He has specialized in lithic studies and has published extensively on Archaic and Woodland cultures of Illinois. He is concerned with ensuring that the Illinois public benefits from and shares in the knowledge that has been gained through archaeological research over the past decades. He has developed a strong interest in the history of the discipline of archaeology, especially as it unfolded in Illinois.

Thomas E. Emerson (PhD) is Illinois State archaeologist and director of the Illinois State Archaeological Survey and former chief archaeologist of the Illinois Historic Preservation Agency. He has produced 18 books or edited volumes and over 125 book chapters and articles on midcontinental archaeology. His most recent research has focused on isotope evidence for population movement, ritual Black Drink consumption, and diet; the geological sourcing of pipestones; and explorations of ethnogenesis, religion, and warfare in the American midcontinent.

Madeleine Evans has been a lithic analyst for ISAS and its predecessors since the 1990s. She has published widely on lithic assemblages from large settlements dating to the Late Archaic, Late Woodland, Upper Mississippian, Mississippian, and protohistoric periods, as well as smaller sites spanning the ancient occupations of Illinois. She has also been active in working with the public to document private collections across the state.

Steven L. Boles is a research archaeologist with the Illinois State Archaeological Survey. His research interests include lithic studies, rock art, and iconography. He also works extensively with the public and collecting community throughout the Midwest in an effort to record sites and surface collections.

Thomas J. Loebel (PhD) is the senior cultural resource coordinator for the Illinois State Archaeological Survey. His research specialties include lithic analysis, microwear, and geophysics. He has published extensively on the Late Pleistocene and Early Holocene archaeology of the midcontinent and has worked with the collector community for over two decades to advocate for cooperation and for the preservation of the archaeological record.

David Nolan (MA) is the coordinator of the Western Illinois Field Station of the Illinois State Archaeological Survey. His research focus is centered on the upper Mississippi River valley region, where he has worked for the past 35 years. He is most interested in lithic technology and settlement patterning, although he truly enjoys sharing insights about the past with the public and local collectors. His authorship credits include hundreds of technical reports, numerous journal articles and book chapters, and several co-edited volumes.

Robert J. Reber (PhD) currently holds emeritus status in the Department of Food Science and Human Nutrition, University of Illinois at Urbana–Champaign, where he served as a faculty member for 42 years. For over 60 years, he found and cataloged artifacts from over 70 previously unrecorded sites in east-central Illinois. He is the lead author of the book *Projectile Points and the Illinois Landscape: People, Time, and Place,* published by the Illinois State Archaeological Survey in 2017.

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# Windows to Ohio's Past: Building Relationships among Professional Archaeologists and Avocational Artifact Collectors

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This paper examines the situational boundaries between Ohio professional and avocational archaeologists against the backdrop of the competing priorities of each community. Here, our attention is directed toward historical development, identity construction, ethical principles, and building an inclusive archaeology at both the organizational and individual scales of interaction. The Nobles Pond Archaeological Project, a long-term, joint professional/avocational collaboration, serves as a case study.

## Introduction

The purpose of our chapter is to explore that gray area that both unites and separates the professional from the avocational archaeologist and/or artifact collector, particularly as it pertains to Ohio and the Ohio Valley area.[1] At present, this is a relationship characterized by a certain amount of unease where there could be mutual respect, support, and satisfaction. We focus our attention on four general topics: historical roots, identity construction and motivation, ethical principles, and building an inclusive archaeology. In doing so, we attempt to make the case that the professional archaeologist and the private collector have much to learn from each other and that active partnerships can both advance archaeological science and make the collecting of artifacts more interesting and worthwhile. Here we also will make specific reference to the Nobles Pond Archaeological Project, a long-term and productive collaboration among professionals and amateurs/collectors in

northeastern Ohio and in which over 4,000 people participated. It should be noted that one of the authors is a professional archaeologist (Seeman), who has relied on the help of private artifact collectors since the 1970s (e.g., Coughlin and Seeman 1997; Seeman 1975, 2005) while the other is a collector (Fulk) who still has the first artifact he found at age 9 over six decades ago in rural Ashland County, Ohio.

Probably the first question we need to ask ourselves in beginning this discussion is, What sort of relationship, if any, do professionals and private collectors want to have with each other? More specifically, do we view each other as allies and fellow travelers in our interest in the past, do we see each other as competitors for a resource that should be rightfully ours to control, or do we see each other basically as something or someone to be exploited for our own purposes? Your authors put themselves firmly in the first category; both of us are fascinated by the ancient past of the Ohio area where we now live and we want to understand it better. Further, we have many friends and colleagues who share our interests within both communities, and we want to have more.

Given our commitment to inclusiveness, we remain uncomfortable with certain aspects of the Society of American Archaeology's current *Principles of Ethics* and particularly with principle 3, which indicates that professionals should discourage all activities that promote the commercialization of archaeological materials and, specifically, those connected to the keeping of private collections for personal enjoyment (Society for American Archaeology 2018). As one of our avocational colleagues recently stated with his tongue firmly in cheek, "You mean the SAA says we can only surface-hunt if we don't enjoy it?" Our point is that regardless of how some professionals may try to build nuance into principle 3 (e.g., Pitblado 2014:395), most avocationals see this as an unfriendly statement and, to borrow from the current political climate, more of a border wall than a bridge. Even if the concern here is focused narrowly on a loss of scientific information, we must recognize that a critical juncture occurs when a collector dies and the collection passes to an uninterested descendant or spouse. Professional neglect or antagonism does not provide an easy path to an institutional donation and makes the trip to the auction house an easy one.

It is not unheard of to ignore an unpopular rule or even a law, especially if the penalty for violation is tolerable. As far as we know, no one has been expelled from the Society for American Archaeology for violating ethics principle 3. Yet the notion that a code of ethics is a statement of acceptable professional practice makes it difficult to ignore. If professionals want to see themselves as beyond reproach, then shouldn't they strive to uphold all aspects of their code of ethics equally? Or perhaps a more realistic question is, How do they balance their ethical commitments to research, public education, stewardship, outreach, and training with this condemnation of commercialization? There is no simple answer. Surface collectors know most of the archaeological sites, have most of the diagnostic artifacts, know most of the landowners, and have boots on the ground. Professionals have a better understanding of how to unlock the secrets of these materials and the ancient cultures they represent but are often "outsiders" or seen as aloof (sometimes expertise comes across as arrogance). Why should collectors give over their hard-earned site locations to the first professional who asks for them? Why should profession-

als work with amateurs' collections, recognizing that any professional recognition may enhance the commercial value of artifacts currently in private hands? Regarding the latter, the simple line drawings of fluted points in Prufer's (Prufer and Baby 1963) Ohio survey unquestionably have enhanced the monetary value of these points in today's market. In order to examine and contextualize these questions and others, we need to consider how things got to be this way, appreciate each other's culture, and work toward a better tomorrow.

## Historical Roots and Organizational Development

In examining the professional/avocational relationships of today and thinking about those of the future, it is important to acknowledge a root system stretching back to the dilettanti and antiquarians before the development of nineteenth-century evolutionary thinking (Daniel 1981:15–48). Here the focus was on bringing back the object and not the context, although the early collections that resulted—sometimes as the trophies of imperialism—clearly told the owners whom they were and, sometimes, whom they were not (Robinson 2003:23). The first private collection in Ohio of which we are aware was that of Dr. S. P. Hildreth of Marietta (Atwater 1820). The growth of public museums was based on these private collections or "cabinets" (e.g., Barnhart 1998:132, 138; Chase et al. 1996; Kastner 2003:148), and museums still do accept, and sometimes buy, private archaeological collections if it serves their mission. With the late nineteenth century and a professional archaeology newly established in its museum settings, a parting of the ways with amateur antiquarians began. At least some of this seems based on a competition for things and also, to some degree, on claims of legitimacy and expertise. For example, at the first public meeting of the Ohio Archaeological and Historical Society—now the Ohio History Connection (OHC)—on March 12, 1885, Roeliff Brinkerhoff (Mills 1900:330) stated,

> We have permitted the earthworks, mounds and graves to be despoiled by the whole world. The ornaments, utensils and implements are of such value that Ohio is the spoil of all nations and many of the best relics have already been carried away. There are better collections of ancient relics of Ohio in London and Paris than in the State.

In addition to competing goals with private collectors, professionals associated with institutions, such as the Smithsonian Institution and the Peabody Museum, competed among themselves for Ohio's past, thus generating an even more complex late nineteenth-century turf war (Barnhart 1998; Burns 2008).

In the twentieth century, professional archaeology continued to expand in museum and subsequently academic settings and most recently into the relatively new domain of cultural resource management (CRM) archaeology. Keeping pace, especially with the growth of college and university professional programs, predominately amateur societies sprang up to serve collector interests. For example, both the Michigan Archaeological Society and Missouri Archaeological Society

developed in the 1930s. The Archaeological Society of Ohio (ASO) was founded in 1941. It should be noted that "archaeological" as a self-identifier is clearly designated in the names of these organizations, and in fact, every publication of the ASO includes the statement that "the Archaeological Society of Ohio is organized to discover and conserve archaeological sites and materials within the State of Ohio."

The ASO has accomplished much. Individual chapters routinely have set up artifact displays for the Ohio History Connection, as well as for schools, public libraries, local museums, and park districts. Chapters have donated thousands of dollars to assist professionals with radiocarbon-dating expenses and special projects, such as a $25,000 shelter at Flint Ridge State Park in Licking County, Ohio. They have helped the Boy Scouts of America with their archaeology merit badge program. Additionally, the ASO has brought in well-known speakers, sponsored interactive seminars, and published descriptions of findings in *Ohio Archaeologist* magazine and stand-alone books (e.g., Converse 1979, 1994, 2003).

Ohio also has an organization of professional archaeologists, the Ohio Archaeological Council (OAC). In fact, virtually every midwestern state now has an organization of professional archaeologists similar to Ohio's OAC as a companion to an amateur/collector organization similar to the ASO. One challenge then is to examine the implications of this bifurcated organizational structure, which in Ohio at the present time has created a somewhat unsettled relationship. Sociologists tell us that the number-one purpose of any organization is to survive. This is accomplished in a variety of ways. First, it must gather to it monies greater than it expends in costs. Second, it must provide its membership with a sense of identity and advantage, sometimes by contrast with those of alternative organizations or institutions (ben Asher 2015). Thus, the OAC was formed in 1975 as a professional-interest group concerned with setting standards for CRM archaeology in Ohio, but as federal policies became clearer with practice, the organizational focus shifted toward presenting research findings, educating the public, and fostering advocacy. The organization lives on with new purposes. The OAC now has approximately 100 members, while the amateurs in the ASO have over 2,500. This is an especially interesting statistic when it is remembered that only about 10% of the collectors nationwide even belong to a formal society (Cooper 2017:75). This sort of membership disparity has to have affected, at least to a degree, the dynamics that exist between organizations.

One of our challenges in building productive relationships between professionals and amateurs is to understand our organizational histories. At least as important, however, is to better understand our different organizational cultures as they pertain to norms, values, objectives, and leadership-membership relations. Some of these cultural constructs are stated clearly in organizational bylaws or codes of conduct, but many are not. Perhaps most fundamental is the need to recognize that diverse views need not be characterized as right or wrong and that both sides can "win" in a successful dialogue. For example, professionals sometimes want to privilege their type of archaeological collecting—of material remains and contextual information for institutional curation—as it has evolved from its early beginnings, over that of the nonprofessional. They see their type of commodification and value—into articles, jobs, agency contracts, museum displays, curated collections

and records—of what were actually just the material things of people long ago as "right" and carrying a very different set of meanings over those ascribed by collectors. Yet a moment's reflection tells us that the power of the expert is fleeting, and it is only acknowledged by the truly powerful if the message is deemed useful or, alternatively, nonthreatening. In sum, sometimes in dealing with nonprofessional organizations, those who are lucky enough to make a living as professional archaeologists can confuse their hard-earned knowledge—and perhaps self-interest—with notions of legitimacy and morality in considering who can and should control the material things and their contexts on which they base their interpretations. Archaeology is a narrative activity and we all must from time to time reevaluate the means and utility of this process with an eye toward inclusion, not exclusion.

Today in Ohio, we still see lingering resentment among avocational archaeologists/collectors toward professionals and particularly toward the OHC and its former curator of archaeology Raymond S. Baby (1917–1982). Baby is still remembered for not returning "borrowed" artifacts and not properly acknowledging discoveries and/or cooperation. Additional fuel can be found in Olaf Prufer's (1975:xix) statement regarding amateurs that "Ohio has always been renowned in folklore and fact for the abuses of its amateurs (significant exceptions)" who are "deplorable" and cause "carnage," and further, that "[a]t this time it can only be said that most of the nonprofessionals and their organization, the Archaeological Society of Ohio, have a long way to go before they can lay claim to acceptance by their professional brethren." It should be noted that Prufer himself depended on the help of such amateurs as Alva McGraw and "Sarg" Smith early in his career and, of course, for his groundbreaking Ohio fluted point survey (Prufer and Baby 1963:1). This antagonism has been carried forward and is well exemplified by a 2017 comment by a professional who stated that she did not even want an amateur ASO member to attend a meeting of Ohio's OAC professional organization unless the amateur-visitor would provide a full endorsement of the code of ethics of the latter organization. On the other side, the ASO, often via editorials in their publication, has called out professionals for hypocrisy, incompetence, and a lack of commitment and has stated that the OAC goals are antithetical to ASO goals (Converse 1996a:23, 1996b:42, 1998:3, 1999:51–52). In Ohio archaeology, particularly in the juxtaposition of the OAC and ASO, the complaint has been that, to quote Robert Frost, "Two roads diverged in a yellow wood, / And sorry [we] could not travel both . . ."—or can we?

## Collectors Collect

If we are to build positive relationships in midwestern archaeology, then professionals need to give up on curing or condemning collectors for their passion. One out of three Americans collects something, and the desire can begin with the amassing of as few as two things of a kind (Gao, Huang, and Simonson 2014:144). The base causes of this need have attracted the attention of social scientists and psychiatrists from Freud to Jung to Muensterberger (1995; see also Dilworth 2003; Formanek 1991; McIntosh and Schmeichel 2004; Pierce 1992). On a more surficial level and

for many avocationals, certain artifacts may connote the gifts of friends or family, memories of earlier times, particular places, and/or the "democratization" of value that comes from finding previously undiscovered things. For example, Eli Lilly, a wealthy Indiana pharmaceutical magnet and the founding father of the Department of Anthropology at Indiana University, could afford to purchase many artifacts for his personal collection, but a local schoolboy with an investment of time and shoe leather could amass his own. Collectors collect. Professional archaeologists rightly lament the potential loss of provenience information when a legacy collection is split up or changes hands for the third or fourth time, but artifact collecting itself is complex and deeply rooted in the midwestern psyche.

Certainly, both individuals and institutions collect many things from the past besides archaeological materials, including antique furniture, books, ancient maps, and fossils. Fossils are in fact an interesting parallel, especially given the recent Paleontological Resources Preservation Act of 2009 and subsequent federal agency rules that control anything other than "casual" invertebrate fossil hunting on federal lands (National Park Service 2016). Although many amateur paleontologists resent the change in laws that keeps them from fossil collecting on federal lands, they continue to cooperate with professionals (Gunther 2016). On private property, the professional Paleontological Society recognizes the legality of the collecting and selling of fossils and that these objects are for the scientific and educational use of *both* professionals and amateurs. Further, the society recognizes that fossils uncollected are fossils subject to degradation and loss due to natural processes and that it is certainly far better to have them collected by amateurs than to lose them to science (Paleontological Society 2017). To quote the current secretary of the Paleontological Society (M. Yacobucci, personal communication 2017):

> As a general statement, the Paleo Society does not think that collecting by "private individuals" is wrong, as long as the fossils are collected legally. In fact, we are trying to increase our outreach efforts to amateur/avocational paleontologists, many of whom are great advocates for the field of paleontology and partner with professional paleontologists to do good science.

Certainly, in the case of both fossils and artifacts, there is a significant, legal market for rare or complete specimens. To use a midwestern example, the "Smithsonian Bird," a porphyry birdstone acquired by attorney Earl Townsend of Indianapolis in 1953 from the collection of the Smithsonian Institution, was resold recently to an Iowa collector for $800,000. To those professional archaeologists who would say they are interested only with the consequences of collecting a nonrenewable cultural resource and potentially damaging its context, we would say there can be no real resolution of differences without a clear understanding of motivation and all that it entails (see Sawaged 1999:81).

Collecting is not looting. Although in many areas of the world artifact collecting and looting are tied together, this is not, or should not, be so in the midwestern United States. We feel it is necessary to make this point because many professional archaeologists working in other countries, some of whom do influence the policy statements of the Society for American Archaeology and other organizations, tend

to conflate the two. From a midwestern perspective, this is unfortunate but understandable. Looting refers to the unsystematic, illicit obtaining of artifacts from archaeological sites for profit (Proulx 2013:111). In the United States, the Archaeological Resources Protection Act of 1979 (ARPA) and the Native American Graves Protection and Repatriation Act of 1990 (NAGPR) provide both deterrents and punishments for looting on federal lands and, also, interstate trafficking of illegally obtained artifacts. Internationally, looting largely fuels a massive international trade in illicit antiquities; collectors of archaeological "art" from Mexico, Peru, Egypt, and other places around the world very often buy, sometimes unknowingly, artifacts that have been looted and/or stripped from their cultural contexts. In contrast, most of the pre-European artifacts bought and sold in the Midwest marketplace by hobbyists are not the result of looting as defined above. Many result from surface collecting on private property and many actually were collected long ago and have circulated for many years (e.g., Barnhart 1998:147–149; Peet 1894). Both professional and avocational archaeologists condemn looting (Labelle 2003:116). Both also acknowledge that it exists, though perhaps not on a scale as in the past (e.g., Harrington 1996; Munson et al. 1995).

## Personalizing Archaeological Relations and the Archaeology of Listening

If archaeological professionals and avocationals are to build something more meaningful over the course of the next generation, then it is important to appreciate each other's contributions and concerns. We need to develop an "archaeology of listening" (Kehoe and Schmidt 2017) between a given professional and a given avocational. While recognizing that organizational-level networking can be effective in fostering structural relationships, it is often at the level of one collector and one professional that many productive relationships are built. Annually, the SAA bestows the Crabtree Award to the one avocational *in all of the Americas* who is judged to have made an outstanding contribution to archaeology. At the more local, personalized level, however, we recognize that hundreds of nonprofessionals make daily and diverse contributions to our field.

Ohio artifact collectors come from every imaginable background. Mayors, park rangers, migrant workers, medical doctors, Amish farmers, judges, welders, schoolchildren, state highway patrolmen, active military personnel, electrical engineers, schoolteachers, and even professional archaeologists have artifact collections and continue to add to them (see Lovis, this volume). They keep and curate their artifacts in a diverse range of formats and use varying cataloging techniques. Some mark each artifact with a series of symbols representing a specific find spot. Others mark their items with a more general geographical area such as a farm, township, river system, county, or state. Still others attempt to rely on their memory only. Catalogs often accompany assemblages, along with photographic records or sketches and detailed site maps. Collected artifacts are kept in wooden display cases, Riker mounts, shoe boxes, and five-gallon buckets or lie loose in cabinets or

atop kitchen windowsills. They may be arranged by site, by artifact type, by raw material, in an artistic design, or simply by date of acquisition. Some collectors maintain their own personally found artifacts only. Others solely purchase items. Many Ohio collections combine both methods.

There is no single path to enlightenment; archaeological hobbyists in Ohio learn about their collections from a diversity of sources and think about them in a variety of ways. Some belong to large organizations of like-minded individuals such as the ASO or the Genuine Indian Relic Society (2,000 members). Some belong to smaller organizations in Ohio, such as Rick Carles's Blanchard River Club at Findlay, Wendy Schumacher's West Lafayette Archaeology Club in Coshocton County, the Central Ohio Valley Archaeological Society in Cincinnati, or the Firelands Archaeological Research Center in Amherst, where they take advantage of publications, speakers, and more experienced fellow members to enhance their knowledge. Some have taken school and college courses in archaeology and anthropology. Still others try to learn from Internet articles and Facebook groups (Artifact Addicts has over 50,000 members). Some collectors have worked on excavations under the direction of professional archaeologists and regularly read professional publications. Some have only a minimal knowledge about the items they have, but many, perhaps most, attempt to accumulate as much information as possible on their artifacts and use multiple sources. This would include data on location, site characteristics, raw material type, functionality, cataloging practices, associations with other artifacts, understanding both similarities and variations with other artifacts in the same artifact or typological category, and generally some notion of monetary value. In sum, individual collectors as people represent a diversity of approaches to their passion and most are truly knowledgeable regarding the artifacts that have passed through their hands, and only some of it overlaps with that of the typical professional. The SAA's notion of "commodity" in our judgment does not begin to capture the meaning of an artifact for many individual private collectors.

Land-use practices represent a particular domain of the individual collector. Such individuals know what sort of long-term histories and usages pertain to a given archaeological site. Here we would include information on when the site first went into cultivation (if ever), what drainage features may have been added to the area, how long ago a section was cleared of timber, what the site was like before developers built homes or other buildings, the intensity and pattern of collecting over time, and of course, who owns the land. Particular individuals may have materials that predate the construction of homes or businesses on a given property or know other collectors who do. He or she may have materials that predate coal strip-mining or sand and gravel operations or the addition of a pond or a lake that have altered the surface of the land. He or she may even be able to pinpoint where concentrations of artifacts, fire-cracked rock, or other features were found within a specific site based on surface indications.

A collector knows the land in his/her "territory" and the landowners who have given permission to surface collect on their property. Often these latter connections are highly personalized and based on long term-friendships or family relationships. It is not uncommon in Ohio for a property owner to call a collector and tell him/her that a favorite field has just been plowed or cultivated and/or washed by rain.

Correspondingly, these same landowners may actively keep away outsiders, including professionals. In short, here is an archaeology that is accessible only by building a personal connection and, correspondingly, one that is based on empathy and understanding—that is, real human communication.

In building relationships, it should be clearly understood that Ohio's various artifact collectors are not interested in all aspects of professional archaeology, just as most professionals are not interested in all aspects of assembling and appreciating a private collection. For example, one avocational recently told one of us (Seeman) that he wished we would concentrate more on excavation and *real* archaeology rather than things like remote sensing and geophysics. Additionally, our impression is that many theoretical flights into the realm of agency theory, praxis, habitus, or the materialization of social memory fall wide of the mark for most of Ohio's avocationals. We know, however, that many collectors are vitally interested in findings that directly relate to the interpretation of their collections. Examples here might include Redmond and Scanlan's (2009) demonstration at Burrell Orchard that most finely made lanceolate points in Ohio are not late Paleoindian or "Aqua-Plano" based on new radiometric dating and context but, rather, Late Archaic in age; Emerson and colleagues' (2013) demonstration via spectroscopy that many of the Ohio Hopewell pipes are not made of Ohio pipestone but, rather, Sterling pipestone from western Illinois; and Hill and colleagues' (2017) analysis showing that Ohio Hopewell copper was coming from not only the Lake Superior source but also the southern Appalachians. To move beyond anecdotal examples, however, we would need to test the waters in a more formal way regarding what various collectors are thinking. Such information could be a cornerstone of many productive relationships and collaborations.

Individual relationships are built not only on maximizing hopes but also on minimizing fears. Regarding the latter, our experiences suggest that Ohio collectors fear basically three things in dealing with a given professional: (1) that the professional archaeologist really wants to stamp out private collecting if at all possible; (2) that the professional archaeologist is not really committed to the long-term protection of archaeological materials; and (3) that collector contributions will not be properly appreciated. The first of these is bound up with perceptions—or misperceptions—regarding NAGPRA, ARPA, and competition for resources. This is sometimes framed as if Big Government is taking over, limiting where avocationals can collect and putting their personal collections in danger of appropriation. There is also the notion that NAGPRA and ARPA laws are somehow inappropriately written and not really the will of the people. Amateurs focus on the fact that public museum collections have been depleted due to NAGPRA claims by native peoples for repatriation, and to quote Converse (1996b:42), "Because of NAGPRA, no one is seriously considering donating collections to museums or universities."

The deaccessioning of museum collections is often cited as another reason to be skeptical of the professional archaeologist and his or her motives. And despite strong guidelines on the part of the American Alliance of Museums regarding deaccessioning, we know that it happens. The deaccessioning of archaeological materials is not a widespread practice today, but it only takes a few clear-cut cases to fuel accusations of impropriety and provide justification to those who would argue that

archaeological materials are safer and better loved in private hands. Similarly, some have argued that because of poor curation practices and poor security, valuable artifacts in public institutions are prone to thievery. We can point to the theft of Hopewell platform pipes from the Ohio History Connection, of many of the Early Archaic diagnostics from the St. Albans excavation from the Blennerhassett Museum in Parkersburg, West Virginia, and perhaps most tragically, the Moundville Repository theft of Mississippian decorated pottery in Alabama. Certainly, security and curation are institutional concerns that all museums struggle with, sometimes unsuccessfully.

Paradoxically, despite the argument by avocationals that museum collections are not secure, there is also the criticism that "public" collections are not properly accessible to them. The notion is that sometimes only a very limited range of materials is on display and that lying behind closed doors are materials of educational value that they would like to be able to compare with their own collections and, further, that these materials go unused and unseen for years or possibly are only for the eyes of selected professionals. In short, they feel unwanted and excluded.

Finally, a collector appreciates recognition. A professional is often dependent on site location and assemblage information (e.g., LaBelle 2003; Pitblado 2014), but what can an amateur expect in return? Sometimes simply taking someone out to lunch is enough. Spending extra time to discuss matters of interest not necessarily related to a formal line of inquiry; making suggestions regarding particular publications, people, or other resources that may further a collector's interests; providing copies of photographs and notes taken on collections; or written acknowledgments at the end of an article (together with a copy of the finished article) are equally appreciated. Cheryl Munson (personal communication 2017) gives every Indiana collector she works with a copy of Kellar's (1993) booklet on Indiana archaeology as well as a two-page guide on how to organize and record a private collection. Regardless of the specifics, sometimes an exchange of "gifts" makes both parties feel better. In sum, at the level of individual interaction is situated that elusive quality called trust, and trust between a given professional and a given amateur is built not only on mutual interest but also on mutual respect. Things may not always go as expected, but mutual respect goes a long way toward evening out any peaks and valleys. We turn now to a specific example of long-term cooperation between a professional and a number of avocationals in a single project to explore some "peaks and valleys" in a specific setting.

## Nobles Pond: A Case Study

Mutual interest and respect between professional and amateur can be built in a variety of ways. Here we point to the successes of the Nobles Pond Paleoindian Project as a context for long-term collaboration with a number of lessons learned. Nobles Pond (33ST357) is an extensive early Paleoindian occupation consisting of 14 distinct debris concentrations (Seeman 2005). The Nobles Pond Paleoindian Project was (and is) co-led by the senior author and the original discoverer of the site, avocational archaeologist Garry L. Summers. The project has been ongoing

since 1988 when it became clear that the site was threatened by a housing development, subsequently named the "Estates at Nobles Pond." It has been facilitated by the ability to set up a permanent, but small, lab at the Stark Campus of Kent State University about 2 miles from the site and about 25 miles from the main campus in Kent, Ohio, where the professional archaeologist (Seeman) lives and works. Committed volunteers who participated in the fieldwork could follow up in the Stark lab that was close to their own homes in the Stark County area. Codirector Seeman made the 25-mile drive to Canton once a week, but volunteers could log in at the lab and work on washing, cataloging, and coding materials as time and schedules permitted under the supervision of one of our volunteer coordinators. With 53,000 artifacts and their provenience saved from the bulldozer, over a dozen articles on Nobles Pond, and two grants from the National Science Foundation and one from the Timken Foundation, the project directors count the project as a continuing success—except for the small fact that the site itself has now been replaced by million-dollar homes. What then, are the major lessons learned as they bear on professional and avocational collaboration?

First and from a professional standpoint, working with amateurs is not like working with students, and in fact, although some students worked on the Nobles Pond project, they contributed relatively little. College students are a transitory population with their own motives. Most were interested in getting some field experience or lab training or perhaps even something they could just put on their résumés. Transportation was also an issue, and students struggled to fit in time at a lab 25 miles away, especially when much of our work was at night and after volunteers were off their real jobs. In general, students were less independent, less interested, and much younger than the core group of volunteers. As the project developed, the senior author quickly found himself with divided loyalties and a dichotomized work effort: students in Kent, amateurs in Canton. This dichotomy also has some implications for the practical archaeologist who wants to make a living and advance his or her career. Administratively and at Kent State, work with volunteers was regarded largely as "community service" and not as pure research in faculty meetings and in evaluations for tenure, promotion, or merit monies. Looping back to a consideration of journals such as the *Ohio Archaeologist*, a modern professional has to consider if he or she actually can afford to publish there since, as a predominately amateur journal, it counts very little toward promotion and tenure. In sum, working with amateurs can carry strong connotations for perception management and self-promotion, and these must be recognized and weighed accordingly.

Another issue that comes to the fore regarding collaborating with amateurs is management and management style. From a professional standpoint, you need the involvement of nonprofessional volunteers to further the project goals but that leadership involves tolerance, negotiation, and compromise, not simply orders. They can always walk away if they want to. In one case 1 x 1 m units were excavated that the project directors pretty well knew had no potential but that a particular amateur who already had made great contributions to the project wanted to dig. He found virtually nothing but stayed with the project another 10 years. Another fact is that once trained amateurs can work independently and

feel empowered to do so. This generally results in good outcomes but sometimes in less-than-good outcomes. In the latter circumstance, analyses sometimes had to be redone, or in the worst case scenario, particular lines of inquiry abandoned. Nobles Pond is a very large database and working with it would pose problems for any investigator.

For any long-term project fueled by avocationals, there is the problem of keeping up morale. The approach taken was to set a series of short-term goals or milestones, some of which involved publishing results based on materials analyzed to date. If the group had waited to work on articles until everything was cataloged, entered into the database, and analyzed, it probably would be almost ready for the first publication in 2019. As is, the group worked with the South Field block first because it was ready, but by focusing short-term efforts here, it put the project further back in terms of reaching our long-term goals for the entire site. Many volunteers at Nobles Pond were familiar with the Paleoindian literature, had their own libraries of Paleoindian books and monographs, and had their own ideas regarding what was important and how to investigate it. They were engaged at every level and wanted their ideas on the table. They valued their experience on the project as a way of increasing their knowledge. They valued the camaraderie and wanted acknowledgment, especially in terms of the joint authorship of articles and professional conference papers resulting from their work. They took satisfaction from the fact that "Nobles Pond" was known in the professional community, and they enjoyed interacting and being known by acknowledged Paleoindian experts in the region. In short, those who remained committed to the project over these many years wanted to create an authentic archaeological experience.

And so the question must be asked, what effect did 29 years of involvement with a professional have on the archaeological hobbyists who have put in many hours and, indeed, many years, on the Nobles Pond project? First, it must be noted that some of the project's core people never had a private collection and had no interest in owning one. Their connection to the past was not made through this medium. Second, the impression is that those who surface collected before they were involved with the project do not do it as much as they formerly did, but that some do continue to buy (but not sell) some artifacts at auction. The decreased surface-collection activities of many of these people may be mainly a function of putting that time in on our project, aging bodies, and increased disposable income but not a sea change in perspective through project involvement. Third, one individual actually began to buy fluted points at auction after he became a Nobles Pond regular, something analogous to someone starting to collect as a result of a stimulating museum visit (Sawaged 1999:82). Everyone on the Nobles Pond project supports the fact that the records and materials from the Nobles Pond investigation will be curated publicly at the local McKinley Museum in Canton, Ohio; there is a collectivity here and an understanding that summary efforts and contributions are too important to be in anything other than the public domain. In that regard, it is interesting that in all the volunteer hours of work with the Nobles Pond materials, the project has never suffered the

theft of anything, and many people have handled those 96 fluted points. What this shows is that the ethics of amateurs can be highly context dependent and that such labels as "amateur" or "responsible collector" or "collector" are sometimes highly situational. For a professional, and now with eyes wide open, it was a great experience and continues to be so.

## Conclusions

Archaeology is an important means of accessing the past, and it comes with a variety of stakeholders with different or overlapping objectives. Certainly not all professionals think alike and neither do all amateurs/collectors. Professionals cannot afford to dismiss the potential constituency that organizations such as the ASO represent and need to recognize that the public must value archaeology if it is to prosper. Also, it would be useful to be in a better position to positively affect the lives of young people who may start as ASO amateurs but who could very well become the professionals of their generation as their interests grow beyond those fostered by their grandfathers or the local 4H Club. Professional archaeologists in Ohio need partnerships and partnerships are built on trust, understanding, and an ability to further mutual interests. Some of this requires organizational solutions, but some of it also must be based on the one-to-one relationships that can link a particular amateur to a particular professional. This involves listening. Professional archaeologists are not that far removed in history and intentionality from the amateur hobbyist with a well-documented collection of "personal finds." If given the opportunity, amateurs will come up with ideas that are really insightful, useful, and sometimes amazing. In Ohio in particular and the Midwest in general, professional/amateur relationships must be dealt with openly, honestly, and with an eye on those difficult-to-think-about long-term impacts. Only then, and only by working together, can we truly advance our understanding and stewardship of Ohio's archaeological past.

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## Endnote

1. The distinction between "avocational" archaeologist and "private artifact collector" is a difficult one with significant overlap in Ohio. An avocational archaeologist, strictly speaking, is anyone who works at archaeology without being paid, although in some cases some avocationals have received tax benefits for volunteering service hours on certain projects. We see the terms "avocational" and "amateur" as perfectly synonymous. A private artifact collector, on the other hand, refers to a person who owns artifacts of past human action; for example, stone tools, pottery, or copper beads (see Renfrew and Bahn 2010:322). Two or more artifacts are a collection. If we think about archaeology as the study of the human past using the surviving material remains of human behavior (Fagan 2010:497), then many collectors are also avocational archaeologists in the sense that they view their collections mainly as material touchstones to ancient times rather than simply as things, investments, or commodities per se. Names are always important and can be meaningful cues to relationships, but we admit to possible inconsistencies in the use of *collector* and *avocational* in this essay.

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