Interpreting the 50-Year Rule

How A Simple Phrase Leads to a Complex Problem

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The western United States (U.S.) is a very special landscape. Home to sweeping vistas, extreme temperatures, low basins, and high plateaus, it is host to a varied topography and environment. One thing that ties together these disparate regions is the vast amount of federal public land. In fact, many of the states in the Intermountain West (commonly defined as Nevada, Utah, Idaho, and portions of Arizona, Colorado, Montanan, New Mexico, and Oregon) are characterized by a large percentage of land owned or controlled by federal

entities, reaching as high as 81 percent in Nevada, 67 percent in Utah, and 62 percent in Idaho (Gorte et al. 2012) (Figure 1). As a result, federal laws pertaining to historic preservation have huge impacts in the region and are the primary drivers of archaeological work throughout the West.

While legislation is a major reason for why archaeological work is done, implementing regulations and the collective policies of federal and state agencies direct how it is done. One such policy has come to be known as the "50-year rule." While the fifty-year rule and its interpretation are important to different groups operating under the umbrella term of historic preservation, the

ABSTRACT

For over 40 years, some archaeologists have labored under a distorted interpretation of the 50-year rule in which anything more than 50 years of age becomes "archaeological" and therefore must be recorded and evaluated for eligibility to the National Register of Historic Places. A reexamination of federal law shows that this is a mistaken interpretation. Data from the Intermountain Antiquities Computer System indicates that, if this practice continues, the number of featureless historical sites requiring documentation in the West will greatly increase at a large expense to the public and that most of these costs will be associated with sites not considered significant in American history, architecture, archaeology, engineering, or culture. Solutions are presented that will give archaeologists greater flexibility in recording material culture more than 50 years of age, allowing us to redirect our efforts to resources of greater interest while making the practice of archaeology more defensible to the public. These problems are symptomatic of a larger issue that relates to how cultural remains from the latter part of the twentieth century and beyond will be valued. The discipline of archaeology must begin candid conversations about the relative importance of such recent material culture and its management implications.

Durante más de 40 años, algunos arqueólogos han trabajado bajo una interpretación distorsionada de la regla de los cincuenta años, en la que cualquier cosa que tenga una antigüedad de más de cincuenta años se considera "arqueológica" y por lo tanto debe ser registrada y evaluada para determinar su elegibilidad ante el National Register of Historic Places. Una revisión de la ley federal demuestra como ésta es una interpretación errónea. Los datos de la Intermountain Antiquity Computer System indican que de seguir esta práctica, el número de sitios históricos sin ninguna característica especial que requiere de documentación en el occidente de los Estados Unidos aumentará de manera considerable a expensas del público y que la mayor parte de estos costos estarán asociados a sitios que no son considerados significativos para la historia la arquitectura, la arqueología, la ingeniería o la cultura americana. Las soluciones que se presentan darán a los arqueólogos una mayor flexibilidad en el registro de la cultura material de más de cincuenta años de antigüedad, lo que nos permite redirigir nuestros esfuerzos a los recursos de mayor interés, al mismo tiempo que se justifica la práctica arqueológica ante el público. Estos problemas son sintomáticos de una cuestión mayor que se relaciona con la forma en la que se valorarán los restos culturales de la segunda parte del siglo 20 y los posteriores a éste. La arqueología como disciplina debe iniciar conversaciones francas en torno a la importancia relativa de la cultura material más reciente y las implicaciones para su administración.

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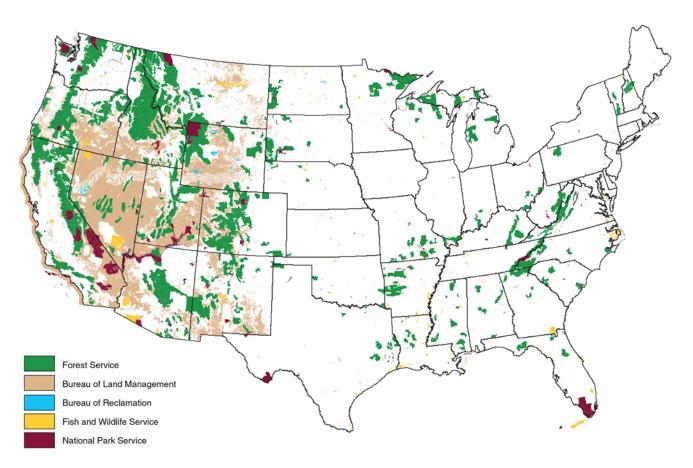


FIGURE 1. Map of federal lands in the contiguous United States managed by the USDA's Forest Service and Department of the Interior (United States Government Accountability Office 2009: Figure 1).

following discussion is focused primarily on archaeological sites and the practice of archaeology.

In many federal and state agencies throughout the Intermountain West, the 50-year rule has come to be interpreted in the following manner: any feature, structure, or collection of material culture over 50 years of age should automatically be considered an archaeological resource that must be officially recorded to be evaluated for its eligibility for listing on the National Register of Historic Places (NRHP or National Register). In practice, this means that many government agencies that are legally tasked with identifying and protecting archaeological properties regularly require professionals performing pedestrian surveys to record and evaluate anything over 50 years of age. While this may have only minor consequences in some parts of the country, in the Western U.S. it results in a huge undertaking due to the hundreds of millions of acres under government agency management.

This has led to a number of very recent archaeological sites being recorded throughout the region. Here I define very recent sites as being between 50 to 75 years of age. Many of these are related to mining, ranching, farming, residential, or recreational activities, but it is the increasing number of small trash scatters that are of particular concern. Such sites are common and are often referred to as can scatters, trash scatters, or single-episode dumps. While seemingly innocuous, these sites are increasingly

becoming a complex issue for land managers due to their large numbers and a common misbelief that those over 50 years of age must be officially recorded to be properly evaluated for eligibility to the National Register. This belief contributes to a considerable expenditure of resources for concentrations of artifacts that are routinely categorized as insignificant (as will be shown below) and is symptomatic of a larger issue that relates to how cultural remains from the latter part of the twentieth century and beyond are valued. To more fully understand the scope of the problem, and its solution, an understanding of the origins of the 50-year rule is necessary.

THE 50-YEAR RULE: A QUICK PRIMER

The 50-year rule is a common convention used in historic preservation across the U.S., but an understanding of the rule and its impacts varies widely throughout the nation and by specialty. Its origin can be traced back to the passage of the Historic Sites Act of 1935 and the creation of the Historic Sites Survey (now known as the National Historic Landmarks Program). The goal of the Historic Sites Survey was to "identify sites and buildings that were nationally significant, that deserved protection, and that might be considered as additions to the National Park System" (Sprinkle 2007:82). Early on, those running the Survey and the

National Park System felt the need to exempt contemporary or very recent properties from consideration for National Historic Site status. Such temporal space not only provided a buffer from nominations that were controversial or political in nature, but also helped ensure that nominations were considered in their proper historical perspective. Different iterations of a 25-year and a 50-year rule were intermittently used previously, but it was in 1948 that the National Council for Historic Sites and Buildings stated that "structures or sites of recent historical importance relating to events or persons within the last fifty years will not, as a rule, be eligible for consideration under the standards" (Sprinkle 2007:84). This was later codified in 1961 with a technical amendment to the Surplus Property Act of 1944 (Sprinkle 2007:90).

This earlier iteration of the 50-year rule, as well as previous standards of historical significance and the concept of site integrity, were adopted in 1969 following review by a nationwide group of historic preservation professionals and federal agencies as part of the National Historic Preservation Act of 1966 (NHPA) (16 U.S.C. 470 et seq.) and its implementing regulations. In the NHPA, Congress described the importance of the nation's "historical and cultural foundations" and emphasized that the "preservation of this irreplaceable heritage is in the public interest" (NHPA Sec. 1[2-4]). More specifically, Section 101 of the NHPA authorized the expansion and maintenance of the National Register of Historic Places: a list of districts, sites, buildings, structures, or objects that are deemed important to the people of the nation and that receive special consideration when threatened with destruction or damage. Resources on the National Register are officially termed "historic properties" and Section 106 of the NHPA instructs federal agencies to consider the effects of their actions on these properties. In 1971, Richard Nixon issued Executive Order 11593, which expanded consideration to resources that were determined to simply be eligible for listing to the National Register, and the NHPA was amended with this provision in 1976. Section 110 of the NHPA tasks federal agencies with the identification, evaluation, and protection of historic properties under their jurisdiction.

To be eligible for the National Register, a property must meet at least one of four "criteria for evaluation" to demonstrate that it has significance in American history, architecture, archaeology, engineering, or culture (Title 36, Chapter I, Part 60 of the Code of Federal Regulations, also known as 36 CFR 60) (United States Department of the Interior, National Park Service [USDI, NPS] 2002a). In addition, it must possess integrity: the ability to convey its significance through a combination of aspects of location, design, setting, materials, workmanship, feeling, and association. While this is what a property *must* demonstrate to be eligible for listing to the register, there are also criteria considerations that may exempt it from consideration *even if* it meets the other requirements. It is one of these criteria considerations (Criterion Consideration G) that has become known as the 50-year rule. The Code of Federal Regulations states:

Criteria considerations. Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and

properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register [36 CFR 60.4; emphasis added].

The National Park Service (the federal agency that administers the National Register) is very clear in stating why Criterion Consideration G is necessary: "Fifty years is a general estimate of the time needed to develop historical perspective and to evaluate significance. This consideration guards against the listing of properties of passing contemporary interest and ensures that the National Register is a list of truly historic places" (United States Department of the Interior, National Park Service [USDI, NPS] 2002a:41).

A PROBLEMATIC INTERPRETATION

This is the very simple explanation and correct interpretation of what many refer to as the 50-year rule. Under normal circumstances, properties that have achieved significance within the past 50 years shall not be considered eligible for listing on the National Register. Despite the simplicity of this single sentence (or perhaps because of it), many cultural resource managers have gradually allowed this criterion consideration to morph into an unanticipated, expensive, and largely unnecessary interpretation that requires the automatic recording of any artifacts or sites over 50 years of age on lands under their jurisdiction. Throughout the rest of the discussion, remember that nowhere in the criteria considerations, legislation, implementing regulations, or guidance by the agency overseeing the NRHP is there any such requirement. On the contrary, the implementing regulations to the NHPA are written in a flexible manner that directs agencies to make a "reasonable and good faith effort" in identifying historic properties (36 CFR 800.4[b][1]). What constitutes a reasonable and good faith effort depends on the magnitude and nature of an agency's undertaking, the degree of federal involvement, and a number of other factors (Advisory Council on Historic Preservation 2011). But one thing it should not be is a mechanized application of rote procedure.

A difficult aspect of addressing this distorted interpretation of the 50-year rule is that, by and large, it is an unwritten policy among some agencies. For example, nowhere in the national Bureau of Land Management (BLM) Cultural Resource Manuals or in the national Forest Service manual—both of which give direction and guidance for managing cultural resources under their respective jurisdictions—is there a requirement or suggestion that identification of historic properties must include the automatic recording of materials over 50 years of age (United States Department of the Interior, Bureau of Land Management [USDI, BLM] 2004; United States Department of Agriculture, Forest Service [USDA, FS] 2008). Although exceptions exist (e.g., Wyoming BLM 2010:4), in most cases this is also true for BLM handbooks, forms, and protocol at the state level (Colorado BLM 2011; Nevada BLM 2012; New Mexico BLM 2005; Utah BLM 2002) (Idaho and Arizona defer to the national manuals). Guidance from State Historic Preservation Officers (SHPO) varies, ranging from no written direction on survey requirements (e.g., Utah) to detailed instructions such as Colorado's 86-page manual stating, in part, that, "Generally, archaeological surveys document all cultural remains over 50 years of age" (COAHP 2007:16).

While most federal and state agencies do not have specific written directions instructing archaeologists to record all materials over 50 years of age, many agency archaeologists have nonetheless embraced this incorrect interpretation of the 50-year rule on their own, or adopted it from a common misconception in the region. Certainly not all archaeologists hold to this interpretation, but, due to the nature of cultural resource management, if it is common enough it can become the de facto procedure. This is because it is difficult for contract archaeologists performing pedestrian surveys to switch between multiple recording standards as they cross invisible geographic lines between different agency domains. Instead, they will often use the more stringent recording practice so as not to have to change survey methodology and reporting standards multiple times during fieldwork and report writing. This is one of the ways in which the distorted interpretation of the 50-year rule can become the norm in some regions.

How this interpretation first arose is likely explained by three main reasons. The first is simple misunderstanding or ignorance. Land managers who are unfamiliar with the NHPA and 36 CFR 60, or have only a basic knowledge of the legislation, may mistakenly assume that, if a historic property must be at least 50 years of age to be considered for listing to the National Register, it follows that anything older must automatically be evaluated for eligibility. Unfortunately, many are unaware that the 50-year rule (and its earlier iteration) was primarily intended for application to historic buildings and sites (Sprinkle 2007, 2014). Its use for archaeological resources, while not always problematic, can lead to interpretations that are not supported by its original intent. The second is a fear by agencies that if they do not follow this interpretation they may be accused of not fulfilling their legal responsibilities under NHPA to identify and protect historic properties, thereby opening themselves to potential litigation. Such legal action can create procedural delays in the compliance process, costing both the agency and a proponent of an undertaking a significant amount of time and money. The third is a well-intentioned belief by some that everything over 50 years of age has the potential to be a meaningful part of our cultural heritage or may contribute important knowledge about the past.

Whatever the reasons behind the current interpretation, the results are the same. Namely, some state and federal agencies in the West now require archaeologists to record and evaluate every abandoned trailer, beer can scatter, county road, ditch, scattering of broken bottles, single-episode dump, etc., that is over the age of 50, regardless of whether it has any chance of being considered significant in American history, architecture, archaeology, engineering, or culture.

Intrinsic to the 50-year rule is the idea of a rolling number, meaning that the 50-year cutoff date is a moving target. Following this line of thinking, what may be considered eligible for the NRHP changes every day, as individual items or sites hit the 50-year mark. This rolling number has many consequences, one of which is that, in some areas, large multi-year compliance projects must record properties that, while not 50 years old when the project begins, may have reached that age before the project is complete (e.g., California DOT 2011:ii and the built environment). Just as significant is the growth in the number and density of very recent historical sites that have started to impact cultural

resource managers, and will only increase as many modern items reach the 50-year mark.

THE GROWTH OF HISTORICAL SITES

As Hardesty (1991:34) states, "the sheer quantity of tin can and glass bottle dumps left by the canning revolution of the late nineteenth and twentieth centuries boggles the mind of most archaeologists with the misfortune to end up with responsibility for managing the cultural resources on vast tracts of public land in the West." Trash scatters even more recent than those mentioned by Hardesty are a rapidly growing issue. The wonderfully dry desert environment of the Intermountain West that will preserve 2,000-year old duck decoys or wagon ruts of pioneers from the 1800s, will also preserve a scattering of cans and plastic cups left on the landscape by hunters in 1964. There they will sit until a survey crew comes along and records them as an archaeological resource and describes them in a report, an agency official examines the documentation and makes an eligibility recommendation, consults with the SHPO about said recommendation, makes a final determination, and then curates the associated records for eternity. As the number of such sites increases, so too do the resources required to deal with them.

The increase of such sites is related to our disposable culture and by population growth. With the widespread and nearly ubiquitous use of mass-produced, machine-made products in the early- to mid-twentieth century, the amount of trash generated by a single individual has greatly increased (Spiegelman and Sheehan 2005), and some of this refuse ends up deposited on the landscape. This is compounded by the huge increase in population across the U.S. in the last century. Utah serves as an example of this growth in the West.

In 1850 (the first year U.S. census data was kept for the state), Utah's non-native population was recorded as a mere 11,380 individuals. By 1960, this had increased to just over 890,000, and in 2010 it surpassed 2,763,000-a 210 percent increase in population from 1960 to 2010 (U.S. Census Bureau 2013a). Population trends in neighboring Colorado are similar, with a 187 percent increase from 1960 to 2010 (U.S. Census Bureau 2013b). These trends are depicted in Figure 2, with the population growth in the last 50 years increasing significantly. While the exact correlation between population growth and the overall number of potential historic properties created is difficult to know with certainty, it is logical to assume that a 210 percent increase in the number of people traversing the countryside, depositing trash and other debris, creating and maintaining infrastructure, extracting natural resources, camping, hunting, etc. will notably increase the number of very recent trash scatters that will require documentation and evaluation under the "record everything over 50 years old" mentality. While some historical trends may have had a dampening effect on the amount of rubbish dumped on the landscape, such as the public trash collection efforts of the twentieth century or the development of sanitary landfills in the 1930s and 1940s (Melosi 2000; Rathje and Murphy 2001:40-45; and references therein), these effects are counterbalanced by extensive population growth. Most trash scatters are on rural land where civic garbage systems have less of an impact, and most recent historical trash scatters are created as a matter of

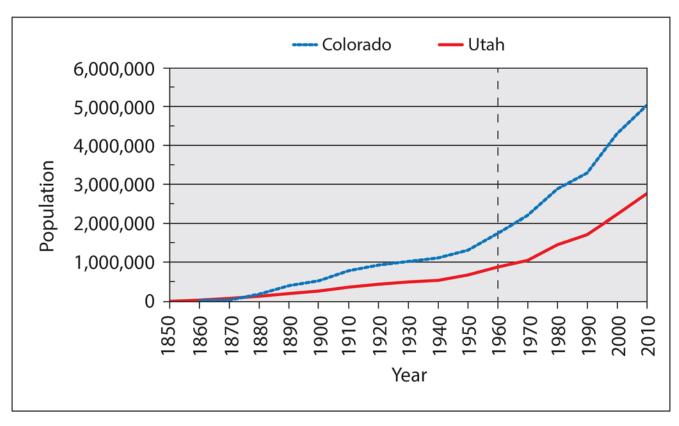


FIGURE 2. Utah and Colorado resident populations from 1850 to 2010 (data compiled from U.S. Census Bureau 2013a and 2013b). The dashed vertical line represents the division between the population growth of the last 50 years and before.

convenience rather than necessity. Individuals traveling throughout the country today have more opportunities than ever before to deposit rubbish in approved trash receptacles, yet, as any archaeologist who has done a pedestrian survey for a department of transportation knows, America's roadways are littered with garbage and refuse of all types.

Another factor that contributes to the number of recent sites being recorded is the difficulty of distinguishing between sites that are slightly more than 50 years old and those that are slightly less. Many of the archaeological technicians and crew chiefs who perform the bulk of pedestrian survey in the West can easily identify a site that dates prior to the mid-twentieth century by recognizing common diagnostic artifacts (e.g., holein-cap or hole-in-top cans, glass bottles with applied or tooled finishes, amethyst or amber colored glass, transfer-print decorated ceramics, hotelware, etc.), but have much more difficulty determining whether a trash scatter dates to 1960 or to 1970 (one of which would need to be recorded under the misinterpretation of the 50-year rule, and one of which would not). When faced with such a decision, many crewmembers will simply record the site "just to be safe," since failing to do so and later discovering that they were wrong could lead to additional costs and may impact client or agency confidence. As a result, even sites that are less than 50 years old are sometimes recorded. Having outlined some of the possible reasons for growth in the number of recent historical sites, let us now turn to a case study that quantifies this trend and highlights some of the consequences and costs of this issue.

THE INTERMOUNTAIN ANTIQUITIES COMPUTER SYSTEM DATA

The Intermountain Antiquities Computer System (IMACS) is a set of forms and protocols for recording and documenting archaeological sites used since 1981 by various federal and state agencies in Utah, Idaho, Nevada, Wyoming, and California (IMACS 1998; Schroedl 2008). While subsequently discontinued or modified by all other states, the use of IMACS (for good or ill) has continued in Utah, resulting in over 30 years of standardized data. The vast majority of documented archaeological sites in Utah have at one time or another been recorded on IMACS forms and the associated information entered into a searchable state-run database operated by the Antiquities Section of the Utah Division of State History. While the quality of information varies substantially and the database is difficult to utilize due to technical issues and recording conventions, it does provide researchers the chance to examine rough, generalized trends in the archaeological data that can help us to understand the national implications of continuing to use the common misinterpretation of the 50-year rule.

Because of the ongoing backlog of documents being entered into the IMACS database, the most recent complete year analyzed for this project was 2010. While the database holds a total of 73,213 records, only sites for which all the key variables were present from 1960-2010 were analyzed, resulting in 60,302

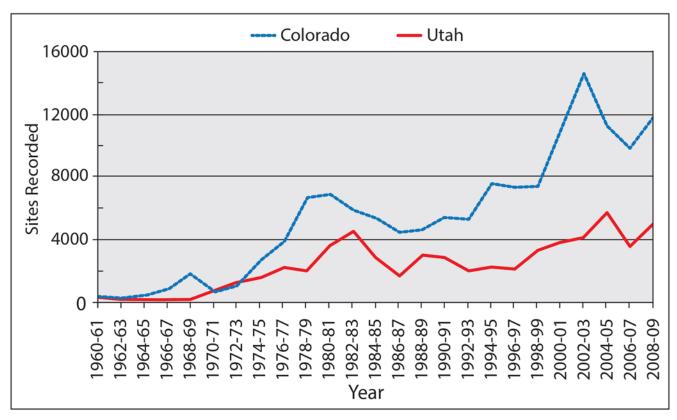


FIGURE 3. Total number of archaeological sites recorded in Utah and Colorado from 1960 to 2009 (data points are two-year totals and Colorado data includes isolated finds).

records available for study. The primary variables used in the analysis included the date the site was recorded, its eligibility status for listing on the National Register, the presence or absence of features (architectural or non-architectural), and site type (prehistoric, historic, or multicomponent).1

In examining the IMACS data, it guickly becomes apparent that, prior to the 1970s, very few sites of any type were recorded in Utah, but there was a significant increase in the following decades (Figure 3; Supplemental Table 1). This growth is no doubt heavily related to the passage of the NHPA in 1966 and the resulting birth of cultural resource management (CRM) in the early 1970s. Despite fluctuations, there is an overall trend of an increasing number of sites recorded over time. From the beginning, prehistoric archaeological sites have been recorded in Utah in much higher numbers than historical ones, but by the late 1990s, there was a major increase in the number of historical sites documented (Figure 4). In the 1970s, historical sites accounted for roughly 2 percent of all sites recorded, but this grew to 8 percent in the 1980s, 17 percent in the 1990s, and 33 percent in the 2000s. Comparing the number of historical sites recorded in the 1990s (n = 2091) to the number in the 2000s (n = 2091) to the 2000s (n = 2097416), there is a 254 percent increase in one decade (compared to a 38 percent increase for prehistoric sites). Part of the reason for this growth is no doubt the increasing awareness of the importance of historical archaeology throughout the West.

Hidden within the larger picture is another interesting pattern, this one directly related to the growth of historical sites with no features. This category of featureless historical sites includes the can scatters, small trash sites, and single-use dumps found throughout the Western landscape. The data shows that these featureless historical sites are increasing at an even quicker pace, averaging a 290 percent increase from the 1990s (n = 494) to the 2000s (n = 1923) (Supplemental Table 3).

Another key piece of information is how many of these sites are being recommended as eligible for listing to the National Register. Of all the historical sites recorded from 1960 to 2009, 30 percent were recommended as eligible to the NRHP, but only 12 percent of the historical sites with no features were recommended as eligible. Importantly, this number has been consistently decreasing over time, with 24 percent in the 1970s, 15 percent in the 1980s, 14 percent in the 1990s, and 12 percent in the 2000s. So, while the number of featureless historical sites continues to rise, their likelihood of being considered eligible to the National Register continues to fall (Figure 5).

One factor that may have an impact on the eligibility recommendations of this type of site is the imbalance of prehistoric vs. historical archaeologists in the region. This is certainly a point worth considering. Yet I know of few historical archaeologists who would judge the average 1960s trash scatter to be truly significant in American history, architecture, archaeology, engineering, or culture (although there are some vocal and respected exceptions). At the very least, the eligibility trends seen above demonstrate how the vast majority of professional archaeologists in the region evaluate this type of site.

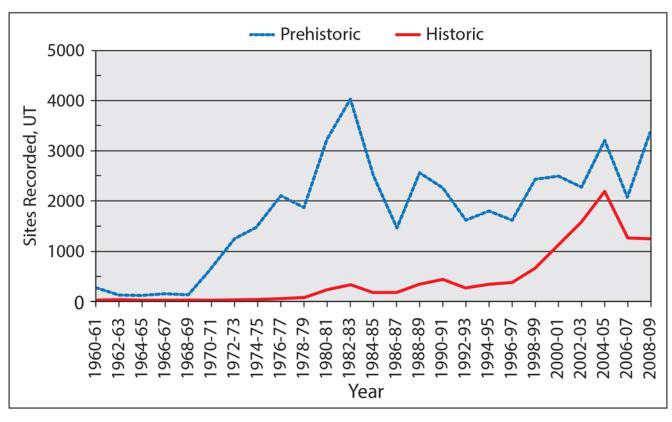


FIGURE 4. Number of prehistoric vs. historical archaeological sites recorded in Utah from 1960 to 2009 (data points are two-year totals).

In trying to examine this issue in other Intermountain states, an attempt was made to mesh data from neighboring statewide databases with the IMACS data. Unfortunately, due to differing database structures, recording conventions and standards, terminology, technical and recording errors, and a number of other confounding issues, it became apparent that data from these systems were not collected or formatted in a way to make a rigorous comparison possible. However, a few generalizations can be drawn as exemplified in an analysis of sites from Colorado.

Information from the SITE.FILES system operated and maintained by the Colorado Office of Archaeology and Historic Preservation (COAHP) was analyzed to determine whether similar growth trends for historical sites have occurred in that state. After formatting the data² as best as possible to equate with conventions used in IMACS, two notable patterns became apparent. First, the overall number of archaeological sites recorded in Colorado³ has risen over the past 50 years and matches the trend seen in Utah (Figure 3). Breaking this down even further into site types suggests that Colorado has also seen a significant increase in the number of historical sites recorded over the last 50 years (Figure 6). In the 1970s, historical sites accounted for 13 percent of all archaeological sites recorded in Colorado, growing to 16 percent in the 1980s, 33 percent in the 1990s, and 35 percent in the 2000s. In 2010, the number of historical archaeological sites recorded in the COAHP database nearly matched the number of prehistoric archaeological sites for the first time ever (Supplemental Table 2). This is particularly interesting considering that the historic period in Colorado

spans approximately 150 years, while the prehistoric spans roughly 13,000. While investigating additional trends is not possible given the differing structures of the two state databases, at the very least it appears that the number of archaeological sites in Colorado is growing at a rate similar to Utah and a large part of this growth is composed of historical archaeological sites (Figures 3 and 6).

WHAT DOES IT COST?

In one way or another, most archaeological work in the United States is paid for by the public. If it is conducted by a federal or state agency, public tax dollars fund it. If it is required of a private entity (usually due to federal or state law), they will pay for the work but recoup the associated costs by charging their clients (the public) more for their product or service. Either way, the public ends up footing the bill. This is acceptable, as legislation and public sentiment show that archaeological resources are important to U.S. citizens and that they are comfortable paying for their conservation and care, as long as the associated costs are worth the benefits. With this in mind, let's examine the price of recording a small, featureless, 50-year-old historical site in the Intermountain West.

The process of officially recording a site to evaluate its eligibility for inclusion to the NRHP varies on a state-by-state basis but involves both a field and office component. Recording in the field usually includes writing a description of the site; sketch-

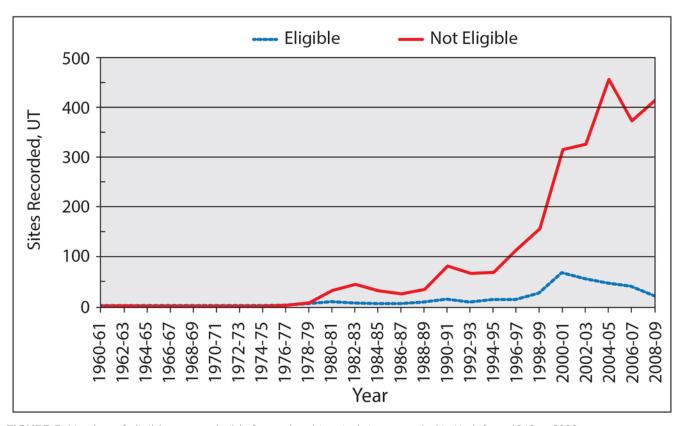


FIGURE 5. Number of eligible vs. not eligible featureless historical sites recorded in Utah from 1960 to 2009.

ing and describing diagnostic or unusual artifacts; creating sketch maps that show site boundaries, any associated artifact concentrations, and spatially significant features (e.g., modern fence lines, roads, trails, etc.); photographing the site and selected artifacts; and filling out official site forms that can vary by state from an expandable one page document in Nevada to an average 5-10 page document in Utah or Colorado. Once back in the office, field forms must be formalized and are often rewritten; photographs, maps, and sketches are formatted; and spatial data are transformed into specific geographic information systems (GIS) formats required by overseeing agencies. All of this information is then put together in a report and reviewed by agencies that consult with a SHPO on the eligibility of the recorded site. Finally, the data must be curated.

To help estimate the cost of recording a recent historical site with no features, a request for a cost estimate was sent to a number of federal and state agencies and CRM firms operating in Utah. The agencies were instructed to estimate only their administrative tasks, such as reviewing the site form and its associated information in a report, filing or entering site data into an agency documentation/recording system, consulting with the SHPO or others about eligibility recommendations, etc. The CRM contractors were instructed to focus on the costs associated with fieldwork, site recording, site form preparation and report writing, editing, data management, etc. Three agencies and four contractors replied with averaged costs of \$160 for agencies and \$890 for contractors. Based on these responses, a minimum of \$1,050 is required for the recording and reporting

on a small historical trash scatter in the Intermountain West. This is a conservative estimate, as it does not take into account the cost of curation of associated records or the cost to the SHPO for consultation on NRHP eligibility. In addition, there are a number of other expenditures that both the agencies and contractors said were difficult to estimate because they are spread over an entire project and cannot be easily extracted for a single site (writing of historic contexts, per diem and lodging of field crews, pre-field research, project administration, etc.).

Using this conservative estimate of \$1,050, between the years of 2000 to 2009, an estimated \$2,019,150 was spent on recording historical sites with no features in the state of Utah. Of that roughly 2 million dollars, \$1,736,469 (86 percent) was spent recording sites that were not recommended as eligible to the National Register. Projecting into the future, assuming a conservative 25 percent increase by decade of featureless historical sites (conservative because the percent increase for these sites in the Utah example was 290 percent from 2000 to 2010) and assuming the cost for recording them remains the same (\$1050), by the middle of the century a minimum of \$16,572,150 will have been spent to record featureless historical sites (including trash scatters and dumps) in Utah alone (Table 1), many of which will date from the 1970s, 1980s, and 1990s. Further, assuming a two percent decrease by decade in eligibility (as indicated by trends discussed above), then \$15,059,751 (90 percent) of those funds will be spent recording sites that that are not significant in American history, architecture, archaeology, engineering, or culture.

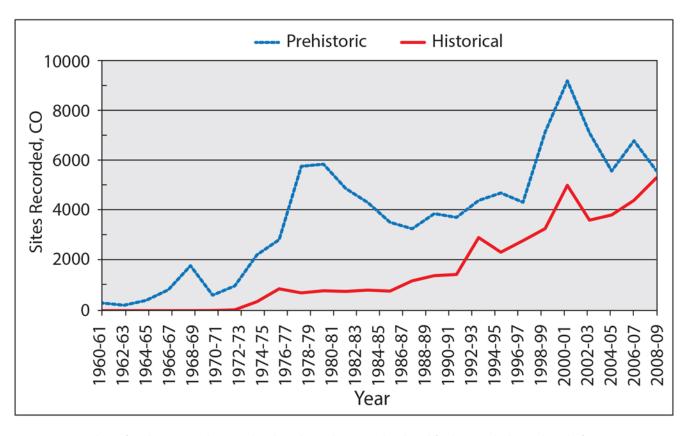


FIGURE 6. Number of prehistoric vs. historical archaeological sites and isolated finds recorded in Colorado from 1960 to 2009 (data points are two-year totals).

IS THE PUBLIC GETTING WHAT IT PAID FOR?

Based on the IMACS data and on my experience working in both the private sector and as an agency archaeologist, it is my contention that many (although certainly not all) of these featureless historical sites are recent trash scatters. As currently implemented in some parts of the western United States, the distorted interpretation of the 50-year rule pressures archaeologists to record anything dating to 1964 or earlier. I have often heard it said by more senior archaeologists, "When I have to start recording [fill in the blank with favorite recent historical artifact], I'm going to retire." Much to their chagrin, many of these professionals are now recording those very pieces of trash, but retirement has not yet come. Currently in Utah, roughly only 1 out of every 10 featureless historical sites is recommended as eligible for listing to the National Register. A system in which the public's resources are spent on mechanically recording sites that the archaeological community does not find to be significant 9 times out of 10 is a broken one. What's more, the data indicate that the number of these types of sites will continue to rise while the likelihood that they will be found to be significant will continue to fall.

If this interpretation of the 50-year rule continues and recording practices persist as presently defined, the archaeology profession must acknowledge the reality that the frequency of these sites will continue to increase at a huge cost to the public,

government, and private enterprise. We must ask ourselves, is the cost expended worth the benefit gained? Or, phrased differently, are we content with how resources are being used and, if not, how can the process be improved? These are crucial questions for the archaeological community to contemplate because they will help to shape our priorities.

WHY IS THIS IMPORTANT?

The aforementioned trends are important primarily for three reasons. First, the automatic recording and reporting of anything over 50 years of age is an inefficient and, in many cases, wasteful use of the public's resources. As stated earlier, archaeology in the United States (and especially in the western U.S.) is in one way or another funded by the public. As a consequence, archaeologists should have as one of their top priorities an effort "to preserve and advance knowledge about the past in a manner that does not betray the public trust" (Lees and King 2007:57; emphasis in original). When archaeologists mechanically and unthinkingly require the recording of very recent historical sites that are only rarely eligible for listing to the National Register, they may unknowingly betray that trust. This is especially true when practices can be changed to stop the inefficiencies, while still identifying and protecting the sites that are truly important. In other words, we need not abandoned the one for the sake of the nine.

TABLE 1. Current and Projected Costs for Recording Featureless Historical Sites in Utah.

Decade	Number of Sites	Recording Costs per Site	Total Costs
2000s	1923	\$1,050	\$2,019,150
2010s	2404	\$1,050	\$2,524,200
2020s	3005	\$1,050	\$3,155,250
2030s	3,756	\$1,050	\$3,943,800
2040s	4,695	\$1,050	\$4,929,750
Total	15,783	\$1,050	\$16,572,150

Second, the resources and time that are being used in the execution of this interpretation of the 50-year rule could be spent on better things. This could include recording sites that are much more likely to be significant to American history and prehistory; developing local, statewide, or regional research questions or historic contexts to guide archaeological investigations; producing public products and education; increasing agency and contractor training in historical archaeology; or simply making the compliance process less expensive and time consuming. Any of these possibilities, and many others, may be a more effective use of our efforts.

Finally, the American people find archaeology both interesting and important (Ramos and Duganne 2000), but they will not support it unendingly or uncritically. Increasing costs, coupled with what many see as decreasing returns will eventually lead to changes in legislation and policy, and not to the discipline's benefit. This is far from a new warning, and such issues are cyclical. Noble (1996:80) stated almost 20 years ago:

There is simply too much effort being expended today on the margins. Given the current political climate in which government is being "reinvented" to foster greater operating efficiency and cost savings, it should be obvious that general support for "nonessential" services will diminish markedly in the coming years, including support for the mission-oriented and mandated archaeological projects that fund so much of our research. Indeed, it would not be surprising if the entire federal historic preservation program is called into question during this period of increasing fiscal conservatism and antiregulatory sentiment. Therefore, it is time we seriously reconsider what we are doing with public funds and make some sorely needed changes before the budget axe is aimed in our direction and some faceless bureaucrat arbitrarily decides to swing away. [Noble 1996:80]

Unfortunately this statement rings just as true today as it did almost 20 years ago. Some may ask whether the current situation is more severe than previous ones. In answering this guestion, Barbara Little (2007a:73) has stated, "It is worth remembering that the parable of the little boy who cried wolf ends with the wolf actually appearing and no one paying attention to the truthfulness of the final warning." Utah serves as an example of how the budgetary and political climate can quickly change the face of archaeology on the ground. In 2011, the Utah state legislature cut funding for the positions of state archaeologist, assistant state archaeologist, and state physical anthropologist

(Loomis and Fahys 2011). While the physical anthropologist has since been rehired to deal with statutorily defined mandates, the positions of state archaeologist and assistant state archaeologist have been eliminated, and there seems to be little likelihood that they will be reinstated anytime in the near future. Funding cuts to federal and state archaeological programs are common across the nation, and given this environment we must employ policies that wisely spend limited time and resources.

CHANGES TO BE MADE

Let me be clear: I am not suggesting that we stop recording all archaeological sites only 50 or 60 years of age. Neither am I suggesting that there are no historical trash scatters that are eligible for the NRHP. Fascinating and important research questions and themes have been, and continue to be, addressed by some recent historical sites (Hardesty and Little 2009; and references therein). What I am advocating is that we should simply read the criteria consideration in 36 CFR 60.4 as it was written: "Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register." Nothing in that sentence (or anywhere else in the law) says that if something is over 50 years of age, then it must be recorded. Hence, land managing agencies should not automatically require it and individual archaeologists should not automatically do it. Instead, agencies should tell those performing work on their behalf to evaluate anything over 50 years of age for listing to the National Register, but to use their professional judgment on whether or not to record very recent sites. If a case is clear-cut and 9 out of 10 archaeologists would say that the site may be significant in American history, architecture, archaeology, engineering, or culture, then continue with your evaluation by officially recording the site and making recommendations to the agency. If it is clear-cut in the other direction and 9 out of 10 archaeologists would say that it probably isn't significant, then don't record the site and move on.

Some may argue that to do this would be giving too much leeway to private contractors who have at the top of their priorities a desire to cut costs and increase their profit margins. They will say that, left to their own devices, some unscrupulous contractors will chose to ignore all very recent historical resources and trash scatters, thereby allowing potentially eligible sites to go unrecorded. I would argue that unscrupulous contractors

already do so; that's why they're called unscrupulous. However, the vast majority of CRM archaeologists are well-intentioned, conscientious, trained professionals who chose archaeology as a profession not to cut costs and increase profits, but to learn from and care for cultural resources. A well-known fact (albeit one rarely acknowledged) is that, like it or not, agencies throughout the West already place great faith in CRM professionals as very few have the resources to go into the field and evaluate survey results. Agencies already trust contract archaeologists to professionally perform the work that is given to them; the proposed change would in no way alter that existing expectation. Further, the collaborative development of research themes and historic contexts by agencies and contractors before survey work begins can outline what archaeological resources need to be recorded and at what level of effort, thereby significantly reducing the amount of individual judgment that need be relied upon.

To help guide agency archaeologists and the contractors they work with, federal and state agencies should develop specific directions about how best to approach the recording and evaluation of recent historical sites; otherwise, this gap in guidance will continue to be filled with incorrect interpretations of the 50-year rule. Such direction should be tailored to the resources of the region and agency and must take into account historic context and research themes.

Some organizations have already taken steps to address these concerns. For example, in Wyoming, the Bureau of Land Management and the State Historic Preservation Officer have taken a programmatic approach by creating a category of "defined non-sites and property types" that do not require formal documentation. Such non-sites include utility lines, pipelines, abandoned motorized vehicles and mobile homes, recent trash, short-term camps associated with stock grazing and recreation, prospect pits and claim stakes, etc. (Wyoming Bureau of Land Management and Wyoming State Historic Preservation Officer 2014:Appendix D). Formal documentation of these resources is not required, but their existence within a survey area must be discussed in the project report and justification for their exclusion explained. Similarly, the California Department of Transportation exempts from evaluation isolated refuse dumps and scatters "over 50 years old that lack specific associations," as well as isolated mining prospect pits and placer mines (Federal Highway Administration 2014: Attachment 4). At a state level, while the Colorado SHPO generally requires documentation of "all cultural remains over 50 years of age" (COAHP 2007:16), they include exemptions for a few historical features (i.e., dirt roads, stock ponds, soil berms, fence lines, small irrigation ditches, pastures, and fields) (COAHP 2007:18).

Some may argue that if the conventions for recording recent historical trash scatters in the West are to change, then the discipline should also consider the costs and associated benefits of recording its prehistoric equivalent: the common lithic scatter. An important distinction, however, is that the recording of small featureless prehistoric sites is not growing rapidly (as with recent historical sites) because prehistoric populations never totaled even a fraction of modern population levels. That being said, I highly encourage discussions on the recording of certain repetitive data sets, regardless of where they fall in the span of human history (it simply is not the topic I am addressing here).

A LARGER ISSUE

While the individual actions taken by select state and federal agencies are steps in the right direction and the issues raised above are important, they are only symptomatic of a larger problem, namely, the sheer number and relative importance of potential archaeological sites from the late twentieth century and beyond. Implicit and explicit in much of the law and regulation for management of archaeological resources in the U.S. is the idea that districts, sites, buildings, structures, and objects that are now modern will, after a certain amount of time, become resources that may help us to learn about people in the past. A regulatory system built nearly 50 years ago, when we had the luxury to be able to assess any and all potential historic properties, will strain under the burden of the coming avalanche of potential archaeological sites. Identifying, recording, evaluating, and treating sites from 10,000 years ago, 5,000 years ago, or even 100 years ago has thus far been manageable because low population densities and a limited amount of associated material culture resulted in a relatively restricted archaeological record. As most archaeological sites are considered eligible for the National Register because of their potential to yield information important in prehistory or history (Criterion D), we have been able to legitimately justify our concern for these sites as the discipline of archaeology has the ability to retrieve and contextualize information from material remains that cannot be gained in any other way.

However, the world has gone through astounding changes in the last 200 years. Population has increased in the United States from roughly 5.3 million in 1800 to 76 million in 1900 and 316 million in 2013 (U.S. Census Bureau 2013c). This has been accompanied by an explosion in the amount and type of material culture produced by individuals, as well as a global transformation in information. In the study of prehistoric cultures in the U.S., there is only one way to learn about ancient peoples: archaeology. In the study of the post-contact period, researchers are fortunate enough to sometimes have written records to supplement this investigation of the past. But as helpful as these limited resources have been, they pale in comparison to the fortuitous flood of information available on how individuals and societies lived and functioned in the last 30 to 40 years. Of course historic records, modern media, and even first-person interviews can never give the full picture of human behavior because not everything is recorded and people may knowingly or unknowingly misrepresent their activities and thoughts. Examples like William Rathje's work have eloquently shown the important role archaeology (and garbage) can play in understanding recent human behavior (Rathje and Murphy 2001). While fully acknowledging that the archaeological record "offers an alternative pathway to the past...that is independent of the other pathways as a source of historical evidence" (Hardesty and Little 2009:196), so much information about the modern era is so easily accessible that we must ask ourselves whether most archaeological resources from the late twentieth century forward should be valued and treated in the same manner as sites from earlier periods. My answer to such a question would be a decisive no. Of course there will be exceptions, and archaeology will always contribute to our understanding of many fascinating research issues from the post-contact and modern periods (e.g., Casella and Symonds 2005; Dixon et al. 2011; Groover 2008; Hardesty1988; Little 2007b; Rathje 1999; Rathje and Murphy 2001; Shanks et al. 2004), but in the future it will be unwise to treat the multitude of sites

from the late twentieth century and beyond in the same manner as those from the more distant past. Acknowledging that, we should adjust the laws and regulations accordingly.

Stepping away from archaeological sites for a moment, consider the aging of residential and commercial buildings. Historic preservationists (including some archaeologists) already spend a large amount of time recording and evaluating the many structures found in cities, towns, and rural areas. Imagine how this workload will balloon in the coming decades as subdivisions, neighborhoods, and tens of millions of housing units reach the golden age of 50. In California alone, approximately six million houses were constructed during the 30 years following World War II. In an accurate, if understated fashion, one statewide context reads, "The survey and evaluation of postwar housing therefore has the potential to greatly increase the time and effort required for Section 106 compliance" (California DOT 2011:ii). To help address this problem, the National Park Service has issued guidance on residential suburbs, historic districts, and a landscape approach (USDI, NPS 2002b), and in 2012 the National Cooperative Highway Research Program issued a report that provides a model for identifying and evaluating post-World War II residences, as well as an associated national historic context (Transportation Research Board of the National Academies 2012).

Individual states are also developing solutions, such as in California, where the Department of Transportation has produced a statewide context for evaluating tract housing built between 1945 and 1973 for eligibility to the National Register (California DOT 2011). Part of their solution is to encourage the evaluation of entire tracts (or subdivisions) as historic districts, instead of evaluating individual units (California DOT 2011:121), and to exempt housing tracts constructed after World War II if research has shown that the individual houses and the tract as a whole have no potential to meet any of the National Register criteria (Federal Highway Administration 2014:Attachment 4).

Similar solutions may or may not be applicable to archaeological cultural resources, but, as a discipline, we should not only continue conversations about the relative importance of archaeological sites and the practical application of cultural resource management (e.g., Mathers et al. 2005; Sebastian and Lipe 2009), but also should bring to the forefront discussions about how modern materials and sites from the latter part of the twentieth century and beyond will be handled. Such discussions must recognize the great research value of many recent and modern sites, while simultaneously acknowledging the ballooning resource base and undeniable budgetary and management constraints. Finally, these conversations must reach across the lines that often divide academic, government, and contract archaeology and stretch into journals, conferences, national guidance, and legislation.

CONCLUSION

An incorrect interpretation of Criteria Consideration G (commonly called the 50-year rule) as currently practiced by some land managing agencies in the western United States leads to the recording of many featureless historical sites that have limited significance to American history, architecture, archaeology, engineering or culture. The rigidness with which this interpretation has been applied may result in a misuse of public funds and threatens to undermine the public's trust in archaeology, while simultaneously adding unnecessary costs to federal and private undertakings. Trends showing an increasing number of these sites, along with significant population growth, indicate that the problem will continue to worsen unless changes are made in policy and practice. This is symptomatic of a larger issue that relates to how cultural remains from the latter part of the twentieth century will be valued and dealt with the context of environmental and historic preservation laws. In the future, many archaeological sites from the 1970s, 1980s, and beyond may contribute less to our understanding of the past in comparison to the historic record. This diminishing return, in combination with the increasing costs of trying to document, evaluate, and treat an ever-expanding number of modern sites, means that archaeologists at the local, regional, and national levels must engage in focused discussions about these issues. While so doing, we would be well advised to remember that, "it is essential that our approach to archaeological resource management be both good archaeology and good public policy" (Sebastian 2009:13).

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Data Availability Statement

The raw data used in the analysis of Utah's IMACS are available from the Antiquities Section of the Utah Division of State History. Requests for data should be made to the archaeology records manager (email: archrecords@utah.gov; phone: 801-245-7246). The raw data used in the analysis of Colorado's SITE.FILES system are available from the Colorado Office of Archaeology and Historic Preservation. Requests for data should be made to the information management director (email: oahp@state.co.us; phone number 303-866-4673).

Supplemental Materials

Supplemental materials are accessible via the SAA member login at http://saa.org/home/tabid/

Supplemental Table 1: Number of Prehistoric, Historical, and Multicomponent Sites Recorded in Utah from 1960-2010.

Supplemental Table 2: Number of Prehistoric, Historical, and Multicomponent Sites and Isolated Finds Recorded in Colorado from 1960-2010.

Supplemental Table 3: Number and NRHP Eligibility of Featureless Historical Sites Recorded in Utah from 1960-2010.

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NOTES

- 1. While "site type" and "class" are data fields on the IMACS form, they are not encoded variables, which means that, while they exist on the paper records of individual site forms, they have not been entered into the electronic database over the years. Therefore, they could not be used for this analysis. As a result, categorization of each site as prehistoric, historic, or multicomponent was based on the presence or absence of specific artifact types (e.g., flaked stone tools, ground stone, Native American ceramics, etc. for prehistoric; metal, glass, kiln-fired ceramics, machinemade artifacts, non-native and European artifacts, etc. for historic). Additionally, although a data field for recording the hypothesized earliest and latest known dates of occupation of a historic site is present on IMACS forms, how these dates were estimated varied widely over the years and between recorders, and the information in the database is not helpful in determining the primary period of use. Consequently, the exact dates of occupation or use of the historic sites is unknown. Finally, the structure of the IMACS database creates a new entry each time an archaeological site is re-recorded. This means that approximately 10 percent of the total entries are later recordings of previously recorded
- Primary variables used in the analysis included: site number, the year the site was recorded, its eligibility status for listing on the National Register, and site type (prehistoric, historic, or multicomponent). The Colorado recording system divides cultural resources into four basic categories: archaeological (primarily prehistoric archaeological resources), historical archaeology (primarily post-contact archaeological resources), historic (primarily post-contact built environment [buildings, structures, features]), and paleontological. These categories are not exclusive, so a single site may be classified as both "historical archaeology" and "historic." While both "historic" and "paleontological" resources were not included in the current analysis, sites that included the "historical archaeology" descriptor as either the primary or secondary classification were grouped with historical archaeological sites to be sure and not exclude them from the analysis. Sampling the descriptions of these sites made it clear that they were more related to historical archaeology than to historic building. The SITE.FILES system also includes multiple recording and assessment dates for each site; however, for simplicity, I used only the first date the site was officially recorded and the most recent NRHP eligibility recommendation.
- While the total number of sites recorded appears to be significantly higher in Colorado than in Utah, this is due to the fact that Colorado's database includes isolated finds and features while Utah's does not. Unfortunately, the isolated finds in the SITE.FILES database could not be easily extracted for the present analysis because individual agencies (and even archaeological contractors) in Colorado have differing definitions of an isolated find vs. an archaeological site. In addition, each isolated find that is submitted to the COAHP receives a Smithsonian trinomial and is evaluated for NRHP eligibility.

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Supplemental Table 1. Number of Prehistoric, Historical, and Multicomponent Sites Recorded in Utah from 1960 to 2010.

Year	Prehistoric	Historical	Multicomponent	Total
1960-61	267	8	8	283
1962-63	127	18	9	154
1964-65	121	4	13	138
1966-67	154	1	3	158
1968-69	129	2	5	136
1970-71	662	7	3	672
1972-73	1251	14	40	1305
1974-75	1491	27	46	1564
1976-77	2106	56	50	2212
1978-79	1870	75	60	2005
1980-81	3236	246	156	3638
1982-83	4036	336	148	4520
1984-85	2495	175	98	2768
1986-87	1446	180	41	1667
1988-89	2561	344	100	3005
1990-91	2261	440	138	2839
1992-93	1620	266	105	1991
1994-95	1802	343	99	2244
1996-97	1617	379	119	2115
1998-99	2433	663	217	3313
2000-01	2495	1129	213	3837
2002-03	2275	1583	266	4124
2004-05	3206	2190	329	5725
2006-07	2054	1265	242	3561
2008-09	3412	1249	333	4994
2010	765	456	113	1334
Total	45,892	11,456	2954	60,302

Supplemental Table 2. Number of Prehistoric, Historical, and Multicomponent Sites and Isolated Finds Recorded in Colorado from 1960 to 2010.

Year	Prehistoric	Historical	Multicomponent	Total
1960-61	308	2	10	320
1962-63	217	4	9	230
1964-65	413	0	16	429
1966-67	835	6	11	852
1968-69	1798	0	22	1820
1970-71	623	9	14	646
1972-73	990	35	32	1057
1974-75	2236	358	100	2694
1976-77	2840	876	159	3875
1978-79	5768	712	207	6687
1980-81	5853	796	236	6885
1982-83	4884	773	226	5883
1984-85	4319	824	204	5347
1986-87	3530	780	155	4465
1988-89	3274	1190	165	4629
1990-91	3875	1401	177	5453
1992-93	3729	1446	126	5301
1994-95	4407	2923	240	7570
1996-97	4705	2334	300	7339
1998-99	4333	2799	271	7403
2000-01	7138	3281	341	10760
2002-03	9181	5011	420	14612
2004-05	7105	3620	549	11274
2006-07	5584	3823	430	9837
2008-09	6792	4410	587	11789
2010	2958	2685	370	6013
Total	97,695	40,098	5377	143,170

Supplemental Table 3. Number and NRHP Eligibility of Featureless Historical Sites Recorded in Utah from 1960-2010.

Year	Not Eligible	Eligible	Unknown	Total
1960-61	0	0	0	0
1962-63	1	0	2	3
1964-65	0	0	3	3
1966-67	0	0	1	1
1968-69	0	0	1	1
1970-71	0	0	1	1
1972-73	0	0	4	4
1974-75	0	0	5	5
1976-77	1	1	3	5
1978-79	3	4	8	15
1980-81	24	8	7	39
1982-83	39	5	5	49
1984-85	27	4	3	34
1986-87	21	4	1	26
1988-89	27	7	2	36
1990-91	68	13	2	83
1992-93	59	7	4	70
1994-95	56	12	0	68
1996-97	102	12	1	115
1998-99	131	25	2	158
2000-01	249	66	2	317
2002-03	272	54	3	329
2004-05	411	45	19	475
2006-07	334	39	8	381
2008-09	394	20	7	421
2010	102	11	5	118
Total	2321	337	99	2757