Indigenous Cultural Landscapes Study for the Captain John Smith Chesapeake National Historic Trail

December 2013

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EXECUTIVE SUMMARY

This Indigenous Cultural Landscapes Study for the Captain John Smith Chesapeake National Historic Trail is in fulfillment of the Chesapeake Watershed Cooperative Ecosystems Studies Unit Cooperative Agreement between the National Park Service and the University of Maryland, College Park. We began work on this study in September 2012 and throughout the process enjoyed the active cooperation and participation of the indigenous cultural landscapes team at the National Park Service Chesapeake Bay.

This report summarizes what we have learned about the history of the concept of indigenous cultural landscapes, as well as methodology and criteria for identifying and representing indigenous cultural landscapes for the purposes of conservation and interpretation. Herein we rely on the Captain John Smith Chesapeake National Historic Trail's Comprehensive Management Plan Draft definition of "indigenous cultural landscapes" as areas that reflect "the contexts of the American Indian peoples in the Chesapeake Bay and their interaction with the landscape" (National Park Service 2010: 4.22). The identification of indigenous cultural landscapes "includes both cultural and natural resources and the wildlife therein associated with historic lifestyle and settlement patterns and exhibiting the cultural or esthetic values of American Indian peoples," which fall under the purview of the National Park Service and its partner organizations for the purposes of conservation and development of recreation and interpretation (National Park Service 2010: 4.22). We provide a 15-step process for identifying indigenous cultural landscapes along the Captain John Smith Chesapeake National Historic Trail, and provide insight into potential limitations and challenges of the indigenous cultural landscape identification and representation process.

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INDIGENOUS CULTURAL LANDSCAPES STUDY FOR THE CAPTAIN JOHN SMITH CHESAPEAKE NATIONAL HISTORIC TRAIL

Introduction to the Cultural Landscape and Indigenous Cultural Landscape Concepts

This report is the result of a cooperative agreement between the National Park Service Chesapeake Bay and the University of Maryland, College Park addressing indigenous cultural landscapes (ICLs) within the Captain John Smith Chesapeake National Historic Trail (Captain John Smith NHT). The aims of the cooperative agreement are to:

> 1. Provide a review of existing literature relevant to the identification, mapping, criteria, and methodology for ICLs (see Appendices) 2. Identify Chesapeake ICLs based on existing research.
>
> 3. Conduct pilot ICL identification and mapping.

It was determined during the course of this research that a comprehensive study of Chesapeake Bay watershed ICLs was unrealistic for us, and that it would be preferable to focus on one well defined region. The Nanticoke River watershed was selected and our research efforts were then limited to this area. A narrative report detailing our identification and mapping of the Nanticoke River watershed high-probability ICL area is on file with the NPS Chesapeake Bay.

Herein we provide a brief history of ICL research relevant to the Captain John Smith NHT (see below, "Indigenous Cultural Landscapes and the Captain John Smith Chesapeake National Historic Trail"), criteria and methodology for identifying ICLs (see below, "Criteria and Methodology for Identifying Indigenous Cultural Landscapes in the Captain John Smith Chesapeake National Historic Trail"), methodology for and challenges related to representing ICLs (see below, "Representing Indigenous Cultural Landscapes for the Captain John Smith

Chesapeake National Historic Trail"), and recommendations for continuing and future ICL studies (see below "Conclusions and Recommendations"). In order to situate this project within the larger body of scholarship regarding ICLs and provide context for the report, we first present a summary of literature reviewed pertaining to the cultural landscape and ICL concepts, and representation of cultural landscapes.

A Brief History of Cultural Landscapes

Cultural landscapes as a concept first appeared in the early 20th century. Carl Sauer (1963: 342) is credited with coining the term in 1925, which he defined as "all the works of man that characterize the landscape." Most early iterations of the cultural landscape concept relegated the term to definitions of spaces modified by humans. Over the years, however, the importance of the role of the natural environment in limiting or otherwise affecting human behavior came to the forefront, and many scholars now understand cultural landscapes to be places in a constant state of change, acted upon and which act upon interdependent human and non-human forces and beings. In other words, cultural landscapes are dynamic landscapes where humans, the environment, and its non-human inhabitants interact with each other.

Themes that arise throughout the literature on cultural landscapes include complications with the very concept of nature, addressing our tendency to look for it only in seemingly pristine locations (e.g., Cronon 1993, 1996; Hufford 1994); the various ways people construct, experience, and give value to spaces (e.g., Ingold 1993; Lane 2001); and how these values change over time and between locations and organizations or communities (e.g., Rowntree and Conkey 1980). Some scholars stress the importance of interaction with communities associated with the landscape, as well as the need for recognizing variations in the way landscapes are valued in different cultures (e.g., Buggey 1998; Cook 1998), as values based on spiritual,

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historic, economic, or other connections vary greatly, so do the ways in which landscapes are perceived.

Many modern experts on cultural landscapes critique older ideas of the concept for giving too much precedent to material culture and for failing to recognize the triangular relationship between humans, non-human "nature", and material culture created by humans (e.g., Korr 2002). There is a concern when discussing cultural landscapes that not enough attention is paid to the reciprocal relationship between humans and the landscape, and there is interest in improving our understanding of the cultural and ideological underpinnings of modes of interaction with landscapes and parse them out accordingly (e.g., Meinig 1979). Categories of cultural landscape classification include those categories based on the elements that make up cultural landscapes (e.g., Sauer 1963), landscapes supporting identity (e.g., Cowley 2011; Cusak 2007), sacred landscapes (e.g., Lane 2001), and on various other criteria (e.g., Birnbaum 1994).

Recent trends in the conceptualization of cultural landscapes include a tendency to reject a dualistic sense of the relationships between culture and the environment and to focus on the interactions (if not inseparability) of culture and the environment as they are expressed in cultural landscapes. Further, there exists a shift in the literature on cultural landscapes, abandoning the temptation to view cultural landscapes as being static, historic, or inactive, in favor of a view that finds their value to lie in their dynamic nature. This appreciation for process over stasis is also increasingly apparent in the ways scholars approach the concepts of culture and environment.

Attention is increasingly paid to the diversity of people represented by cultural landscapes and to issues of social justice as they apply to people (indicated by characteristics such as class, ethnicity, and gender) who have been underrepresented in the past. As noted above, this trend has also given rise to calls for greater public involvement in cultural landscape

research and policy. There exists a growing recognition that standard ways of representing cultural landscapes (historical and archaeological research, geographical mapping, etc.) might profitably be augmented with other approaches such as textual analysis and narrative inquiry (e.g., Ryden 1993; Taylor 2007).

A Brief History of Indigenous Cultural Landscapes

Indigenous cultural landscapes, and the related applications of aboriginal cultural landscapes and ethnographic cultural landscapes, are relatively recent concepts, having for the most part entered the literature within the past two decades. ICLs are defined variously as "living landscapes that indigenous people identify as fundamentally important to their cultural heritage, areas that embody their relationship with the land" (Andrews and Buggey 2008:PG) and "holistic homelands" that can be composed of "units of land large and natural enough to accurately reflect the cultural life ways of the communities that lived within them" (Beacham 2012: 41). Early use of the term "indigenous cultural landscape" emerged as a way to recognize the impact of indigenous peoples on landscapes, as well as the continued interactions of indigenous peoples with landscape, for the purposes of land management and community development (DavidsonHunt 2003). More recently, the term "indigenous cultural landscape" has been used to highlight problematic issues related to the representation of people and their traditional relationships with the land in UNESCO World Heritage Areas (Carter 2010).

Australian "indigenous cultural landscapes" were recognized under the Australia ICOMOS Burra Charter as early as 1992 (Lennon and Mathews 1996:38; see also Australian Heritage Commission 1995) and the Historic Sites and Monuments Board of Canada "adopted the concept of Aboriginal cultural landscapes and approved guidelines for identification of their national historic significance" in 1999 (Andrews and Buggey 2008:254). Other agencies around

the world have begun working with or on behalf of indigenous peoples to draw attention to the ways in which Native peoples interact with, use, and are affected by their environment.

One of the most salient issues that arises from the body of literature on ICLs is the concern that traditional Western values associated with landscape may not be those of indigenous populations. Movement, travel, connection with a spirit world or with non-humans that share the environment, may define a space more so than terrain features or built material culture (e.g., see McNiven 2003, Pandya 1990), and Western notions of historical value may downplay the importance of non-human agency in defining an ICL (Plumwood 2006) or otherwise give priority to non-indigenous heritage values (e.g., Memmett and Long 2002). In short, an "authentic" ICL may look or be experienced differently by different peoples. Many scholars emphasize the need to understand the cultural context of the people whose landscape is being studied (e.g., Andrews and Buggey 2008), and creative interpretations of place and time are shown to be important in conceptualizing the ICL. Some experts caution against presenting ICLs in the context of a single (and past) historic period, arguing that it is as important to represent indigenous perspectives in contemporary times as it is to represent them in some past time (e.g., Davidson-Hunt 2003; Wohling 2009).

Representing Indigenous Cultural Landscapes

Data most generally used to delineate cultural landscapes include archaeological and historical data, oral history transcriptions, and archival materials such as maps, photographs, journals, and socioeconomic data. Geographic information systems (GIS) data are put to effective use in reconstructing landscapes and viewsheds (e.g., Contreras 2009; Bongers, Arkush and Harrower 2012). Overlays of historic maps and photographs are shown to be helpful in

determining population and cultural landscape drift (e.g., Darling, Ravesloot and Waters 2004), as well as indicating the location of landscapes such as Indian reservations. The need for clearly defined and confined time periods of study is emphasized repeatedly in cultural landscape literature (e.g., Etter, McAlpine and Possingham 2008), although it is recognized that to fully tell the story of the evolution of a landscape, it is possible that many time periods may need representation. For ICLs, many scholars emphasize the need for collaboration between archaeologists or other researchers and indigenous communities or descendants—not only in gathering information, but also for making decisions about representation of landscapes (e.g., Gallivan 2011; Sletto 2009). This is of particular importance considering the potential for widely different worldviews encompassing a variety of values related to the landscape.

The process of communicating the ICL concept and its values to a range of audiences presents challenges, and calls for dynamic methods, involving expressions of place through creative media such as interactive websites (c.f. Cowley 2011; Lane 2001). In this respect, it can be noted that the representation of indigenous cultural landscapes remains experimental and tentative.

Decisions made regarding the representation of ICLs will likely relate directly to the goals of ICL creation—for example, conservation as a goal will lead to a focus on landscapes that may be protected, and a need to represent an ICL in a way that lends itself to conservation. As an example, acquisition of land for the purposes of conservation will require a concrete boundary drawn around and indicating an ICL—a boundary artificially placed around an area that is dynamic and porous in reality. The use of particular legal frameworks may require particular representations of an ICL for support of action. A few scholars have pointed to existing legislation that may require unique documentation. For example, Parker and King (1998) point to the National Historic Preservation Act and the American Indian Religious

Freedom Act as legislation potentially helpful in designating traditional property or spaces; and

King (2004) uses these acts and a range of additional legislation to back up a recommendation

for landscape conservation. This legislation includes the National Environmental Policy Act and

Executive Order 13007, which addresses American Indian sacred sites.

Indigenous Cultural Landscapes and the Captain John Smith National Historic Trail

A brief history of the ICL concept as it is used by the NPS Chesapeake Bay will provide background for the present study:

The 2010 *Draft Comprehensive Management Plan and Environmental Assessment: Captain John Smith Chesapeake National Historic Trail* (CMP) includes among its Cultural Resources four distinct forms of cultural landscapes for consideration along the Captain John Smith NHT: 1) Historic designed landscapes (those consciously designed or laid out), 2) Historic vernacular landscapes (those which evolved "through use by the people whose activities shaped that landscape"), 3) Historic sites (associated with historic events, activities, or persons), and 4) Ethnographic landscapes (those containing 'a variety of natural and cultural resources that associated people define as heritage resources") (National Park Service 2010: 4.21-22). The CMP goes on to suggest that it may be beneficial to consider an additional category of cultural landscape that expands the scope of the ethnographic landscape: the Indigenous Cultural Landscape. The NPS Chesapeake Bay defines ICLs as reflecting "the context of the American Indian peoples in the Chesapeake Bay and their interaction with the landscape." The concept "includes both cultural and natural resources and the wildlife therein associated with the historic lifestyle and settlement patterns and exhibiting the cultural or aesthetic values of American Indian peoples" (National Park Service 2010:4.22).

The CMP fleshes out the ICL concept in an appendix written by Deanna Beacham. Therein the author suggests ICL as a concept useful for expanding the public's and policy makers' understandings of Indian societies and life-ways, and which may also be useful for aid in supporting conservation efforts (National Park Service 2010:Q.1-2). Beacham notes that

American Indian people of the Chesapeake Bay watershed are not just "Indian communities" as represented by "the dots on John Smith's map" (National Park Service 2010: Q.1). The NPS has an opportunity to more fully include the story of American Indian peoples who have historically lived in the Captain John Smith NHT area. She encourages the NPS to develop productive relationships with the American Indian communities living in the Chesapeake Bay watershed today, through the inclusion of large indigenous landscapes that encompass important waterways, seasonal habitation locations, and many other important cultural and natural features. Since the creation of the CMP[1] the NPS has overseen two pilot study projects related to the ICL concept. One, headed by Brenda Barrett (Living Landscape Observer) and Jackie Kramer (National Park Service Chesapeake Bay), examines ICLs along the Lower Susquehanna River. The second project is the subject of this report and identifies a potential ICL associated with the Nanticoke River watershed.

In addition to these two studies, several other organizations and agencies have begun similar projects utilizing the ICL concept, many on Maryland's Eastern Shore and in southern Maryland. These include the Maryland Historical Trust, the Maryland Department of Natural Resources, and the National Oceanic and Atmospheric Administration—the last of which is undertaking research on ICLs and marine protected areas. The Accokeek Foundation, together with members of Piscataway tribes, are working to develop the Piscataway Cultural Landscape in southern Maryland, as well as to create related educational materials (Accokeek Foundation 2013). It is clearly in the NPS's best interest to continue to collaborate with these partner organizations, as well as with descendent communities living in and related to the study areas.

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[1] Following a period of public comment, the CMP was approved and completed in 2011, and made available online at http://www.nps.gov/chba/parkmgmt/john-smith-trail-planning.htm.

Criteria and Methodology for Identifying Captain John Smith Chesapeake National Historic Trail Indigenous Cultural Landscapes

In this section we describe potential criteria for identifying ICLs within the Captain John Smith NHT, as well as a field-tested methodology for undertaking further ICL study.

Criteria

The Chesapeake Bay watershed encompasses parts of six states and stretches across more than 64,000 miles. The landscape includes tidal marshes, anthracite coalfields, swamps, mountains, agricultural fields, and a variety of other natural features. A great many paramount chiefdoms, chiefdoms, and tribes existed in these landscapes when Captain John Smith arrived in the early 17th century, and today the watershed is home to over 17 million people, many of whom are descendants of the tribal members encountered by Smith (Chesapeake Bay Program 2013). It is impossible to develop a single set of criteria that will encompass all ICLs along the Captain John Smith NHT, given the differences in the natural landscape, as well as differences in cultural traditions of the many tribes to be considered. However, we can expect some similarities, and begin with these.

Deanna Beacham (2011: 6) provides an excellent starting point with general suggestions for consideration in ICL inclusion. These are:

- Good agricultural soil (fine sandy loam, 1-2% grade)
- Fresh water source
- Transportation tributary adjacent
- Landing place (confluence of tributaries optimal)
- Marshes nearby (for waterfowl, shellfish, reeds, tubers, muskrat, turtles)
- Brushy areas (for small game, berries)
- Primary or mixed deciduous forest (can be restored or restorable, for larger game, nuts, bark, firewood)

- Uplands that could support hunting activities (are supporting a variety of wildlife)
- Proximity to known American Indian community (documented through ethno- history or archaeology; may be Contact-era or later)
- Protection from wind
- High terrace landform
- Areas of recurrent use for food or medicine acquisition (shell middens, plant gathering sites)
- Areas of recurrent use for tool acquisition (quarries)
- Places with high probability for ceremonial or spiritual use (even if not documented), or known by a descendent community to have been used for ceremony
- Trails used as footpaths
- Parcels that can be interpreted as supporting activities of Indian community sustainability, such as trading places or meeting places
- Places associated with ancestors, or part of a descendent community's past known through tribal history, ethno history, or archaeology

Any given ICL should include many of the above features. However, some of these criteria may not apply to all locations (e.g., marshy areas) or may need regional refinement (e.g., resources used for tools). There may also be ICL criteria specific to a given location that is not included in this list, or the above criteria may be refined for a location to reflect, for example, particular resources necessary for food procurement or tool acquisition. In such cases, we suggest supplementing Beacham's criteria, not by providing an additional list, but by outlining a methodology for developing regionally specific criteria.

In order to develop criteria for the Nanticoke River watershed ICL study we undertook a simple text analysis—critically examining ethnohistorical accounts, scholarly secondary sources, and transcripts of interviews and oral histories conducted with descendent community members. We based our analysis in grounded theory. Grounded theory gives priority to developing propositions based on research rather than to verifying analytic propositions (Emerson, Fretz and Shaw 1995: 143). The text, be it a scholarly book or a quote from a descendent community member, is the guide, and the grounded theory approach recognizes this guide as the way to both

identify emerging text-based concepts and categories, and to link these concepts (Bernard 2006: 492). Additionally, text analysis may provide supporting evidence for the inclusion of

Beacham's criteria above.

In practice, we reviewed texts relevant to our study area and coded, or highlighted, instances where the author or speaker referred to something that would help define an ICL. For example, in an interview conducted with Chief William Daisey of the Nanticoke Indian Tribe (conducted 9 August 2013 with Kristin Sullivan and Cindy Chance), he stated:

> The Nanticoke are tidewater people, like to be near the water, fishing, clamming, all those things that relate to the water. And also, we have berries and stuff many times close to the water. To survive, that was the way we lived during the summer, basically. We used to hunt and trap. Hunting and trapping was basically a winter survival method. You moved into the woods for trapping. Some berries too, obviously - nuts, berries. You lived off the land.

In this passage we can see that the Nanticoke people required tidewater for fishing, plants nearby the water for food, and inland forest for wintertime hunting and trapping. Similarly, Rountree and Davidson (1997: 29) describe the Late Woodland period (ca. 900CE - 1600CE) American Indians of the mid-Atlantic as needing "fresh water, high ground for foraging, edible plant foods in the upstream marshes, and multiple ecological zones with different fish in different areas." Rountree and Davidson (1997) here corroborate Chief Daisey, as do others in the literature on indigenous people of the Nanticoke River watershed. Grounded theory suggests that we can take this evidence and build a case for the inclusion of these features in ICL criteria. Nanticoke River watershed ICL criteria evolved to include:

- Navigable water for ease of travel or escape, including a confluence of rivers in multiple locations
- Fresh water sources (e.g., springs) nearby for drinking
- Access to tidal salt and brackish water for a variety of fish and shellfish for food and trade goods materials (e.g., shells for jewelry)
- Good agricultural soil (e.g., corn-growing soil)

- Inland forest for supplies (e.g., trees, medicinal plants), food (i.e., forest animals and plants), and winter settlement
- High ground or ridges for village sites (noting that "high ground" may be only a few feet higher than nearby low ground)
- Marshes and brush areas for foraging and hunting small game
- Support from archaeology, ethnohistorical, and other scholarly accounts.
- Support from a descendent community's oral history.

Text analysis reveals other characteristics as well, which may not specifically define an ICL, but that help with the interpretation of ICLs. For example, Rountree and Davidson (1997) state that archaeological evidence of defensive palisades and ossuary burials seem to indicate chiefdoms (29), and that many Indian towns on the Maryland and Virginia's eastern shore were "settlements only in a loose sense," consisting of "a scatter of houses interspersed with cultivated gardens and overlooked by groves of trees…" (33). As such, this method helps build support for the inclusion of particular criteria, and allows for a fuller understanding of the ICL.

Methodology

Through our pilot study of the Nanticoke River watershed ICL, and through communication with a variety of subject- and geographical region experts including archaeologists, geographers, and historians, we developed a list of replicable steps, which comprise methodology employed for the delineation of a Captain John Smith NHT ICL. These are as follows:

1. **Identify a geographic area of interest.**

    This area will be related to the Captain John Smith NHT, but may also be of interest to organizations such as state-level natural resource conservation agencies, or cultural resource conservation partners. For the purposes of our study, we chose the Nanticoke

River watershed due to the availability of existing research, interested partner

organizations, abundance of natural resources, and presence of descendant communities.

2. **Develop a list of project goals and preferred project outcomes.**

An ICL study may have several goals, and people working on the ICL study may have

varying preferred outcomes, all of which will hone the project focus. These might

include land conservation, interpretation for tourism purposes, and increased visibility of

or education about American Indian tribes or Captain John Smith's travels. In the

Nanticoke River watershed ICL study, land and water protection for conservation

purposes was emphasized. This resulted in focus on landscapes evocative of the

historical Nanticoke River watershed, for example those with large areas of vegetation.

3. **Define "indigenous" and "indigenous cultural landscape" for the purposes of the project.**

Many interpretations of these terms exist in both scholarly literature and popular

imagination. Definitions should be clearly stated, and any constraints or limitations made

explicit. For example, the time period of consideration is important to define: does the

ICL study examine only early 17th century life, or is the evolution of an ICL pre- and

post-contact to be considered?

4. **Visit the study area to get a sense of and document the landscape. Ideally this will be with members of a descendent community or expert with knowledge of the landscape.**

   Visiting a landscape provides a sense of place, and a stronger grasp on important features of the landscape than attained by simply reading about a place. One can get a feel for what can be seen from important vantage points, the movement of waterways, see regional wildlife, and otherwise experience an ICL in a way that heightens the understanding of that place. This experience can be made richer with narration by someone familiar with that landscape, who can point out important features. Furthermore, being in an ICL with a descendent community member allows for more natural conversation about that landscape.

   For the Nanticoke River watershed ICL study we took four driving tours with members of descendent communities, attended a descendent community pow-wow in the watershed, and made a trip on our own to the watershed, specifically the area surrounding Vienna, Maryland. We documented much of this travel with photographs, and recorded and transcribed conversation.

5. **Develop initial criteria for an ICL.**

   Initial criteria are necessary for initial mapping efforts, although they will likely evolve as knowledge of the study area increases. We began with Deanna Beacham's (2011) criteria, listed earlier in this section.

6. **Develop an annotated bibliography of sources related to the geographic region and Native communities involved, to include: 1) academic publications, 2) materials from archive repositories, e.g., maps or journals, and 3) additional, region-specific documents.**

   Information relayed in this bibliography provides support for inclusion of some locations in an ICL. Further, sources annotated will likely provide criteria, and will be helpful for understanding the people of a region and for the interpretation of landscapes.

7. **Engage Native communities related to the area of interest and consult the appropriate representatives regarding: 1) potential involvement of the tribes, 2) areas the tribes would like to include in the mapping and representation, 3) any concerns the tribes have with the ICL project and process, 4) preferred outcomes.**

   Descendent communities should be engaged from the beginning of an ICL study to determine the extent to which they want to participate in the study process. When appropriate, representatives should be invited to mark up a map of the area, indicating features important to an ICL from their perspective; to provide tribal history and oral history when available; to provide feedback and guidance regarding mapping; and to otherwise collaborate with researchers throughout the study process.

   Under the guidance of Deanna Beacham and Virginia Busby we contacted two descendent communities for the Nanticoke River watershed ICL study, as well as one tribe related to a descendent community. We are very fortunate that tribal leaders want to participate in the study. They provided four tours of the region, accounts of the tribes' histories, and voiced concerns about the project as well as preferred outcomes. Two of the primary concerns raised were about appropriate representation of sacred landscapes,

and the desire for continuing participation in the ICL study, representation, and management process. One of the preferred outcomes is conservation of sacred landscapes.

8. **Engage regional experts, including archaeologists, historians, geographers, and others with academic and practical knowledge of the geographic area in question.** Topical and regional experts should be involved in preliminary mapping of places of interest and the location of relevant texts, maps, and other records. Experts should take part in mapping features important to the ICL, voice concerns about the ICL project and process, and determine their preferred outcomes.

For the Nanticoke River watershed ICL study we were fortunate to work with experts such as independent archaeology contractors, archaeologists at state agencies and universities, historians, conservation specialists at state agencies, and a geographer from the National Museum of the American Indian. We conducted or participated in six meetings between June and November 2013 with various groupings of these experts at meetings held at the NPS Chesapeake Bay office, off-site locations such as the Maryland Historical Trust library, and online. During four of these meetings experts were asked to mark up maps, and refine maps created, in order to determine locations of ICL features. They were also asked to express any concerns with the project, desires for project outcomes, and to review criteria and methodology. Agencies such as the Maryland Department of Natural Resources share common goals with the NPS and expressed an interest in utilizing the ICL for conservation purposes. Several archaeologists expressed concerns about drawing attention to artifacts and conserving cultural resources.

9. **Conduct text analysis of relevant archival material and interview transcripts for places of importance and criteria for ICLs in the region.**

Texts that might be included in such an analysis include archaeological reports, ethnohistorical documentation such as published accounts, and testimony from Native participants.

10. **Create an annotated list of places, waterways, and landscapes of importance in the ICL.**

It is important to have support for the inclusion of places in an ICL. For the Nanticoke River watershed ICL study we created a spreadsheet of place names mentioned in a selection of representative texts, and by descendent community members. We filled in information from these sources, matching place names with quotes and information about the places, to act as support for their inclusion in the ICL, and for use in future interpretation.

11. **Finalize ICL criteria.**

Using information gathered in step #9, and in cooperation with topical and regional experts including descendent community members, refine the list of criteria for inclusion in the study area.

12. Gather layers of information helpful for mapping.

These data layers will be helpful for assessing which landscapes have the highest

probability of being an ICL. Layers may include:

a. information provided by informants such as descendent community members,
   archaeologists, or others who have engaged with working maps of ICL features.

b. land-cover data.

c. information regarding ownership of land, public lands, and public access points to
   waterways or other potential recreational resources.

d. relevant archaeological survey data conducted in the study area

e. data that may be helpful suggesting location of ICLs, such as topographical maps
   of the study area and maps of soil quality data

f. mapped Indian reservations or other historical landscape features

When overlaid, these data will create a picture of potential ICLs, as well as potential

landscapes in which preferred outcomes might be carried out, for example conservation

or interpretation. We were fortunate in our study to have the cooperation of the Maryland

Historical Trust, which provided valuable cultural data layers; and the Delaware

Department of Natural Resources and Environmental Control, and Chesapeake Bay

Program, which both provided valuable natural resource data layers.

13. Create a map of potential ICLs, or a high-probability ICL area, in the region. Data

for this come from steps 7, 8, and 10. The process of and challenges involved with

representing ICLs are detailed in the following section, "Representing Captain John

Smith Chesapeake National Historic Trail Indigenous Cultural Landscapes". We are

fortunate to have worked with NPS Chesapeake Bay GIS experts Matt Jagunic and Andy

Fitch on this step. Jagunic and Fitch turned experts' and descendent community members' markings into GIS shape files, and compiled layers of data from partner organizations, for the purposes of creating a comprehensive high-probability ICL area map.

14. **Continue to engage with those who have participated in the project to this point, to assess the map and refine locations and representation methods as necessary.** Everyone whose markings are represented in a potential ICL map should have the opportunity to refine interpretations of their work, as human error is likely. Many changes were made during the course of our study that reflected refinement of site locations and sizes, addressed the naming of locations, and addressed representation of sensitive locations such as burial grounds and archaeological excavation sites.

15. **Create a narrative report regarding the mapped high-probability ICL area** A narrative report of the ICL study fleshes out the process, challenges, and opportunities involved with the ICL project. Further, it serves as documentation of support for the creation of the ICL.

Representing Captain John Smith Chesapeake National Historic Trail Indigenous Cultural Landscapes

In this section we will explain the process we used to represent the Nanticoke River watershed high-probability ICL area. We hope this will act as a guide for future researchers attempting to document and map large landscapes including a great deal of important cultural and natural resource data—noting successful methodology, as well as challenges faced.

For the purposes of the Nanticoke River watershed ICL study, we opted to represent ICL features and a high-probability ICL area with a conventional map created using GIS software. There are several practical reasons for starting in this way. These include ease of communication with partner organizations able to provide information about the landscape via their own GIS files, and availability of resources. GIS allowed us to create a map that included all of the following information as shapes, outlines, and patterned areas:

- Sites, waterways, paths, and locations of importance relayed by descendent community representatives

- Sites, waterways, paths, and locations of importance to the Nanticoke peoples' story as relayed by archaeologists with topical expertise

- Approximate historical boundaries of Indian reservations

- Soil quality with respect to probable historical corn-growing soils (suggestive of nearby occupation)

- Areas thought to be high probability areas for indigenous occupation or use, and on which archaeological surveys were conducted

- Land-cover data suggestive of areas evocative of historical landscapes, including o Vegetation:

  - Forests (deciduous, evergreen, and mixed)

  - Shrub Scrub

  - Grassland herbaceous cover

  - Woody Wetlands

  - Emergent Wetlands o Agriculture:

  - Pasture and Hay

  - Cultivated Crops o Developed Lands:

  - Developed open space

  - Low, medium, and high intensity urban space

  - Areas of probable historical corn-growing soil

- Public lands and conservation easements

While GIS proves to be a useful tool, there are limitations to its ability to represent some features or attributes of a landscape. Primary among these may be the inability to visually represent the permeable nature of an ICL. Historically, there are no hard borders demarcating an ICL; boundaries surrounding indigenous landscapes were and continue to be porous, and likely shifted over time. We encourage the use of blurred boundary lines, which are not easily made using GIS, as well as interpretive approaches that evoke an understanding of dynamic and imprecise historical boundaries. We do recognize that the demarcation of boundaries may be necessary for administrative purposes such as partnering with state agencies for acquiring conservation easements. On the other hand, an important part of the interpretive process regarding ICLs might

well be providing explanations of cultural limitations and variation associated with representing and placing landscapes.

Representing sensitive information presents another challenge. In the course of our research we have been entrusted with the locations of burial grounds, ceremonial grounds, and other locations of special value to the Nanticoke peoples. For the purposes of mapping we identified all these locations as the names provided without indication of cultural value, or as "Indian sites," so as to not draw attention to them. In most instances, we have placed generic shapes on the site locations that do not reveal specific points of sensitive information. It is a challenge, nevertheless, to present this information broadly while retaining the significance of a sacred location such as a burial ground.

Additionally, the wealth of information we attempt to represent in our Nanticoke River watershed ICL study area rendered the map extremely difficult to read, especially at a small scale. The following methodology is helpful for determining high-probability ICL areas when working with a map including large amounts of data:

1. Overlay the following information and create a boundary around these features:

   a. Cultural resources, including specific locations such as village sites, but also areas of travel (e.g., paths or important waterways), areas of spiritual or ceremonial significance, archaeological survey data, reservation boundaries, or other data deemed significant through research.

   b. Natural resources necessary for or suggestive of ICL features or criteria (e.g., marshes for hunting, high ground for settlement, rivers for travel)

2. Visually assess the cultural and natural resource layer, and create a line of demarcation surrounding the areas most likely included within an ICL (i.e., a line around all the

cultural and suggestive natural features). This provides a high-probability ICL area, or an area in which ICLs will likely be found.

3. Overlay the high-probability ICL area boundary on top of land-cover data layers, with the cultural and suggestive natural layers removed, so as to remove unnecessary visual noise while retaining a sense of the potential landscape.

The process of overlaying the high-probability ICL area boundary on land-cover data reveals those areas with a high probability of being evocative of historical landscapes. These are the areas that the NPS and partner organizations will likely want to focus on for the purposes of future conservation. Additionally, it may be useful to overlay the high-probability ICL area boundary on top of public lands data layers. This will determine areas presently under some level of conservation, and areas that may be good candidates for interpretation in tourist recreation areas.

Another possible option for utilizing the data gathered is to create a heat map of the highprobability ICL area. Such a map, created using GIS or other analytic software, depicts "hot spots" of information—those places designated as having more value, or where meaningful points or landscapes overlap—based on criteria decided upon in advance. This type of map will have significant visual impact, clearly showing areas of high value using color saturation, rather than depicting potentially confusing boundary lines and shapes that may be difficult to decipher. If this technique is to be employed, we urge the NPS to consult with a range of experts and informants such as those engaged in this study, to help determine the values to be assigned to resources such as scholarly information, ethnohistorical data, archaeological evidence, natural resources, and oral history

Conclusions and Recommendations

This report describes an initial effort intended primarily to establish relevant ICL criteria, and to develop and field test a methodology for identifying potentially useful ICLs on the basis of these criteria. The work for this project was carried out with close cooperation and participation by our research team and the ICL team at the NPS Chesapeake Bay. We are appreciative of the many insights they provided during the course of this study and acknowledge that the preceding report, as well as the following recommendations, are a result of this joint effort.

While we trust that the work described in this report will be useful in subsequent efforts to broaden our understanding of ICLs associated with the Captain John Smith NHT, it must also be recognized that each such potential landscape will present its unique characteristics and require adaptations of the approach described in this report. As the effort to utilize the ICL concept continues we hope the following recommendations will remain under consideration.

Recommendations:

1. **Clearly Define ICL Study Terms and Goals**

   We have found throughout the course of our study that the broad definition of "indigenous cultural landscape" in the CMP, and language regarding ICLs in the scholarly literature and popular imagination, easily lead to multiple interpretations of what an ICL actually is. Common questions voiced by participants included: Who are the people being addressed or considered? What is (or are) the time period(s) of study? What are the end goals of the ICL study, or what will the NPS do with this concept? Answering these questions early on in an ICL study will help guide partners and consultants in

identifying ICLs that are consistent with NPS goals and improve opportunities to utilize the ICL concept in mutually beneficial ways.

2. Consider ICLs in Developed Areas

It is important to note that many of the locations associated with the historic lifestyle and settlement patterns of American Indian peoples are presently in developed areas. This situation does not, however, make highly developed land any less a part of an ICL than nearby areas of protected vegetation, or landscapes evocative of historical use. Furthermore, experiences consistent with NPS recreational and interpretive goals can be had in urban places as well. These spaces may be well utilized in the interpretation of ICLs that are no longer immediately evident in the present day landscape, and they may contribute to a larger view through which the public might more fully understand the dramatic changes that have been visited upon many indigenous landscapes.

3. Continue A Holistic Approach to Interpretation

We recommend that the NPS continue ICL studies with an eye toward representing the evolution of settlement in and traditional uses of landscapes. Rather than describe the indigenous peoples encountered by Captain John Smith, confining study to the early 17th century, we believe this is an outstanding opportunity to enrich the historical account of the Native peoples of the Chesapeake Bay watershed—exploring, not only their lives in the early 17th century, but the changes that followed European contact. This interpretation should include both the struggle of Native communities against their oppression as well as an accounting of the ways in which descendent communities have adapted to the present circumstances.

4. **Continue Collaboration and Communication with Partner Organizations**

   There is a need for greater centralization of information about ICLs in the region, to both pool resources and share knowledge. In some instances overlapping work has been undertaken by multiple agencies or organizations with little coordination of effort. The NPS has begun to rectify this situation by hosting ICL-related webinars and meetings, encouraging communication between interested organizations. We recommend the continued development of this sort of communication and collaboration.

5. **Continue Collaboration with Descendent Communities After the Study** There exists an unfortunate history of researchers gaining knowledge from Native communities and failing to continue engagement after research concludes. We hope the ICL concept will be understood as representative of a dynamic process and used to build a mutually beneficial relationship with descendent communities, providing a richer understanding of the landscape in the process.

6. **Recognize the Dynamic Nature of ICL Discovery and Representation** The recommendation made directly preceding this can be expanded to include recognition that the construction and representation of ICLs must remain a dynamic process subject to the interests and concerns of a variety of actors and stakeholders.

   Differences of view as to how any particular ICL might be delineated or described are almost inevitable. These differences, encouraged rather than disputed, have the potential to enrich public understanding of the resilient properties of both natural and cultural landscapes.

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　　1980 Symbolism and the Cultural Landscape. Annals of the Association of American Geographers 70(4):459-474.
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APPENDIX A: ANNOTATED BIBLIOGRAPHY OF THE CULTURAL LANDSCAPE CONCEPT

Bryan, P.W.
1931   The Cultural Landscape. Geography 16(4):273-284.
Cultural landscapes are understood here as objective expressions of human/nature relationships. This paper serves as an early exploration of the concept. It is based on the idea that human activity adapts and modifies nature—thus changing the landscape—in order to satisfy human desires, or "demand for satisfaction" (274). A classification of cultural landscapes is created based on these needs or demands, including landscapes that are indicative of shelter, materials for food, materials "from the crust" (e.g., quarrying), transport, settlements (to include landscapes used for spiritual and material needs), community services, recreation, and aesthetic experience. Bryan further suggests that cultural landscapes have an "essentially impermanent character" (282) due to "changes in man's activity," including activities related to the needs above.

Buggey, Susan
1998   Historic Landscape Conservation in North America: Roaming the Field Over the
**   Past Thirty Years. APT Bulletin 29(3/4):37-42.**
Buggey traces the evolution of interest in historic landscapes within the field of historic preservation, from the treatment of historic gardens to the concept of cultural landscapes. Several factors contribute to changes in landscape preservation in the 1990s: the historic preservation movement in the 1970s; increased attention to environmental preservation, as well as an increase in archaeological expertise in the 1980s; and a combination of other factors such as the economy, the grown of ecological and cultural heritage tourism, and the changing role of government agencies such as the national park systems in Canada and the United States. Buggey documents events that changed the face of landscape conservation, such as the UNESCO World Heritage Convention in 1992, as well as the creation of the Olmsted Center for Landscape Preservation the same year. She predicts that cultural landscapes will become increasingly important for focusing on both the cultural and natural attributes of a place, and suggests that the cultural landscape as a concept "acknowledges historical process more fully in the identification of landscape values and moves landscape treatments nearer to natural-resource management" (42). She suggests that conservation approaches "must respond primarily to the community's needs and values rather than to the expert's craft or the outsider's vision" (42). As heritage (rather than historic) preservation becomes more community-focused, preservation professionals will necessarily become more facilitators rather than experts (42).

Chiarappa, Michael J.

2005   Great Lakes Commercial Fishing Architecture: The Endurance and Transformation of a Region's Landscape/Waterscape. *In* Building Environments: Perspectives in Vernacular Architecture. Kenneth A Breisch and Alison K. Hoagland, eds. Pp. 217-232. Knoxville, TN: University of Knoxville Press.

Michael Chiarappa describes the cultural landscape of commercial fishing that has been in place on the Great Lakes since the late nineteenth century, focusing on four specific sites on Lake Michigan. He prefaces this discussion with descriptions of how Ottawa and Chippewa communities altered the landscape for fishing before and after European-Americans arrived and how indigenous individuals transitioned from subsistence fishers to wage laborers in the fishing industry in the beginning of the twentieth century (220). Turning to the four sites he has selected, Chiarappa details how the fishing industry has changed over the years, responding to shifting ecologies and economies, and how these changes have shaped the landscape in the four sites he examines. Many of the local business owners who manage buildings in these localities actively curate distinctive commercial fishing architecture, no longer as utilitarian structures, but as "'Historic Fishtown[s]'" (229). Chiarappa argues that the maintenance and interpretation of these cultural landscapes in the face of a changing commercial fishing industry demonstrates the communities' "desire to survive their political and ecological marginalization" (229). In this way, he frames the maintenance of culture landscapes in which features no longer serve their original utilitarian purposes as political acts that signal individuals' desires to maintain identity.

Conzen, Michael P.

1990 Introduction. *In* The Making of the American Landscape. Michael P. Conzen, ed. Pp. 1-8. Boston, MA: Unwin Hyman.

In this introductory chapter, Conzon discusses the term landscape, illuminating some of its historical uses. For example, the term has been used to indicate ownership and inhabitance in the Middle Ages, while "Dutch and Italian painters used it to mean a representation of scenery, either in general or with respect to a particular view" (1). Conzen points out the duality of landscape, explaining how it can be viewed as object and subject, from an insider and an outsider perspective, and as natural and cultural. Beginning to break down the natural verses cultural divide, he points out that few, if any, landscapes exist today that have not been shaped by human activity in some way. Conzen previews the following chapters of the book. Most relevant for the topic of indigenous cultural landscapes, the second chapter, which is authored by Karl Butzer, broadly outlines the expansive history of Native American groups shaping the landscape before Euro-American dominance and explores traces of Native American presence that exist in United States landscapes in the present (6). In his analysis of surviving Native American landscape features, he includes place names and physical features—mounds in the Southeast and pueblos in the Southwest (49). In the fifth chapter, Pierce Lewis describes how British settlers established landscape traditions along the Atlantic seaboard and how these patterns influenced national landscape traditions as well (7). While focusing on immigrant rather than indigenous groups, Michael Conzen explores expressions of ethnicity on the landscape in the twelfth chapter (8).

Cook, Albert

1998   Space and Culture. New Literary History 29(3):551-572.

This article is an exploration of the concept of space and the indications of space and time in language, which the author shows to be different from culture to culture. While the article is largely concerned with understandings of space in historical and contemporary literature, the author points out the differences in ways various cultures' members experience their selves visà-vis spaces, including landscapes. Cook argues that the language of place-making or placenaming affects the experience of a place.

Cowley, Jillian P.

2011 Knowledge All Around You: Cultural Landscapes Management from a Landscape Point of View (Session Introduction). *In* **Rethinking Protected Areas in a Changing World: Proceedings of the 2011 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites***.* **Samantha Weber, ed. Pp. 405-406. Hancock, MI: The George Wright Society.**

Cowley introduces the papers presented as part of session on cultural landscapes organized at the 2011 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites. Cowley asserts that there is a strong connection between landscape and identity, pointing out that landscape also plays a role in negotiations of class, race, and gender in specific local contexts. Other papers included in this session have been included in this bibliography. See Beacham 2011in the "Indigenous Cultural Landscape Concept" section and Cowley 2011, Goetsch 2011, and Schuster 2011 in the "Cultural Landscape Management, Policy, and Legislation" section.

Cronon, William

1993 The Uses of Environmental History. Environmental History Review 17(3):1-22.

Cronon addresses the usefulness of environmental history, asking which audiences this discipline is attempting to reach and why. He points out examples of how examining history can inform environmental management and conceptions of nature in the present and future. The environmental movement has tended toward "ahistorical" impulses, seeing urban-capitalist society and its members' impulses for consumption in direct opposition to "nature," which is seen as "stable, balanced, homeostatic, self-healing, purifying, and benign" (10). When using this frame, proponents of the environmental movement have failed to historicize current conditions by examining how ecologies and human societies shape each other overtime, rather than always serving as opposing forces. Recognizing that all of human knowledge about nature is culturally constructed, Cronon also emphasizes that the natural world exists apart from out conceptions of it, although humans will never be able to see it except through cultural lenses.

Cronon, William

1996 The Trouble with Wilderness: Or, Getting Back to the Wrong Nature. Environmental History 1(1):7-28.

Cronon examines the history and current usage of the "wilderness" concept in American and western European contexts. As late as the 18th century, wilderness was widely associated with wasted space that had no value for humans. More recently, wilderness has also been re-imagined and experienced as "sublime," a "frontier," a site of "freedom," and a site of "individualism" (16). Cronon suggests that the "uninhabited" wilderness of North America only seems to exist in

twentieth century retellings of United States history as a result of the removal of Native American populations (15-16). Cronon emphasizes how humans tend to think about nature in dualities—something is either natural or cultural, wild or tame—and argues that, instead, humans should "embrace the full continuum of natural landscape that is also cultural" (25).

Cusack, Tricia
2007   Introduction: Riverscapes and the Formation of National Identity. National
Identities 9(2):101-104.
This article serves as an introduction to a special journal edition regarding riverscapes. Riverscapes are said to "refer both to the river itself and its human fashioning and to secondorder representations such as painting" (101). The author points out that many national and regional capitals are built around and are closely identified with rivers (e.g., Thames), and that rivers have served as symbols of national vitality, as parts of creation myths, and as symbols of the course of the uninterrupted flow of national history. Cusack points out that national identities need to be built and maintained, and she discusses the place of river imagery in this process. Some of the other authors in this special journal deal with rivers as territorial and symbolic boundaries (Havrelock), historical narratives used by river restoration activists (Baidya), and appeals to the cultural and environmental heritage of riverscapes (Taylor).

Eben Saleh, Mohammed Abdullah
2000   Value Assessment of Cultural Landscape in Alckas Settlement, Southwestern Saudi
Arabia. Ambio 29(2):60-66.
The author discusses cultural landscapes in southwestern Saudi Arabia. He describes cultural landscapes as "any area of land that has responded to the interaction of cultural and natural forces and thus, resulted in the emergence of a very different landscape spatially, visually, and emotionally" (62). Visual characteristics of cultural landscapes include natural elements (e.g., quarries, pastureland, forests, agricultural landscape elements (e.g., irrigated fields, cultivated property), and built landscape elements (e.g., towers, minaret, purpose-built open-air spaces). Eben Saleh cautions that value assessments of visual characteristics are highly subjective. He emphasizes the dynamic nature of landscapes: "a new vision of the cultural landscape should reflect human experience, expectations, and perceptions. It should not merely reconstitute versions of the past, but reshape the present around new ecological relationships. Reconstitution of the cultural landscape should be understood both as a process and a product" (66).

Horton, Tonia
2004 Reading the Cultural Landscape at Dyea, Alaska. *In* Protecting Our Diverse
Heritage: The Role of Parks, Protected Areas, and Cultural Sites. David Harmon,
Bruce M. Kilgore, and Gay E. Vietzke, eds. Pp. 177-181. Proceedings of the 2003
George Wright Society/National Park Service Joint Conference. Hancock, MI: The
George Wright Society.
 Horton details the process of researching an historic town site in Alaska's Klondike Goldrush National Historical Park. Emphasizing that landscapes cannot be frozen in time, she calls for a focus on documenting *processes* of change in cultural landscapes rather than trying to preserve or restore a specific, imagined time period. She points out that the contemporary construction of engineered logjams in the Taiya in an effort to curb erosion of the Dyea town site is a

continuation of human interaction with the environment and a part of the cultural landscape's history, not apart from it.

Hufford, Mary
1994 Introduction: Rethinking the Cultural Mission. *In* Conserving Culture: A New Discourse on Heritage. Mary Hufford, ed. Pp. 1-11. Urbana, IL:University of Illinois Press.
Hufford introduces the chapters of this edited volume and calls into question divisions between "cultural" and "natural" that have been expressed in heritage management policies. Hufford points out that landscapes and species—routinely classified as "natural" forms—are often culturally important as "touchstones to community life and values" (2). This distinction and a distinction between tangible and intangible aspects of heritage are further explored in individual chapters. Calling for a shift from "preservation" to "conservation," Hufford brings attention to "the dynamic nature of the past itself and its multiform manifestations and uses" (6-7). In the remainder of this book, three chapters stand out as particularly relevant for discussions of indigenous cultural landscapes. In the third chapter, Downer, Roberts, Francis and Kelley discuss the political nature of history and draw on examples from the "traditional" history of Navajo groups. They use these examples to illustrate how ethnographic documentation of traditional history can aid in determining which places should be protected (as a result of their traditional meanings and associations) and which ones can be used in development projects. In the ninth chapter, Howell further explores the distinction between natural and cultural resources in the context of the United States National Park Service, pointing out challenges to that distinction through policy shifts. Staub, in the 16th chapter, focuses on the Pennsylvania Heritage Parks Program. He highlights the concept of communities reclaiming places and links reclamation of industrial sites to both environmental concerns and local cultural conservation.

Ingold, Tim
1993 The Temporality of the Landscape. World Archaeology 25(2):152-174.
Ingold sees the landscape as something that both tells and is a story; it "enfolds the lives and times of predecessors who, over the generations, have moved around in it and played their part in its formation" (152). Engagement with the landscape is an act of remembrance, a perpetual giveand-take with an environment "pregnant with the past" (153). Ingold explores here the concepts of landscape and temporality. He argues that temporality exists in a pattern of dwelling-activities he calls "the taskscape." Further, Ingold suggests that landscapes are not simply land, space, or nature. Rather, they are lived places not entirely distinct from one's self; landscape is "the world as it is known to those who dwell therein…" (156). Landscape is different from environment in that the landscape concept puts emphasis on form rather than function. To Ingold "landscape" is a sort of embodiment or incorporation rather than an inscription. It is created in the interaction of person and place, and "meaning is there to be *discovered* in the landscape, if…we know how to attend to it" (172).

Jackson, John Brinckerhoff
1984 Discovering the Vernacular Landscape. New Haven, CT:Yale University Press.
Jackson provides several definitions for the word "landscape," by drawing on its origins and shifting meanings. He suggests the following as a contemporary definition for landscape: "a composition of man-made or man-modified spaces to serve as infrastructure or background for our collective existence" (8). Clarifying his use of the word "background" in this definition, Jackson continues, "[background] means that which underscores not only our identity and presence, but also our history" (8). In this way, Jackson assigns landscape a pivotal role in history, identity-formation, and human existence in general. He emphasizes that landscapes are "shared realit[ies]" (5), while also describing how landscapes are necessarily perceived from specific points of view. Jackson explains that his interest in landscapes centers on how they are organized and identified on different terms by various groups of people who have differing social or religious attitudes. In particular, he focuses two contrasting ways of organizing space: "vernacular" landscape verses "political" or "aristocratic" (149) landscape. In describing the concept of vernacular landscape, Jackson specifies that vernacular landscapes are associated with "vernacular cultures" (149). He defines vernacular cultures as "way[s] of life ruled by tradition and custom, entirely remote from the larger world of politics and law" (149) and highlights that vernacular cultures are based on group membership. In keeping with this definition, Jackson specifies that vernacular landscapes have little or no evidence of "political organization of space," defining political landscape features as those "spaces and structures designed to impose or preserve a unity and order on the land" (150). Political or aristocratic space is defined by ownership. It can be inherited by descendents. It has recognized boundaries, and the owner or ruler exercises power over enclosed space (149). Ultimately, Jackson insists that landscape organization must be seen in terms of power relationships.

Korr, Jeremy L.
2002 Appendix A: Cultural Landscape Analysis Fieldwork Model. *In* Washington's Main Street: Consensus and Conflict on the Capital Beltway, 1952-2001. Pp. 474-510. Ph.D. dissertation, Department of American Studies, University of Maryland, College Park.
Korr puts forth a model for analyzing and describing cultural landscapes. He argues that other models for analyzing material culture fall short in cases in which landscapes are units of analysis. Expanding on these models, he recognizes a "dynamic triangular relationship" (509) between humans, artifacts (non-human objects or features modified by humans), and non-human nature. He explains that humans, artifacts, and nature influence each other and that the relationships between these three categories of actors are continually changing, shaping and re-shaping landscapes. Rather than specific illustrations of how this model might work in practice, Korr provides a series of questions that researchers should ask themselves as they go about describing specific cultural landscapes. He asks prompts them to describe the ecology, physical formations of non-human nature, environmental history, built environment, people living in and passing though the landscape. Pushing further, he prompts researchers to then examine the relationships between the members of the three categories (humans, artifacts, and nature). For example, how have human modifications of the environment influenced the local ecology? How are human values reflected in the built environment and the ways in which they navigate the space?

Ultimately, Korr asserts that analysis of the relationships between humans, nature, and artifacts can provide clearer insight into "humans' beliefs, values, and conventions" (510).

LaBianca, Øystein S.
2006   Tells, Empires, and Civilizations: Investigating Historical Landscapes in the Ancient Near East. Near Eastern Archaeology 69(1):4-11.
LaBianca herein constructs a diachronic framework for studying multi-period archaeological historical landscapes, including "tell sites" (mounds built up by generations of human settlement, built on top of one another) in the ancient near east. The author focuses on local food systems, by identifying component parts of the system (e.g., natural resources, religious beliefs, use rights, division of work), how the parts interact, and mechanisms that produce change in the system. From this one can learn whether a settlement might be occupied year round, and one can come to understand settlement based on outside factors such as access to food affected by political interventions. Her focus on food systems makes it clear that cultural landscapes are affected not only by those immediately present within it, but outside influencing factors as well.

Lane, Belden C.
2001   Giving Voice to Place: Three Models for Understanding American Sacred Space. A Journal of Interpretation 11(1):53-81.
Lane writes about the processes by which humans come to think of certain places as unique and meaningful, using his own experiences at Medicine Wheel in central Wyoming to illustrate his points. He offers three approaches to defining sacred places. The ontological approach draws on creation stories and sees places as having intrinsic meaning, completely separate from the nonsacred (57). The cultural approach assumes that places humans call "sacred" are cultural constructions and do not have any intrinsic qualities that make them sacred (57-58). The phenomenological approach recognizes the "place itself as a participant in the formation of experience" (58). Lane argues that the study of sacred places requires both "critical/ scientific" and "personal/ humanistic" perspectives (72). He suggests that the skills of poets are most useful in the interpretation of sacred places because scholarly language rarely allows authors to describe what they "know" in their bodies as they experiences places. Personal, private "constructions of place" should not be dismissed, but rather re-imagined as the place's "construction of the interpreter" (73). In other words, Lane asserts that places or landscapes are capable of influencing the way humans experience them. For example, a painting that an individual creates in order to represent how he or she experienced a place should be viewed not only as that individual's creation but also as the place's creation. Ultimately, Lane views places as participants in constructing the meanings that become associated with them, and he views people as capable of experiencing places in ways that we have not yet been able to share with others through language.

Lewis, Peirce
1983 Learning from Looking: Geographic and Other Writing about the American Cultural Landscape. American Quarterly 35(3):242-261.
Lewis reviews a selection of works on cultural landscapes by prominent geographers. He identifies a list of "ingredients" included in cultural landscape analysis, and he breaks down the approaches to viewing cultural landscapes into three categories. Lewis's categories are cultural

landscapes as "collection[s] of artifacts," cultural landscapes as "types," and cultural landscapes taken as "whole[s]" (249). Expanding upon the view of cultural landscapes as collections of artifacts, Lewis explains that researchers who use this lens focus on lists of artifacts removed from their geographic context. He critiques this approach, arguing that the objects selected to represent the landscape reflect the preferences of the researcher. For example, he notes that students of cultural landscapes tend to select "rural things over urban things" (257) to study. With respect to the view of cultural landscapes as types, Lewis describes researchers who use this approach as focusing on either "rural" or "urban" (258) landscapes, noting the characteristic of these landscapes types, and tracing their origins. Lewis is less critical of this approach, describing what he refers to as a "considerable literature" that treats both rural and urban landscapes as types. In describing the third approach—viewing cultural landscapes as wholes— Lewis asserts that the writings produced by geographers using this approach are "the greatest glories of geographic literature" (259). He explains that researchers using this approach necessarily take into account "the full range of tangible things and intangible ideas that weave together to produce any given human landscape" (259-260). Lewis advocates for more geographers to use this holistic approach in landscape description and analysis.

Mathewson, Kent
2009 Carl Sauer and His Critics. *In* Carl Sauer on Culture and Landscape: Readings and Commentaries. William M. Denevan and Kent Mathewson, eds. Pp. 9-29. Baton Rouge, LA: Louisiana State University Press.
Mathewson writes about Carl Sauer's critique of mainstream American geography's environmental determinism and about scholars who critiqued Sauer's ideas as the discipline of geography went through paradigmatic shifts. Sauer's interdisciplinary approach, which drew from history, anthropology, and the natural sciences, was viewed as driving geography in a misguided direction by some contemporary geographers. Sauer used a framework of history to approach questions of culture and landscape. Sauer's positions are relevant today as part of the "new cultural geography" that developed in 1980s, which rejects environmental determinism and cultural evolutionism.

Meinig, D. W.
1979 The Beholding Eye: Ten Versions of the Same Seen. *In* The Interpretation of Ordinary Landscapes: Geographical Essays. D.W. Meinig, ed. Pp. 33-48. New York, NY: Oxford University Press.
Meinig describes ten different culturally constructed frameworks from which humans view landscapes. His frameworks include "landscape as nature," "landscape as habitat," "landscape as artifact," "landscape as system," "landscape as problem," "landscape as wealth," "landscape as ideology," "landscape as history," "landscape as place," and "landscape as aesthetic." Meinig discusses the ideologies that sustain all of these frameworks and highlights how these frameworks are related and distinct. He states that his purpose in discussing these frameworks is to add clarity to discussions of landscape and to spur people to examine the frameworks that support their views and the views of others.

Melnick, Robert Z.
2000 Considering Nature and Culture in Historic Landscape Preservation. *In* Preserving
Cultural Landscapes in America. Arnold R. Alanen and Robert Z. Melnick, eds. Pp.
22-43. Baltimore, MD: Johns Hopkins University Press.
Melnick explores the relationship between culture and nature through the frames of "landscape
as teacher," "landscape differentials," and "semantic ecotones" (23). In considering landscape as
teacher, Melnick explains that humans learn the "grammar" of landscapes (35). He elaborates by
describing how in landscape systems, as in grammatical systems, some elements will respond to
the addition of new types of features in predictable ways. Once humans begin to learn the
systems of response—how different additions and subtractions of ecological, human, or built
landscape elements tend to shape the rest of the system—they are learning a landscape's
grammar. Melnick's "landscape differentials" frame highlights the extent to which nature has
many forms and allows for change and contradiction (32). The semantic ecotone frame allows
for a nuanced way of approaching landscapes as both natural and cultural (25). It borrows the
ecotone concept from ecology, in which ecotone marks "the transition zone between two
different plant or ecological communities" (24-25). Melnick observes that the false dichotomy
between nature and culture reinforces "adversarial relationships" (26) between people and
ecologies. His three frames work together to promote a more inclusive way to manage
landscapes.

Melnick provides an example from his work in California's Yosemite Valley, which he describes
through the "landscape of differentials" approach, noting that its usage patterns place it in both
urban and rural landscape categories simultaneously. Melnick also observes that managers
prioritize differing resources for conservation, in the case of management polices regarding the
meadowlands, for example. Often differences in conservation priorities are the result of training
in narrow disciplines. In the case of the Yosemite meadows, Melnick notes that managers either
privilege an American Indian cultural landscape *or* a natural landscape in their policies. Melnick
strives to promote an inclusive landscape management system that expands and breaks apart
"narrowly defined understandings of landscape values" (42).

Mitchell, Don
2003 Cultural Landscapes: Just Landscapes or Landscapes of Justice? Progress in Human
Geography 27:787-796.
Mitchell notes that geographers are interested in the production of landscapes and asks whether
geographers are also interested in the processes that contribute to the destruction of landscapes.
Making the argument that theories of landscape have to include concepts of capital circulation,
race, gender, geopolitics, and power, he calls for redefining landscape studies as a way to
explicitly further social justice agendas.

Porteous, J. Douglas
1990 Landscapes of the Mind: Worlds of Sense and Metaphor. Toronto: University of
Toronto Press.
Porteous notes that conceptions and descriptions of landscapes are overwhelming focused on
visual characteristics of places. Noting that all human senses gather information that can be
spatially mapped and associated with places, Porteous explores the concepts of "smellscape" and

"soundscape" (25, 47). He also highlights how landscapes can play parts in metaphors. For example, he writes about how the landscape may be conceptualized as a "body," "home," and other points of reference.

Prown, Jules David
1982 Mind in Matter: An Introduction to Material Culture Theory and Method.
        Winterthur Portfolio 17(1):1-19.
Prown proposes a definition for material culture, categories of material culture, and methodologies for analyzing material culture. As one category, he includes modifications of landscape, using architecture, city planning, agriculture, and mining as examples of this type of material culture. He points out a distinction between intentional and unintentional modifications of landscape. While Prown's step-by-step methodology for analyzing human modifications of landscape as material culture may indeed be useful, he does not discuss the influence of ecology or landscape on human culture. In this way, Prown's methodology might contribute to a broader methodology that recognizes ecologies and human cultures as shaping each other.

Rademacher, Anne
2007   Farewell to the Bagmati Civilisation: Losing Riverscape and Nation in Kathmandu.
        National Identities 9(2):127-142.
This article explores the "life" of an urban cultural riverscape and the ideas of state and nation associated with it. Rademacher suggests that connections between the ecological life of an urban riverscape and an assessment of the state of a nation point to "the ways that certain cultural meanings and social practices [are] thought to infuse…rivers with ecological functionality" (129). That is, even when a river is ecologically "dead" it may be culturally alive (important), and still understood as life giving. In the case in Kathmandu, a proclamation of the location's river's ecological death marks the perception of civil disaster; the river is a metaphor for the state of the nation. In this location cultural identity generally—regional and national political identity in particular—is tied directly to the river. Development in the Kathmandu Valley is associated with a perceived general cultural "forgetting" of the country's rivers and "forgetting" the state's responsibility to the rivers; the demise of the riverscape becomes a metaphor for the Valley's perceived demise writ large. The river becomes a sort of metonym of the society that shaped its surroundings.

Razak, Victoria
2007   From Culture Areas to Ethnoscapes: An Application to Tourism Development. The
        Journal of Regional Analysis and Policy 37(3):199-212.
Victoria Razak reviews other authors' contributions to the development of ways to conceptualize "culture areas," (199) including Carl Sauer's category of "cultural landscapes" and Arjun Appadurai's idea of "ethnoscapes" (202). She summarizes Appadurai's concept of "ethnoscapes" as "the landscape of persons who make up the shifting world" (202), noting that ethnoscapes become increasingly difficult to define as ideas of culture become less "territorialized" and "spatially bounded" (202). Razak explains that her "culture areas" model blends ethnographic approaches to authenticity and heritage with regional science approaches to tourism policy (211). She uses analysis of tourism policy in the Dutch Caribbean Island of Aruba as a case study to

show how her culture areas approach has been applied, and she suggests that the model is appropriate for other rural areas seeking to develop "locality-based tourism" (211).

Rowntree, Lester B. and Margaret W. Conkey
1980   Symbolism and the Cultural Landscape. Annals of the Association of American Geographers 70(4):459-474.

The authors suggest that storage of meaning in symbolic forms is fundamental to human life, and that aspects of nature are cultural products imbued with symbolic, cultural meaning. Cultural landscapes are places through which or in which people create environmental symbols. Historic preservation is a process whereby certain aspects of the past are highlighted, by whatever group may benefit from the aspect highlighted, and imbued with significance for a present landscape and the landscape's participants, or users. This article focuses on the ways in which some landscape symbols are promoted by a range of actors from preservation professionals to graffiti artists, to "alleviate cultural stress through the creation of shared symbolic structures that validate, if not actually define, social claims to space and time," with examples provided from a study of Salzburg, Austria (459). Rowntree and Conkey create a model for the symbolization process as a result of stresses—ranging from hostile social environments and political pressures to environmental pressure—within cultural landscapes as follows (468):

Early Phase	Late Phase
1) The primary agents of a symbolic action are individuals, ad hoc groups, and populations at social margins	1) Maintenance of symbolic structures is now at the center of society, involving more inclusive social populations; de jure groups are responsible for protection of symbol systems.
2) Already existing forms and objects are selected for symbolic elaboration. These will be relatively visible, material forms, and overtly nonpolitical, rather than abstract concepts. Symbolic meanings will be diffuse, varied, and ambiguous. The symbols will have high information context and be expressive in function.	2) Symbols have become condensed, their information context is focused, and formal political symbols, lacking ambiguity, may emerge. Meanings are shared widely and may have been linked.
3) Emphasis is on attaching meaning to selected forms, codifying and translating the affective component. Goals are to gain acceptance and widespread belief in the symbols. Critical resistance to stressors is attempted via symbolic promotion.	3) The symbols are widely understood, accepted, and sanctified. Structural or institutional changes may have taken place to maintain the symbol system through the enforcement of legal, political, or other sanctions.
High Flexibility, Low Risk, Low Resource Expenditure	Reduced flexibility, High Risk, High Expenditure of Resources

While this model serves to explain the path toward environmental symbols in cultural landscapes, it also serves to suggest that cultural landscapes may vary in meaning even among

participants within a given culture (e.g., fringe participants versus institutions such as historic preservation agencies).

Ryden, Kent C.
1993 Mapping the Invisible Landscape: Folklore, Writing, and Sense of Place. Iowa City,
        IA: University of Iowa Press.
Kent C. Ryden writes about "sense of place" (xiv). He seeks a better understanding of this concept, which—as he defines it—"gives a landscape significance in the eyes of the people who inhabit it" (xiv). Ryden discusses the limitations of maps, explaining that they focus only on spatial, physical distribution and that they help their users accomplish certain tasks. He argues that maps fall short in communicating place meanings and that words or folklore are more suited to this task. He explains landscape, history, and narrative as necessarily connected (242). In one section of this text, Ryden focuses on essayists who write about place, asserting, "writers who capture and preserve places in words, then, tend to urgently recognize their importance to human life, their vital role in maintaining the world's coherence" (253). In this way Ryden connects human identity and culture with stable human-place relationships, and he privileges cultural expressions though writing as ways of communicating and maintaining identity. He highlights the constant presence of time in writings on place: "The past stands behind place, and place also implies the future: time will change it or will bring new places" (255). Throughout his text, Ryden draws on personal narratives to convey his understanding of sense of place, acknowledging that he sees this work "not only as a scholarly study of place, but as a personal mapping of place, an allusion to my own geographically rooted narratives" (296).

Salter, Christopher
1971   The Cultural Landscape. Belmont, CA: Duxbury Press.
Salter calls the cultural landscape "the artificial landscape man creates, remaking nature to better provide himself with his short-term needs" (introduction). His book is an anthology of essays, letters, and such that address his conception of cultural landscape, through sections including those on mobility, husbandry, the organization of space, and contemporary cultural landscapes (e.g., cityscapes). Authors therein include Captain James Cook, Henry David Thoreau, and David Lowenthal. Salter provides background or context information for each piece.

Sauer, Carl
1963[1925] The Morphology of Landscape. John Leighly, ed. Pp. 315-350. Berkeley, CA:
        University of California Press.
Geographer Carl Sauer coined the term "cultural landscape." Here he defines a cultural landscape as "all the works of man that characterize the landscape," (342) and explicitly sets this apart from an "original" or "natural" landscape, words that he uses to describe all aspects of a landscape unmodified by humans. In Sauer's cultural landscape framework, the emphasis is placed on humans—he uses the gendered term "man"—as agents that act upon the landscape. Recognizing that cultural landscapes are dynamic, he describes scenarios in which cultures pass through different stages and create corresponding cultural landscapes and other scenarios in which one culture builds on the "remnants" of another's cultural landscape. Sauer is concerned primarily with the observable modifications that groups of people leave on the landscape, rather than with the meanings that landscape features have for groups and individuals. He does not

reject the premise that ecologies and landscapes shape human cultures but instead seeks to broaden the study of geography to include humans as interdependent agents, who shape the landscapes they occupy. Although he recognizes reciprocal relationships between landscapes and cultures, he writes about humans and nature as strictly separate, often opposing forces.

Schein, Richard H.
1997   The Place of Landscape: A Conceptual Framework for Interpreting an American Scene. Annals of the Association of American Geographers 87(4):660-680.
Schein reviews the concept of cultural landscape and the way academics have discussed it in the past: as a symbolic, representative place; as central to the production of social life; as places of production and consumption; etc. He expands on this work, and suggests that a cultural landscape is the "tangible, visible articulation of numerous discourses" (660), a place shaped by (in his study of a U.S. suburb) architecture, historic preservation, neighborhood associations, zoning regulations, and so on. Discourses are defined as "shared meanings which are socially constituted, ideologies, sets of 'common sense' assumptions... [a] social framework of intelligibility" (Duncan in Schein, 663). Cultural landscapes are thus seen as material phenomena that reflect all these things as well as individuals' activities. Discourse analysis is suggested as a means to understanding cultural landscapes, and it is the backbone of a framework for understanding cultural landscapes. Schein provides examples from a study of Ashland Park, a suburb in Kentucky.

Smith, Laurajane and Anita van der Meer
2000   Viewing Riversleigh as a Cultural Landscape. Australian Archaeology 51:64.
The authors situate natural fossil sites found in the Australian Fossil Mammal Sites Worldwide Heritage Area within a contested cultural landscape in Queensland, Australia. That the cultural landscape exists or has value is not contested; rather, the landscape is imbued with competing values and understood through competing knowledge systems. This article examines these competing values and systems, and the authors also examine the consequences of listing the landscape as a World Heritage area, noting the ways in which various expressions of cultural and historical identity associated with the landscape take place. Stakeholders in the site include federal, state, and international government land managers; mining companies; tourist operations; indigenous peoples; and other local communities. The authors use oral history and interview data to analyze values and perceptions.

Taylor, Ken
2012   Landscape and Meaning: Context for Global Discourse on Cultural Landscape Values. *In* Managing Cultural Landscapes. Ken Taylor and Jane L. Lennon, eds. Pp. 21-44. London: Routledge.
Taylor explores how the concepts of landscape, culture, and cultural landscape have developed throughout the 20th century. Before and during the 1970s, cultural landscapes were generally viewed by scholars as physical evidence of human occupation—products that could be read for clues to historical and contemporary cultures. During the 1980s and 1990s, scholars began to see landscapes as cultural constructs endowed with intangible associations, while some scholars also maintained that landscapes can function as texts to be read. These characteristics suggest a more interpretive approach to understanding the significance of cultural landscapes. It was during the

1990s that cultural resource managers and researchers began to see value in landscapes that reflected the practices of "everyday ways of life." Increasingly, concepts of cultural landscape transverse the boundaries between tangible and intangible heritage and between nature and culture.

Taylor, Ken, and Jane L. Lennon
2012 Introduction: Leaping the Fence. *In* Managing Cultural Landscapes. Ken Taylor and Jane L. Lennon, eds. Pp. 1-18. London: Routledge.
Taylor and Lennon introduce their edited volume on managing cultural landscapes. They highlight a shift, which they assert took place in the 1980s and 1990s, in the conceptualization of landscapes from "cultural product" to "cultural process." These authors explain that the aims of this edited volume include describing the fluidity of cultural landscapes, expanding the notion of cultural landscapes to include urban and town settings, recognizing the connections between landscape and identity, and spurring interdisciplinary debates about these topics. Other authors in the volume address international influences on cultural landscape management (Lennon), alternative and innovative approaches to landscape conservation (e.g., Bandarin, Andrews and Buggey), and perceived future challenges such as continuing living traditions in managed cultural landscapes (Villalón).

Taylor, William M.
2007   Misplaced Identities: Cultural and Environmental Sources of Heritage for the "Settler Society" along the Swan River, Perth, Australia. National Identities 9(2):143-161.
Architectural and landscape projects on the Swan River in Perth, Australia, provide insight into the production of heritage values related to cultural riverscapes. The author discusses roles played by cultural and natural heritage in identity formation, and the ways in which varying iterations of heritage are ascribed to a riverscape for different ends. He is critical how we come to know a place through maps, suggesting that "the objectivity of maps as a representational medium" is "illusory, and so too is an understanding of terrain as straightforwardly knowable through geographic means" (146). He underscores the authorship of maps, and highlights the "gaps" present in all those sets of choices, omissions, and so on, that do not appear in a final product yet may be vital to an alternative understanding of a river- or landscape. Taylor seems to suggest that landscapes could be better understood as "texts," which necessarily include the performance of writing, reading, interpreting, and so on, and may be simultaneously understood in a multiplicity of ways.

UNESCO-ICOMOS Documentation Centre
2011   World Heritage Cultural Landscapes: Description of the World Heritage Sites with a Bibliography. Paris: International Council on Monuments and Sites (ICOMOS). Online <http://www.international.icomos.org/centre_documentation/index.html>. Accessed December 5, 2012.
In this document, the United Nations Educational, Scientific and Cultural Organization's International Council on Monuments and Sites (UNESCO-ICOMOS) introduces the concept of "cultural landscapes," (5) providing a brief definition, history, description of cultural landscape categories, and explanation of what it means for a landscape to be inscribed on the World

Heritage List. In defining and further explaining cultural landscapes, the authors emphasize that a cultural landscape is one that represents "'the combined works of nature and man,'" (5) quoting from the Operational Guidelines for the Implementation of World Heritage Convention. For each cultural landscape inscribed on the World Heritage List, the authors provide a description, a justification for inscription, and a list of documents associated with that landscape. The authors provide a bibliography (131-167) organized by the following categories: concept and definition, management of cultural landscapes, cultural landscapes by region (Africa, the Americas, Asia and Pacific, and Europe), and vineyards cultural landscapes.

Upton, Dell
1991 Architectural History or Landscape History? Journal of Architectural Education 44(4):195-199.
Upton writes about the professionalization of architectural history and critiques this discipline's approach to history, offering a new framework. Upton's framework challenges the traditional focus on buildings and instead suggests that more holistic approaches using cultural landscapes as units of analysis would make for more interesting historical accounts. He calls for the abandonment of the distinction between high and low culture and the distinction between builder and user, explaining that the meaning of a structure is "determined primarily by its viewers and users" (197) rather than the builders' intention. Arguing a cultural landscape approach would make the discipline of architectural history more "contextual" and "inclusive," (198) he also acknowledges that cultural landscape analysis is more comprehensive and challenging than traditional architectural history analysis.

Wallach, Bret
2005 Understanding the Cultural Landscape. New York, NY: Guilford Press. Wallach sees the cultural landscape as an interactive experience between humans and the environment. He provides historical data on cultural landscape development in early civilizations, as well accounts for the ways in which political, ideological, and emotional responses to land shape cultural landscapes. The majority of his book focuses on the processes that shape land, and by which the land shapes culture. His final chapters, however, deal with how geographers read landscapes - recording details about, as well as understanding value given to both cityscapes and rural landscapes.

Woodhouse, Monte C. A.
1993 Elements of a Pastoral Landscape: Holowiliena, South Australia in 1888. Australian Historical Archaeology 11:88-98.
Woodhouse describes the evolution of the concept of cultural landscape, from *kulturlandschaft* (landscape created by a human culture) to both the cultural and natural elements of a place, where these terms are not necessarily mutually exclusive. Much of the value and significance of a cultural landscape comes from the ways in which it is a "repository or storehouse of evidence relating to the ways in which a culture or series of cultures has made use of the land" (88). Holowiliena, South Australia, Represents a cultural landscape that reflects aboriginal as well as Australian pastoralist presence. Woodbine points out the ways in which the land was not only modified by humans, but humans were limited by and flourished because of environmental constraints.

APPENDIX B: THE INDIGENOUS AND ABORIGINAL CULTURAL LANDSCAPE CONCEPT

Andrews, Thomas D. and Susan Buggey
2008 Authenticity in Aboriginal Cultural Landscapes. APT Bulletin 39(2/3):63-71. This article brings into question what we mean by "authenticity" and how it varies between cultures. The authors write that "the Western notion of authenticity is considered crucial to the cultural value of heritage places," and that the standard Western interpretation of authenticity relies largely on tangible things, material evidence, and the integrity of the "physical fabric" (63). All of this, they suggest, may not resonate with aboriginal people, nor indigenous communities' values. The authors call for respect of cultural context when measuring authenticity—including associated belief systems, concepts of land and time, and movement that embodies meaning. Further, they compare ideas about authenticity generated by agencies such as UNESCO and indigenous peoples in the Northwest Territories of Canada.

When describing aboriginal cultural landscapes, the authors offer this definition: "Aboriginal cultural landscapes are not sites or relics. They are living landscapes that indigenous people identify as fundamentally important to their cultural heritage, areas that embody their relationship with the land. Dynamic change is inherent in such cultural landscapes. They change constantly as a result of natural and cultural processes; they are always growing" (65). The authors emphasize the importance of gaining knowledge through the experience of travel; of moving through a landscape; and of landscape being acted out by its inhabitants through oral history and other forms of performance, or embodied while "dwelling" in places where engagement occurs with animals and spirit-beings (65).

Anyon, Roger, T. J. Ferguson, and Chip Colwell-Chanthaphonh
2005 Natural Setting as Cultural Landscapes: The Power of Place and Tradition. *In* Connecting Mountain Islands and Desert Seas: Biodiversity and Management of the Madrean Archipelago II. Proc. RMRS-P-36. Gerald J. Gottfried, Brooke S. Gebow, Lane G. Eskew, and Carlton B. Edminster, eds. Pp. 273-276. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. The authors describe the cultural meanings and uses that members of American Indian groups assign to landscape features in the Madrean Archipelago in the Southwestern United States. The tribes included in their research are Tohono O'odham, Hopi, Zuni, and Apache. The authors show how members of all of these different groups associate cultural meanings with places and species in the landscape and how the cultural landscapes constructed by each are not identical but do overlap. Their purpose in this article is to inform those managing lands from an ecological or biological perspective about how cultural landscapes can also be important factors in management decisions. Without considering cultural landscapes, managers can inadvertently disrupt the practices of contemporary members of indigenous groups.

Aporta, Claudio and Eric Higgs
2005 Satellite Culture: Global Positioning Systems, Inuit Wayfinding, and the Need for a New Account of Technology. Current Anthropology 46(5):729-753. This article explains how Inuit hunters of the Igloolik region have a history of orienting themselves according to

natural phenomena: wind behavior, snowdrift patterns, water patterns (tidal cycles, currents, etc.), animal behavior, astrological phenomena, etc. The authors describe the shift from historical understanding of these phenomena in wayfinding to the use of modern technology such as global positioning systems (GPS) by Inuit youth. It is suggested that reliance on GPS undermines the knowledge-building process about a land- or waterscape, and that there is a risk of turning landscapes into constructed entities or commodities, which is "what happens figuratively when [people] are too attentive to the map and not the territory" (729). This suggests that the way people interact with a landscape affects understanding of the landscape, and that cultural knowledge is built on the particular ways people come to understand how natural phenomena occur and evolve.

Barber, Ian
2003   Sea, Land and Fish: Spatial Relationships and the Archaeology of South Island Maori Fishing. World Archaeology 35(3):434-448.
Barber compares and contrasts the beliefs of the New Zealand Maori with regard to fishing practices, with archaeological interpretations of Maori fishing behavior emphasizing opportunism and low-risk extractive fishing behavior—an economy-driven model of fishing behavior. The Maori are said to perceive the ocean as the "primal source of beings and lands following the separation of heaven and earth" (434), and they recognized ritual restrictions enforced by "supernatural" penalties. The author comes to the conclusion that these models—religious and economic—are not mutually exclusive, and that both models allowed for an evolution of fishing behavior and changing restrictions on areas of use. Archaeological evidence supported both religious and economic explanations, or interpretations, of behavior and interaction with a given seascape.

Basso, Keith H.
1996   Wisdom Sits in Places: Landscape and Language Among the Western Apache. Albuquerque, NM: University of New Mexico Press.
This is an ethnographic account of landscape and language use among a community of Western Apache. Basso focuses on how the Western Apache with whom he interacts conceptualize and consciously experience the landscape in which they live. He describes how his informants pass down place names and stories associated with places through generations, and how they actively name places in the landscape in the present according to new stories and events. These instructive stories—linked explicitly with places—are told to others in order to communicate moral lessons. Some of the place names and stories can be traced to relatively recent historical events, while other names and stories are more ancient. Basso sees the telling of the stories associated with places as serving to impart moral lessons in an indirect way. Those who are told stories associated with concrete places will remember them when they experience the places. The moral lessons associated with the stories are continually being retold and re-remembered as individuals experience the landscape. For these Western Apache, Basso frames the landscape as an active keeper of memories, stories, and wisdom, and he frames contact with that landscape as a way to sustain those memories, stories, and wisdom to others.

Beacham, Deanna

2011 The Indigenous Cultural Landscape of the Eastern Woodlands: A Model for Conservation, Interpretation, and Tourism. *In* Rethinking Protected Areas in a Changing World: Proceedings of the 2011 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites. Samantha Weber, ed. Pp. 40-42. Hancock, MI: The George Wright Society.

Beacham argues that the construct of "cultural landscapes" can be a useful tool in efforts to conserve and restore land and watersheds. Beacham specifically proposes the identification and protection of indigenous cultural landscapes in the Chesapeake region. These landscapes go beyond specific "hunting grounds," "villages," and "sacred sites" to include holistic homelands that are "units of land large and natural enough to accurately reflect the cultural life ways of the communities that lived within them" (41). While acknowledging that the idea of American Indians "living in harmony with the environment" is a stereotype, Beacham reinforces the idea that complex regional ecological and geographical knowledge was essential for the survival and lifestyle of American Indian groups in the Chesapeake. Outlining an idea for developing indigenous cultural landscapes associated with the voyage of Captain John Smith, she proposes that the definition, conservation, and interpretation of these landscapes would spur the following processes: attracting interested "geotourists" to the region, highlighting the continued presence of indigenous communities in the region, and furthering conservation efforts by reinforcing attachment to place both for indigenous individuals and others. Beacham establishes that descendent communities—defined by their continued identification as American Indians of the Chesapeake region rather than by state or national tribal recognition—should be involved in indentifying and prioritizing indigenous cultural landscapes. She emphasizes that public access to and interpretation of those landscapes will allow American Indians to participate in the development of heritage tourism.

Brody, Hugh

1981 Maps and Dreams. New York, NY: Pantheon Books.

Brody alternates between presenting ethnographic findings about the economic systems of several Indian groups in northeast British Colombia, notably Beaver Indians, and describing more intimate accounts of his experiences interacting with them in daily life. In 1978, the threat that the Alaska Highway natural gas pipeline would "cut directly through Indian lands" (xiii) sparked the studies of Indian groups' interests in this land. Brody suggests that the Native people he worked with map their landscapes through "dreams" that contrast with those of Western developers. "White men" dream or imagine northeast British Colombia as a frontier filled with energy resources and, thus, the wealth
(61, 126). More recently, they have imagined and used this frontier as a hunting ground for sport.

In contrast, the Indian individuals with whom Brody interacted have been dreaming about this land as a homeland and as a territory that sustains their hunting and trapping livelihoods (255). Some Beaver Indian individuals talked with Brody about how some ancestors were "strong dreamers" (47) who had dreamed while sleeping about the route to take when searching for prey in the coming days. They had dreamed about where to go in order to kill a specific animal, and then these dreamers would carry out the same sequence of hunting in their waking hours. Moreover, strong dreamers—who were also "good men" (46) or women (47)—dreamed maps to

"heaven" (47), sometimes writing down these maps and sharing them with others. The men telling Brody this qualified that strong dreamers were becoming rarer among their people in the present, but that they hoped this would change. Ultimately, the Indians with whom Brody works—led by elder Joseph Patsah—decide that mapping their hunting territories in a style that will be recognized by developers and government officials will help to make a case for their hopes and dreams for the future (12). These Indian maps, viewed collectively, may help to challenge white developers' maps and dreams of the frontier—maps that leave no place for Indian settlements and livelihoods.

Carter, Jennifer
2010   Displacing Indigenous Cultural Landscapes: The Naturalistic Gaze at Fraser Island World Heritage Area. Geographical Research 48(4):398-410.
Carter argues for doing away with the nature/culture dichotomy and embracing a nature/culture hybridity. Indigenous Australians are marginalized by the use of the technocratically-driven dichotomy model. A reevaluation of current environment and heritage management paradigms and policy is needed. People, "and perhaps especially Indigenous Australians, are always and everywhere embedded and implicated in 'natural environments." (398).

Carter includes a review of world heritage and Australian heritage management, as well as a history of Fraser Island's placement on the World Heritage protected area list. She notes shortcomings in the engagement of indigenous populations in heritage management policy and practice. She also discusses shortcomings in full valuations of a cultural landscape bereft, for example, of local social cartographies of value and meaning. Carter urges landscape managers to map "values associated with place, rather than with nature or culture" and mapping how placebased values construct networks. Mapping indigenous values helps to create a holistic understanding of the cultural landscape.

Chapin, Mac, Zachary Lamb, and Bill Threlkeld
2005   Mapping Indigenous Lands. The Annual Review of Anthropology 34:619-38.
Mac Chapin, Zachary Lamb, and Bill Threlkeld provide a detailed account of the origins and evolution of participatory mapping projects conducted with, by, and for indigenous peoples around the globe, pointing out that these projects represent a significant "shift" in the ways in how cartography is "undertaken and used" (619). Beginning with projects in Canada and Alaska in 1950s and 1960s, they describe the spread of similar initiatives to sites around the world. While acknowledging that participatory mapping is a powerful tool that can be used by indigenous people in their struggles to claim and manage ancestral lands, the authors also bring up the practice's unintended consequences and raise questions that deserve more attention. Participatory mapping has sometimes served to exclude some important potential participants, including women. One key question that the authors raise concerns how indigenous systems of knowledge and Western technology fit together: "is it possible to employ the new technologies to preserve traditional knowledge, or do they serve to disfigure it with Western patterns of thought?" (630). These questions deserve attention before, during, and after participatory mapping projects are carried out.

Colwell-Chanthaphonh, Chip, and J. Brett Hill
2004 Mapping History: Cartography and the Construction of the San Pedro Valley.
        History and Anthropology 15(2):175-200.
Colwell-Chanthaphonh and Hill examine how maps made by Euro-American cartographers and
colonists have portrayed the San Pedro Valley in Arizona during this region's history of
colonization. They discuss the way in which this land was transformed in the eyes of settlers
from "terrain vague" for "no man's land" to a unique place. The authors take into account how
place names on maps transitioned from American Indian words to Spanish words, showing how
these transitions reflect power relationships in the process of place-making. In this way, the
authors illustrate how making alternative maps that reflect members of subjugated groups' place
associations and meanings is one way for these groups to reclaim culturally significant places.

Colwell-Chanthaphonh, Chip, and T. J. Ferguson
2006   Memory Pieces and Footprints: Multivocality and the Meanings of Ancient Times
        and Ancestral Places among the Zuni and Hopi. American Anthropologist
        108(1):148-162.
Colwell-Chanthaphonh and Ferguson discuss why they see multivocality as a viable way forward
in archaeology and in the interpretation of the past more generally. They argue against strict
dichotomies between objective archaeological research and subjective descendent community
interpretations. Noting that Hopi and Zuni interpret archaeological "ruins" as living and imbued
with spirits and meaning, the authors suggests that including these interpretations and others
alongside archaeological evidence creates a fuller picture of history, culture, and place.

Davidson-Hunt, Iain J.
2003   Indigenous Lands Management, Cultural Landscapes and Anishinaabe People of
         Shoal Lake, Northwestern Ontario, Canada. Environments 31(1):21-41.
 Davidson-Hunt writes about the history and present practices of the Anishinaabe people of
Shoal Lake in northwestern Ontario. He points out that the concept of cultural landscapes
functions to challenge the assumption that indigenous people lived using the bounty of natural
resources in their region and did not exert agency over their environment. He also cautions that
the same concept has in the past functioned to "freeze the history of the relationship between
society and environment in time" (23). Challenging the view of cultural landscapes as artifacts to
be restored, Davidson-Hunt emphasizes the processual nature of indigenous cultural landscapes.
He describes the Anishinaabe as taking on active custodial roles over local ecologies as part of
their traditional belief system. He argues for the practice of promoting dynamic indigenous
cultural landscapes through the development of indigenous land management institutions in the
present, asserting that these organizations would produce innovative technologies and
management practices.

Hansen, Stephen A.
2002   Indigenous Landscapes: A Study in Ethnocartography (Review). Human Rights
        Quarterly 24(3):825-828.
This article is a review of Mac Chapin and Bill Threlkeld's *Indigenous Landscapes: A Study in
Ethnocartography* (2001). Hansen argues that indigenous peoples maintain balanced, sensitive

relationships with often-threatened biological resources, and that indigenous peoples' natural resources as well as cultural knowledge (ecological and otherwise) are being exploited by a range of industries and organizations. Addressing these issues is a matter of urgency. Chapin and Threlkeld's work is a resource for communities working with sponsoring partners or organizations to remedy such exploitation. For Hansen, ethnocartography "represents a transition in how information about land and natural resource use is communicated outside the community itself" (826); it breaks from oral tradition and documents what were formerly "mental maps," in a way Hansen sees as beneficial to indigenous peoples, who may use such maps to protect against attempts of encroachment.

Hendriatiningsih, S., Andri Hernandi, Yan Shofian Syarief, Alfita Puspa Handayani, Kurdinanto Sarah, and Rizqi Abdulharis
2010 Cultural Landscape Mapping: The Basis for Managing a Sustainable Future?
         Paper presented at the International Federation of Surveyors Congress, Sydney.
         April, 2010:11-16.
The authors rely on studies that they conducted in Indonesia's provinces of West Java and Banten to argue that traditional indigenous practices of interacting with the landscape will benefit sustainable development. These practices include methods for managing fisheries, cycles of agricultural planting and harvest, beliefs designating parts of forests as "forbidden" (12), and medicinal customs. The authors do not recommend specific policies that should be implemented in order to conserve these practices; instead, they recommend further research on cultural landscapes in these regions to be carried out by an interdisciplinary team of surveyors, geologists, anthropologists, and archaeologists (15).

Kelley, Klara Bonsack and Harris Francis
1994   Navajo Sacred Places. Bloomington, IN: Indiana University Press.
The authors, who were employed by the Historic Preservation Office of the Navajo Nation's government during their field research, describe and analyze how members of 13 Navajo chapters or communities in New Mexico and Arizona tell stories about places. They emphasize that this work is *not* meant to be seen as an inventory of culturally significant places, and they acknowledge that such an inventory might risk violating the codes of secrecy surrounding sacred Navajo place knowledge. Rather, the authors explain that they conceptualize this work as a study concerned with "various ways in which these places have been, and still are, part of Navajo life" (6). The authors make a few specific conclusion about what they have learned about Navajo conceptualization of place from the individuals they interviewed: 1.) places "derive their significance from their position in larger, culturally 'constructed' landscapes"; 2.) while places are significant for various qualities, one place cannot be ranked in relation to another as more or less significant; 3.) members of the older generation saw "'economic development'" as luring their children away from Navajo culture and as a threat to the preservation of important places (50). Stretching their analysis further, the authors use a cross-cultural comparison approach to draw connections and contradictions between Navajo stories and the stories of neighboring Hopi, Zuni, Acoma, Laguna, and Rio Grande Pueblo Indian communities (206). This approach allows them to analyze the continuities in the associations between stories and places between groups, and to assert that "even as communities and ethnic groups have broken up and recombined to form new ones, the stories themselves… have stayed with the land" (215). This assertion

suggests that preserving place is particularly important in sustaining stories across generations, even in times when other factors are destabilized. Kelley and Francis conclude by pointing out that places play important roles in the transmission of stories and that stories about past changes contain lessons, which can be helpful for coping with changes in the present (224).

Knapp, Gregory and Peter Herlihy
2002   Mapping the Landscape of Identity. Yearbook. Conference of Latin American Geographers 27, Latin America in the 21st Century: Challenges and Solutions:251268.

Knapp and Herlihy provide a review of literature related to Latin American ethnogeography, a branch of cultural geography dealing with the distribution of people linked culturally in some way, and their relationships with the environment. The authors describe how some indigenous people of Latin America have been active in organizing themselves and seeking international alliances to protect and express their heritage. Mapping can be used as a tool to reveal connections between places. It may be used as a visual representation of shared identity going beyond political boundaries, including valued places or similar material culture that exists across political borders. Identity mapping can be used to identify and locate cultural markers, such as "folk housing types," or gendered perspectives on women's sites. Indigenous cultural markers in the landscape lend credence to claims of identity and can be used to present alternative views of a landscape. Maps are being used by teams of indigenous people and applied cultural geographers, socially and politically, throughout Latin America. Collaboration between geographers and indigenous people—participatory mapping—is encouraged to increase the "proliferation of maps" and get at more creative ways of mapping "the spaces, places, and landscapes of identity" (261).

Martinez, Dennis
2003   Protected Areas, Indigenous Peoples, and the Western Idea of Nature. Ecological Restoration 21(4):247-250.

Martinez argues for including indigenous people and their traditional ecological practices as part of the realm of "wilderness" or nature. The exclusion of human practices from "nature" is a relatively recent practice. Martinez questions why Western policies should dictate environmental management practices when Westerners have occupied the North American continent for a great deal shorter time than indigenous peoples.

McNiven, Ian J.
2003   Saltwater People: Spiritscapes, Maritime Rituals and the Archaeology of Australian Indigenous Seascapes. World Archaeology 35(3):329-349.

McNiven documents the use of anthropology and archaeology to explore Australian indigenous seascapes, which are said to correlate "with the scale and complexity of spiritual engagements with the sea and use of its resources" (329). The author contrasts the Western tendency to rely on technological aids such as maps, Global Positioning Systems, waymarkers such as lighthouses, etc. for determining seascapes with the Australian indigenous Saltwater People's construction of seascapes as "spiritscapes," within which spiritual forces exist and can be engaged ritually. He argues that an archaeology of seascapes needs to extend beyond subsistence and technology and

look at associated ritual sites of spiritually-driven marine management and control. The author's approach carefully considers not just the social or economic drives for use of the sea, but the ontological question of how Saltwater People (indigenous marine specialists) perceived the sea and conceptualized their seascapes. McNiven writes, "seascapes are defined by cosmologies that frame and constrain perception, engagement, and use of the seas. Seascapes are animated spiritscapes because ancestor spirits…imbue seas with spiritual energies, fecundity and sentience" (332).

Memmott, Paul and Stephen Long
2002   Place Theory and Place Maintenance in Indigenous Australia. Urban Policy and Research 20(1):39-56. Online <http://espace.library.uq.edu.au/view/UQ:9203>. Accessed December 5, 2012.
Memmott and Long apply "a cross-cultural theory of 'place'" to Australian indigenous groups, and explore how the indigenous peoples they study and work with value, identify, and protect their cultural landscape. In doing so, the authors compare indigenous and Western approaches to conceptualizing places and their conservation, including a discussion of differing hierarchies of environmental units, climatic knowledge, and models of ownership. The authors offer a critique of heritage management policy and planning legislation, suggesting that Australian statutory law meant to protect indigenous heritage actually gives greater value to Euro-centric ideas of heritage and modes of heritage management. They provide a brief history of the cultural landscape concept, and review some UNESCO and Australian policy and legislation concerning indigenous cultural heritage conservation.

Miller, Andrew Martin and Iain Davidson-Hunt
2010   Fire, Agency and Scale in the Creation of Aboriginal Cultural Landscapes. Human Ecology 38:401-414.
The authors explore the role fire plays in creating Anishinaabe cultural landscapes, for the Pikangikum First Nation in northwestern Ontario. For the Anishinaabe, forest fires are beings that possess agency, and who "intentionally create order in landscapes" (401). As such, indigenous cultural landscapes may not be places solely affected by human activity, but as places understood to include non-human agency in the creation of meaningful spaces. The authors suggest the need for studying indigenous peoples' land management practices—including the associated ontologies—and their importance to the maintenance and meaning of sites within the landscape. There is a need to bridge gaps in the understanding of cultural landscapes between local communities and Western managers. This might involve "resolving differences in taxonomies, practices and worldviews held by management partners" (412).

Oetelaar, Gerald A. and David Meyer
2006   Movement and Native American Landscapes: A Comparative Approach. Plains Anthropologist 51, Memoir 38(199):355-375.
Oetelaar and Meyer examine and compare western plains of Canada Native perceptions and uses of landscapes using a combination of archival material (e.g., historical maps), established routes, and ethnographic data. They find that while landscape perceptions are rooted in landforms, vegetation, and transportation technology, they are also widely influenced by origin myths,

spiritual relationships (between features on the landscape and humans and these features), and by oral traditions. The authors note that Native maps are shown to only include those features which are culturally important, many of which relate to movement (e.g., networks of paths used in travel to and from important places, which, with their imprints of past journeys, serve as metaphorical links to ancestors and mythological beings). Place names of spaces surrounding mapped features (generally waterways) usually referred back to the feature underscoring the importance of the features (again, here, waterways) to the landscape in its entirety. For example, of 113 Cree place names the authors refer to in northern Alberta and adjacent districts, "35 were names of lakes, 16 were the names of rivers, 36 were the names of creeks, 4 were the names for mountains, 17 were the names for hills and 5 were the names for European forts or settlements" (362). The Native cultural landscape continually refers back to particularly culturally salient features.

Pandya, Vishvajit
1990   Movement and Space: Andamanese Cartography. American Ethnologist
    17(4):775797.
Pandya explores anthropological understandings of what space (as location, social structure, etc.) is, how people move through it, and the ways in which space is a cultural construct (i.e. determined by or understood through one's culture). He explains how the construct of space for Ongee hunters and gathers of the Indian Ocean's Little Andaman is a map of movements "created by plotting various experiential coordinates that demarcate activity-specific places" (775). Ongee are said to share space both with spirits who hunt and with those animals that are hunted. Hunting grounds, sacred spaces, spirit worlds, and the realm of the living (humans, animals, and plants) coexist. Movement throughout this coexistence reveals stories-cum-map in a sort of "cartography of kinesics" (782), and embodied knowledge and belief about the land- and spiritscape is both revealed and taught through day-to-day movement such as work children's duties. Movement reveals belief and values related to activity more so than do material (manmade or natural) landmarks.

Plumwood, Val
2006   The Concept of a Cultural Landscape: Nature, Culture and Agency in the Land.
    Ethics and the Environment, Special Topic Issue Nature/Culture Dualism
    11(2):115150.
Plumwood considers the concept of cultural landscape as one that downplays natural agency. In doing so she discusses how complex and at times nebulous the term "nature" can be and calls the concept of nature into question, exploring the political epistemology of the word. With respect to cultural landscapes, Plumwood suggests that the concept downplays or hides nonhuman agency and presents humans as having a monopoly of creativity, making "nature" a human-centered term, usually Euro-centered, as the following quote illustrates:

> An important initial motivation for the popularity of cultural landscape concepts
> in the humanities has been the wish to recognize the presence of indigenous
> people, and so to reject colonial representations of the land as lacking all trace of
> prior human agency. The concept of targeted land as pure wilderness removes
> constraints on colonial appropriation, so such a concept of 'virgin' land as an
> absence of agency, a realm of chaos, has often been stressed in colonial systems

of appropriation as a way of denying indigenous human agencies. … The concept of land as wilderness or pure nature certainly carries some nasty historical baggage, and the idea of nonhuman agency has been tainted by association. The idea of the land as the product of human culture has been stressed as a corrective—hence 'the cultural landscape' vogue. But is it only indigenous human agency that is overlooked or hidden in discourse about terra nullius, wilderness and nature? … An unfortunate and unnecessary side-effect of the long overdue recognition of the creativity of indigenous humans has been a denial of creativity to nonhuman species and ecosystems—nature skepticism. This latter denial is unhelpful as well as unnecessary because there is no necessary incompatibility between recognizing indigenous (cultural) agency and recognizing nonhuman (natural) agency. A related consequence of the denial of nonhuman agency in the land is the subtle imposition of a land creation story that is not at all culturally neutral but instead follows the standard western pattern of human agency on a passive land…" (120-121).

Plumwood advocates developing alternative accounts of nature that take into account ecological contexts. She rejects a nature/culture dualism.

Pungetti, Gloria, Gonzalo Oviedo, and Della Hooke
2012 Conclusions: the Journey to Biocultural Conservation. *In* Sacred Species and Sites. Gloria Pungetti, Gonzalo Oviedo, and Della Hooke, eds. Pp. 442-453. Cambridge: Cambridge University Press.

The authors argue that recognizing and protecting sacred sites and species can be part of a larger global movement for maintaining biodiversity. They acknowledge that case studies show that sacred species are not always protected as a result of their sacred status, but they insist that better understanding the systems of belief that designate some species and sites as sacred can lead to new ways of encouraging and implementing conservation initiatives with increased support from local (and indigenous) communities.

Rose, Deborah Bird
1996   Nourishing Terrains: Australian Aboriginal Views of Landscape and Wilderness. Canberra: Australian Heritage Commission.

Rose describes how aboriginal people living in Australia write about and discuss the concept of "country" (i.e. landscape). For aboriginal groups, "country" is a holistic concept that can be conceptualized similar to a person: it is an entity which has agency and history, and with which aboriginal people have relationships (7). Rose discusses aboriginal concepts of animal and plant extinction; these comments are characterized by a belief that even when an animal or plant is absent, there is still the possibility of its existence. As illustrations of varying perspectives—both contemporary and historical—Rose includes aboriginal poetry and song lyrics throughout the text. To conclude, she discusses how human and ecological rights are "embedded within each other" and argues that aboriginal perspectives on country are complex but essential for the managing Australian ecologies in the present and future.

Russo, Kurt
**2009 Healing Landscapes: A Historical Perspective. *In* Rethinking Protected Areas in a
       Changing World: Proceedings of the 2009 George Wright Society Conference on
       Parks, Protected Areas, and Cultural Sites. Samantha Weber, ed. Pp. 73-78.
       Hancock, MI: The George Wright Society.**

Russo describes some indigenous groups as having different frames of reference or "social
imaginaries" for looking at the environment and landscape. Social imaginaries are defined here
as "systems of signification" and a "background metaphysic that provide [*sic*] order and unity to
experience" (73). He contrasts an indigenous perspective—he outlines this perspective as
viewing landscape as "sacralized," linked with restorative power, and interconnected with
humans—with a dominant Western perspective on landscape. Describing the dominant Western
perspective as one that frames landscape as an outlet for economic growth, he argues that the two
ways of looking at the world must be seen as fundamentally in conflict with each other.

Silliman, Stephen W.
**2005   Culture Contact or Colonialism? Challenges in the Archaeology of Native North
         America. American Antiquity 70(1):55-74.**

Silliman focuses not on cultural landscapes, but on "contact-period" archaeology, and the
interpretive distinction between "contact" and "colonialism" that is downplayed or absent in the
literature he sites. Contact, or culture contact, is understood here as "groups of people coming
into or staying in contact for days, years, decades, centuries, or even millennia" (58).
Colonialism is defined as "the process by which a city- or nation-state exerts control over
people—termed indigenous—and territories outside of its geographical boundaries" (58). He
sees three problems with treating colonialism as "culture contact": 1) emphasizing short-term
encounters rather than long-term entanglements ignores the "heterogeneous forms of
colonialism" and the many ways indigenous peoples experienced them, 2) downplaying the
extremely different levels of political power, which generally fails to reveal how indigenous
peoples negotiated complex "social terrain", and 3) privileging "predefined cultural traits over
creative or creolized cultural products" (55). Silliman does not dismiss archaeology as
incompetent in addressing the complex social terrain, but emphasizes that it can both reveal and
hide subtleties of cultural change and continuity; additionally, he argues for taking "quality time
to understand the colonial and postcolonial literature and to trace out the implications of
terminology for research and for descendant communities" (69).

Stewart, Andrew M, Darren Keith, and Joan Scottie
**2004   Caribou Crossings and Cultural Meanings: Placing Traditional Knowledge and
         Archaeology in Context in an Inuit Landscape. Journal of Archaeological Method
         and Theory 11(2):183-211.**

In this study of an Inuit landscape (lower Kazan River, Nunavut Territory, Canada), the authors
suggest that oral tradition provides context for understanding archaeological features and their
spatial and temporal distribution. Archaeologically derived landscapes can, in turn, provide
support to traditional knowledge. Traditional knowledge may relate to commemoration of events
or people (in monuments), "enduring practices" (skills related to the land or water), and
"principles of spatial differentiation and orientation" based on relations between people and the
animals and environment around them (183). The authors argue that deliberate modifications of

an environment are acts resultant in features or objects that embody specific cultural meanings, narratives, cosmology, and so on; and meaning in archaeology, therefore, is achieved through understanding context. Thus a cultural landscape is an embodiment of meanings and values.

Strang, Veronica
1997   Uncommon Ground: Cultural Landscapes and Environmental Values. Oxford: Berg.
Strang uses ethnographic methods to explore ways people construct relationships with their environments and why this process differs across cultures (4). She focuses her investigation on the Mitchell River watershed in Far North Queensland, comparing cultural expressions and values of the aboriginal people living in Kowanyama and white Australian pastoralists residing in the same region. In order to describe the relationships these two groups have developed with their environment, Strang provides accounts of the region's contested history, contemporary cultural forms that reveal environmental values, cosmological beliefs, and limitations and pressures created by landscape characteristics. In her analysis, cultural forms include language, modes of transmitting cultural values, economic modes, and resource management. For the aboriginal groups, economic success is dependent on extensive and detailed ecological knowledge. The white Australians, on the other hand, are more dependent on a larger political structure and economy for economic success. Strang provides a table dividing cultural factors into those that discourage verses encourage affective environmental values, emphasizing continuity of land occupation as a key factor that encourages affective environmental values (287-88). According to Strang's analysis, white Australians living in the region have not developed economic modes that allow continuity in their relationships with the landscape. Instead, they are at the mercy of larger economic systems of exchange. She argues that, as a result, individuals within this group have failed to develop affective environmental values (290).

Strang, Veronica
2005   Common Senses: Water, Sensory Experience and the Generation of Meaning. Journal of Material Culture 10:92-120.
While this article does not deal with cultural landscapes per se, it does explore the different ways in which cross-cultural meaning is produced and experienced in relation to the natural environment, and in particular, waterscapes. The author uses two ethnographic examples: an aboriginal community living alongside the Mitchell River in Far North Queensland, and Dorset, England communities living in a river valley. She explains how meanings are encoded in natural objects for each of these groups, and how a consideration of interaction with a waterscape might provide the basis for discussion about the relationship between universal and particular, cultural experiences. Among commonalities that arise are presentations of water as a "matter of life and death; as a potent generative, and regenerative force; as the substance of social and spiritual identity; and as a symbol of power and agency" (115). The author suggests that humanenvironmental relationships "should incorporate a greater appreciation of sensory experience and the part played by 'natural' resources and their characteristics in the generation of meanings" (115).

Wohling, Marc

2009   The Problem of Scale in Indigenous Knowledge: a Perspective from northern Australia. Ecology and Society 14(1). Online <http://www.ecologyandsociety.org/vol14/iss1/art1/>. Accessed December 5, 2012.

Wohling takes a critical look at the concepts of indigenous knowledge (IK) and indigenous ecological knowledge (IEK) and the prominence that such knowledge has gained in discussions of land management practices, particularly in northern Australia, where he has focused his fieldwork. Wohling writes that IK and IEK are localized systems of knowledge that should not be applied to larger scale management decisions that transcend the local. He also brings up that IK and IEK are dynamic systems. The practice of documenting these systems and attempting to apply them in the present and future without allowing for changes in these systems and integration with other systems of knowledge undermines their dynamic qualities. Wohling points out that the tendency to reify IK and IEK of the past may prevent land managers and others from acknowledging "expressions of indigeneity in contemporary forms" (1).

Worby, Eric

1994   Maps, Names, and Ethnic Games: The Epistemology and Iconography of Colonial Power in Northwestern Zimbabwe. Journal of South African Studies 20(3):371-392.

Worby's article highlights the power underlying the naming of ethnicities generally, and specifically with attention to ethnocartography or "ethnic mapping" - the mapping of knowledge of the "relationship between ethnic identities and socio-geographic space" (371). He examines a region of Zimbabwe where colonial subjects in the mid-20th century refused to be located in a particular cartographic space, and where these subjects could not be accurately named by colonial powers. While Worby's work does not deal specifically with the notion of "cultural landscape," he demonstrates the difficulties and potential harm that may arise when representatives of a colonial power attempt to name and map indigenous people employing their own understandings of identity and space.

APPENDIX C: METHODOLOGY FOR IDENTIFYING AND WORKING IN CULTURAL LANDSCAPES

Adone, Leonard-Fabrice Odambo, Nigel Crawhall, and Joe Eison
2011   Report on Participatory 3D Modeling Workshop: Representing the Abongo Mitsogho Cultural Landscape of the Ikobey Commune and Waka National Park. Jocelyn Garnett, trans. Indigenous Peoples of Africa Coordinating Committee. Online <http://www.ipacc.org.za/eng/resources_featuredreports.asp>. Accessed December 5, 2012.

This report describes a three-dimensional mapping project, involving communities living near the Waka National Park in Gabon. Park management, government officials, and other organizations involved were interested in facilitating this mapping project as a way to make indigenous traditional knowledge a resource that could be routinely considered by those who manage land in the region. These mangers include government officials, park officials, and private landowners. The mapping facilitators sought to recognize indigenous local and spatial knowledge and values as authoritative factors that should be taken into account in land management decisions. The project brought together 60 individuals from nine nations for a multiday workshop that resulted in the construction of a three-dimensional model of the Ikobey commune and Waka National Park this model has been made available to land managers and other stakeholders. In explaining the "project impacts," the authors assert that this project initiated interaction between communities and other stakeholders and that this interaction has resulted in relationships between these groups that may serve as useful foundations in the future for other projects (1). Moreover, the authors emphasize that Waka National Park officials will use the information gained from this project when they create a new park management plan (1).

Birnbaum, Charles A.
1994 Preservation Brief # 36: Protecting Cultural Landscapes. Online <http://www.nps.gov/history/hps/tps/briefs/brief36.htm>. Accessed December 5, 2012.

While using the term interchangeably with historic landscapes, Birnbaum defines cultural landscapes and also provides definitions for four types of cultural landscapes: historic designed landscapes, historic vernacular landscapes, historic sites, and ethnographic landscapes. He focuses on historic designed and historic vernacular landscapes as he gives advice on how to plan for the preservation and management of these types of landscapes. Birnbaum recommends involving an interdisciplinary team of experts to identify plant species, do soil tests, provide archival research, provide archaeological assessments, and more. He stresses the importance of combining primary sources, secondary sources, and assessments of existing conditions in order to develop a plan for preservation and interpretation.

Black, Bryan A. and Marc D. Abrams
2001   Influences of Native Americans and Surveyor Biases on Metes and Bounds Witness-Tree Distribution. Ecology 82(9):2574-2586.

"Witness-trees" are trees recorded in surveyor's notes, and records of these trees have been used to make inferences about the forest composition at the time of European arrival in North

America (2574). As Black and Abrams explain, "in order for witness trees to represent presettlement forest accurately, trees must be accurately identified and located on the landscape and the sample must be unbiased" (2574). As this set of criteria for accuracy shows, there are many challenges in the context of witness-tree identification that may have affected accuracy: misidentification of trees, surveyor bias, and the use of a "'metes and bounds system'" for surveying rather than a rectangular surveying system (2574). A metes and bounds approach meant that "surveyors would follow a seemingly haphazard route, often around stream banks, ridgelines, or 'Indian paths'" (2574). However, taking into account these challenges, Black and Abrams assert that by using site catchment analysis methods, witness-tree data can be useful in investigating interactions between Native Americans and their environments, specifically how Native Americans' activities caused changes in local vegetation (2575). The authors focus on witness tree data in Lancaster County, Pennsylvania, which contains over 1,200 known Native American archaeological sites (2575). They specify that this area has a high density of recorded witness-trees and a "low physiographic complexity," which are both factors that Black and Abrams identify as ideal for showing connections between Native American activities and vegetation patterns. They argue that while fossil-pollen analysis often fails to show small-scale changes in the environment, the use of witness tree data paired with site catchment analysis is more likely to show nuanced changes in vegetation that might have been caused by Native Americans around the time of European settlement (2584).

Bongers, J., Arkush, E., and Harrower, M.
2012   Landscapes of Death: GIS-based Analyses of Chullpas in the Western Lake Titicaca
         Basin. Journal of Archaeological Science 39:1687-1693.
The authors utilize GIS to map chullpas (funerary towers) and their viewsheds. They test the hypothesis that locations for chullpas were selected based on their high visibility, which aided in delineation of territories and social ties, perpetuation of memory, and demarcation of resources. The researchers initially identified and mapped chullpas as well random points to compare degrees of visibility with chullpas. Visibility was calculated and viewsheds were mapped. Research showed that chullpas were visible from larger areas than the random points. The authors were able to conclude that chullpa locations were likely selected based on their high visibility, and thus that they were important parts of the cultural "landscape of death…deliberately constructed to have an enduring social impact" (1687).

Brown, Steve
2008   Mute or Mutable? Archaeological Significance, Research and Cultural Heritage
         Management in Australia. Australian Archaeology 67:19-30.
Brown's article is a commentary on Australian archaeology after the work of Sandra Bowdler, who called in the 1980s for archaeological significance to be a mutable. It does not explicitly deal with aboriginal cultural landscapes, but with the methodology that might benefit them. Brown suggests that applications of criteria for assessing archaeological significance have not benefitted archaeological research into past aboriginal life ways, and that many criteria for assessing significance tend to be entrenched in formulaic approaches and have limited gains from cultural heritage management. He calls for methodologies that are able to integrate values of multiple peoples, taking into account scientific, social, spiritual, and historic values when

assessing criteria for significance. This is a call for understanding the significance of landscapes in the terms or criteria of those who used them, rather than modern scientific criteria alone.

Captain John Smith Chesapeake National Historic Trail
N.d.   Connecting Trails Evaluation Study. Annapolis, MD: Chesapeake Conservancy.
Online <http://www.chesapeakeconservancy.org/connecting_trails.html>. Accessed
December 5, 2012.
Chesapeake Conservancy funded a study of six Chesapeake Bay tributaries to determine if they met criteria to become "connecting or side trails" (3) for the Captain John Smith Chesapeake National Historic Trail (CAJO), which was signed into law in 2006. The six rivers are the Anacostia, Chester, Choptank, Susquehanna, Upper James, and Upper Nanticoke. The Conservancy, in cooperation with the National Park Service, specified that that rivers should meet at least one, and preferably more than one, of the following three criteria based on CAJO themes:
1. "Be closely associated with the voyages of exploration of Captain John Smith in 1607-1609"
2. "Be closely associated with the American Indian towns and cultures of the 17th-century Chesapeake"
3. "Be closely illustrative of the natural history of the 17th-century Chesapeake Bay Watershed" (3)

The research teams assigned to each respective river concluded that at least some portions of each of these six rivers met the criteria, and recommended that these segments be designated as CAJO connecting trails (4). Particularly relevant for developing research methodologies to identify indigenous cultural landscapes, the teams of researchers assigned to each river included discussions of their methods in this report. In order to evaluate how closely sections of each river are associated with 17th-cenury Chesapeake American Indian towns and cultures (the second criterion), the research teams drew from the following sources of data: archaeological site reports, Smith's maps, Smith's writings, artifacts recovered and accounts written by 19th-century antiquarians, historical and archaeological literature, predictive modeling based on archaeological evidence, and treaty records (13, 16-17, 20-21, 25, 27-28). The addition of these connecting trails allows CAJO to narrate a fuller story by reaching outside those places that Smith "explored personally" (6). In this way, the connecting trails will include more stories of "rivers Smith did not sail up and Indian towns he did not see" (6).

Contreras, D. A.
2009   Reconstructing Landscape at Chavin de Huanatr, Peru: A GIS-based Approach.
Journal of Archaeological Science 36:1006-1017.
Contreras discusses the use of GIS to identify archaeological and geomorphological features and approximate a complex prehistoric landscape. Field data sources included archaeological and geomorphologic survey, excavations, examination of existing stratigraphic exposures, and previous data collected from the field. A GIS-based reconstruction of precontact landscapes was proven useful in representing the "dynamism of the physical environment" and the anthropogenic modifications made to that landscape. The author emphasizes the importance of considering both the natural and cultural aspects of defining an indigenous prehistoric landscape.

Crampton, J. W.

2010 Cartographic Calculations of Territory. Progress in Human Geography 35 (1):92103.

Crampton discusses approaches to mapping and geographic information science in a literature review on calculation and territory as they pertain to the study of human geography. He highlights that "territory" is not always a bounded space with a primarily sociopolitical meaning. Citing others, Crampton explains that territory is "a historically and geographically specific form of political organization and political thought" (98). As such, he suggests the need for exploration of how qualitative data can be better incorporated into the usually quantitative process of GIS mapping. This may be particularly important for understanding how indigenous people conceive(d) of territory in what might be understood as their cultural landscape.

Darling, J. Andrew, John C. Ravesloot, and Michael R. Waters

2004 Village Drift and Riverine Settlement: Modeling Akimel O'odham Land Use. American Anthropologist, New Series 106(2):282-295.

The authors provide a model for understanding human ecodynamics, an "emerging landscape perspective that emphasizes the coevolution of humans and their ecosystems—with implications for understanding prehistoric and historic settlement…" (282). Their model was developed to account for settlement change or drift, which can be as much a several kilometers over centuries. It is based on data from archaeological and geomorphological field studies. Settlement drift may occur as a result of cultural or environmental factors—e.g., leaving a home and rebuilding elsewhere after a death in the family, moving to be near land brought under cultivation, or moving due to shifts in riverscapes—and it can account for incongruities between, for example, archival material and archaeological data (or lack thereof). The authors describe their work around the Gila River in the O'odham landscape and suggest visualizing a changing landscape by two means: 1.) Reconstructing historical landscapes at various times using maps and other available data, and 2.) Modeling land use based on village structure, system inputs (e.g., fluvial stability, flooding, socioeconomic dynamics, etc.), and system constraints (e.g., land availability, mobility threshold, kinship, ideology, etc.).

Disspain, Morgan, Lynley A. Wallis, Bronwyn M. Gillanders

2008 Developing baseline data to understand environmental change: A geochemical study of archaeological otoliths from the Coorong, South Australia. Journal of Archaeological Science 38(8):1842-1857.

Otoliths are "calcium carbonate structures found in the inner ear of teleost fish" (1842). The authors of this study describe how they were able to analyze these structures, which are often studied by marine scientists, in order to make inferences at archaeological sites at the Coorong in South Australia, in the homeland of an indigenous group called the Ngarrindjeri. Excavation of Holocene aged archaeological shell middens uncovered these otoliths, and through geochemical analysis the authors have determined the "season of catch, age of fish and environmental conditions experienced by fish" (1842). In turn, the study has also provided information about how the salinity levels of the examined estuary have changed over time, and it has confirmed that contemporary Ngarrindjeri fishing seasons are consistent with the seasonal fishing that took

place in the Holocene period (1855). Ultimately, this study provides one example of how archaeological evidence can be used to construct inferences about the way humans interacted with and modified their environments in the past.

Etter, Andres, Clive McAlpine, and Hugh Possingham
2008   Historical Patterns and Drivers of Landscape Change in Colombia Since 1500: A
Regionalized Spatial Approach. Annals of American Geographers 98(1):2-23.
The authors explore the process of reconstructing landscapes in Colombia. They do this by defining historical periods of study, constraining physical areas of study, using data on groups' accessibility to important features (e.g., rivers, possible settlement areas), and taking into consideration the impacts of events such as colonization and the introduction of cattle, and rates and trends of land cover change, on demographics. While the study focuses on the environmental landscape, human interaction with the landscape is taken into account and noted to be a strong influence in some areas. Data sources included chronicles, historical literature, statistics, and maps. Information was gathered regarding populations and settlements, economy and political institutions, land uses, agricultural products, resource extraction, contour lines, rivers, and climate. From these data the authors estimated and mapped land used for varying activities (e.g., hunting and gathering, permanent agriculture) over a 500-year period. They emphasize the importance of combining data from a wide range of sources and fields, which all relate to a particular bounded space, to help make sense of that space's past.

Ferguson, T. J. and Chip Colwell-Chanthaphonh
2006   History is in the Land: Multivocal Tribal Traditions in Arizona's San Pedro Valley.
Tucson, AZ: University of Arizona Press.
Ferguson and Colwell-Chanthaphonh describe their archaeological and collaborative work in the San Pedro Valley of the southwestern United States. They collaborated on the "San Pedro Ethnohistory Project" with the following indigenous groups: Hopi, Zuni, Apache, and Tohono O'odham. Archaeological evidence and ethnohistorical knowledge are combined to present a multivocal account of the San Pedro Valley's history. This multivocal account reveals complex patterns of movement—the way individuals and groups settled in and used different areas of San Pedro Valley over time, rather than remaining in one area consistently. This multivocal account also obscures strict distinctions between cultural groups. Archaeologists tend to write in terms of "abstract archaeological cultures" (22-23), while living members of the Hopi, Zuni, Apache, and Tohono O'odham speak of these groups as "clans" or "ancestral kin groups," which might become linked, divide, shift membership in other ways, interact with each other, and share cultural traditions (22). The authors argue for and exemplify a collaborative methodology for identifying indigenous cultural landscapes. They explain that their account recognizes ethnohistorical narratives as valid sources of knowledge but simultaneously qualifies these narratives as symbolic rather than "literal truth" (247). Justifying the validity of ethnohistorical accounts as a knowledge source, they explain that these accounts are "encoded with spiritual and ritual elements that need to be acknowledged and respected for what they are" (247). Going further, Ferguson and Colwell-Chanthaphonh call for scholars to develop systems of theory and methods that allow for and differentiate between these differently situated sources of knowledge. They emphasize that the landscape of the San Pedro Valley is a "living" and dynamic record of these groups' histories and cultures, stressing that it should be documented, protected, and

managed jointly by archaeologists, other professionals, and members of the indigenous groups for whom it is meaningful.

Gallivan, Martin
2011 The Archaeology of Native Societies in the Chesapeake: New Investigations and
Interpretations. Journal of Archaeological Research 19:281-325.
Gallivan provides a detailed literature review of archaeology in the Chesapeake Bay region, along with an immense bibliography for the topic. He asserts that approaches relying on cultural ecology, systems theory, and cultural materialism have dominated archaeology in the Chesapeake, and focuses on how these approaches have been challenged and broadened by archaeological studies in the region over the past two decades. More recent studies include those on Native American materiality, social hybridity, exchange networks, and ritual analysis. Highlighting studies that shed light on the contact period and emphasizing historical contingency and social interaction approaches, Gallivan calls for increased collaboration between archaeologists and American Indian descendent groups. This moves from an approach based in moments or stasis evident in material culture, to an understanding of archaeology as part of highlighting emergent social cultures or processes in which descendent communities can prominently figure. Gallivan provides examples of collaborative relationships that have already developed, noting the mixed results they have yielded.

Gamble, Lynn H., and Michael Wilken-Robertson
2008   Kumeyaay Cultural Landscapes of Baja California's Tijuana River Watershed.
Journal of California and Great Basin Anthropology 28(2):127-151.
The authors discuss how members of the Kumeyaay, a Native American tribe living in Baja California, interact with the region's landscape. They point to the need for "middle range theory" to connect archaeological evidence and the oral tradition of contemporary people (129). In an effort to address this shortfall, the authors describe the Kumeyaay's cultural landscape as an "ideational landscape" or "landscape of the mind." Ideational landscapes embrace "symbolic and sacred meanings of landscape, in addition to mythical histories, moral messages, and genealogical pasts," and they may be natural or constructed (128). They may be landscapes uncovered by archaeology, but they are known or understood by the Kumeyaay as idea or one of many forms of history. By focusing on the ideational landscape, the authors emphasize that contemporary practices—including telling stories associated with places, naming places, and gathering plants for making medicine and food—serve to sustain social memory and recreate relationships between people and landscape. Ethnographic, geographic, and archaeological methods used to collect data for this study are described.

Goldschmidt, Walter R., and Theodore H. Haas
1998   Haa Aaní, Our Land: Tlingit and Haida Land Rights and Use. Thomas F. Thornton,
ed. Seattle, WA: University of Washington Press.
Goldschmidt and Haas provide reports on the land occupation and use of the Tlingit and Haida of southeastern Alaska. Based on fieldwork undertaken in the summer of 1946, the authors have created lists, maps, and descriptions of places occupied, used, or otherwise claimed by individuals of these groups. They conducted this fieldwork in order to document village property

claims in accordance with the 1884 Organic Act by the United States Congress. Applying to southeastern Alaska, this legislation stated, "Indians, or other persons in said district, shall not be disturbed in the possession of any lands actually in their use or occupation or now claimed by them." The research team included an anthropologist (Goldschmidt), the chief counsel for the Office of Indian Affairs (Haas), and a Native Tlingit and Alaska Native Service teacher (Joseph M. Kahklen). The team spent about one week in each of ten villages. Their methods of documentation in any given village usually began with holding community meetings to recruit "witnesses." Often the village members would decide who should serve, but in each village the team tried to find some witnesses who were old enough to remember traditions of past land use and occupation and other younger witnesses who were serving as hunters and fisherman at the time this research was carried out. These witnesses would then be interviewed, their interviews were recorded, transcribed interviews would be read back to witnesses, and the witnesses would make any necessary corrections before signing the transcription (5). It seems that most—or perhaps all—witnesses were male. The editor explains that the information collected through these research methods is "reliable" (6) because interviews were conducted separately and any disagreements between witnesses about historical or current land claims were either clarified or noted. In summarizing the report, the authors assert that the Tlingit and Haida have continuously occupied and used all parts of the lands and waters of southeastern Alaska since before any exploration of these lands was undertaken by people of European descent (4).

Grumet, Robert S.
2000   Bay, Plain, and Piedmont: A Landscape History of the Chesapeake Heartland from 1.3 Billion Years Ago to 2000. The Chesapeake Bay Heritage Context Project. Annapolis, MD: U.S. Department of the Interior, National Park Service.
Grumet presents a detailed history of landscape and environmental change, migration, culture change, and interactions between humans and landscape in the Chesapeake Bay region. Tracing cultural and environmental change from 1.3 billion years ago to the year 2000, Grumet describes nine periods or "heritage contexts" (6). For each heritage context, he provides maps of the Chesapeake region and lists of references organized by topic. He identifies three major landscapes of the Chesapeake into three types: the "Bay itself," the "Coastal Plain," and the "Piedmont" (3). His "Heritage Context framework" is a combination of two National Park Service frameworks: the Historic Context and the National Historic Landmark Thematic Framework (6). The heritage context framework summarizes basic information about each time period in ways that show relationships between changes in cultural and natural resources (6).

Heckenberger, Michael J., Afukaka Kuikuro, Urissapa Tabata Kurikuro, J. Christian Russell, Morgan Schmidt, Carlos Fausto, and Bruna Franchetto
2003   Amazonia 1492: Pristine Forest or Cultural Parkland? Science 301:1710-1714.
The authors discuss their collaborative process of mapping features and modified forest areas associated with Native Amazonia people in the Upper Xingu region of present-day Brazil. Features (e.g., mounds, ditches, bridges, roads, and wetlands) help show that the area was not a stereotypical "pristine forest" sometimes pictured in the modern imagination. These humandeveloped features and alterations are grouped into "clusters" that help identify the location and expanse of settlements. While features are identified on maps, these features are not necessarily encompassed in a border; that is, the authors discuss areas between bounded

settlements that are highly engineered and managed. Mapping clusters, as well as evidence of activity between borders, provides a view into a fully anthropogenic landscape. Additionally, the authors emphasize the importance of incorporating GIS technology with collaborative practices and indigenous participation to understand the relationships of culture and environment in Amazonia before European contact.

Johnson, Gregory A.
1977   Aspects of Regional Analysis in Archaeology. Annual Review of Anthropology
**   6:479-508.**
This article focuses on regional analysis of settlement patterns and interaction between populations. Section topics include "alternative models of human decision-making as the bases of models of spatial behavior," a review of "model[s] of the spatial interaction of groups or populations," and "aspects of the development and operation of regional interaction systems" (479). Johnson sees assumptions about human decision-making as both potential strengths and weaknesses in spatial theory (480). He discusses "gravity models," which assume that populations generally minimize their movement. These models examine interaction between populations in permanent settlements systematically by identifying specific variables involved in settlement, including the abundance of specific natural resources (487). Turning away from permanent settlements, Johnson considers settlement formation and size differentiation for hunter-gathers (488). He brings up "central place theory," as derived from the field of economic geography, explaining that this theory provides a framework for seeing regional systems as part of "settlement hierarchies" (494). In his discussion of central place theory, Johnson explains that the "rank-size rule" organizes settlements according to relative population sizes (496). He discusses deviations from this rank-size rule, while ultimately emphasizing its potential for use in archaeological contexts (496-497, 501). Yet, he cautions that prediction should not be equated with understanding and that different behavioral patterns can produce similar patterns in the archaeological record (501-502). Bringing this article to a close, Johnson asserts that many of the approaches for understanding regional settlement systems and interaction that have been developed in other fields can be useful in archaeological analysis (502).

Korr, Jeremy
1997   A Proposed Model for Cultural Landscape Study. Material Culture 29(3):1-18.
Korr suggests that cultural landscape research is focused on three agents—humans, artifacts, and nature—in a dynamic relationship where each agent is influenced by, and influences, the others. He refutes earlier arguments (e.g., Sauer 1925) that emphasize human agency in shaping landscapes, rather than as viewing humans as a part of the landscape. Korr suggests that a more holistic approach to cultural landscapes is needed, and he offers a model that consists of five operations or phases: 1.) Description - describing cultural landscapes in terms of its basic elements (human, artifact, and natural components); 2.) Boundaries - understanding boundaries in space in time along with their creators, as well as determining any abstract, experiential, or socio-political boundaries; 3.) Dynamic Relationships - assessing the ways in which humans, nature, and artifacts are all agents; 4.) Perceptions - determining how has the landscape been understood by different groups; and 5.) Cultural Analysis - an examination of the depth of the relationship between landscape and its culture (ideologies, shared beliefs, etc. attached to the place or objects). The author emphasizes the importance of regarding landscapes as dynamic

processes rather than static entities, and suggests incorporating performance theory (in which "theatrical vocabulary" is used to view "historical cultures as performances" (10)) and other ethnographic techniques to "get inside" cultures to understand their landscapes.

Lewis, Peirce
1979   Axioms for Reading the Landscape: Some Guides to the American Scene. *In* **The Interpretation of Ordinary Landscapes: Geographical Essays. D. W. Meinig, ed. Pp. 11-32. New York, NY: Oxford University Press.**

Lewis informs us that his students are challenged when they try to "read" landscapes—they do not know how to approach the task of using what they see as ordinary as evidence for culture. Lewis gives examples of "farmers' silos," "golf courses," "garbage dumps," and "manure piles" (11), insisting that all of these elements can serve as clues about the cultural values, norms, and systems of the people who created—intentionally or unintentionally— these ordinary places and structures. Yet, he also insists that his students often do not see these places and structures as acceptable forms of evidence or sources of information when they initially attempt to read the landscape. In response to this challenge, Lewis identifies seven "axioms" based on his own experience working with cultural landscapes. These practical rules call attention to elements of landscapes and relationships between those landscapes that seem easy to overlook. While assuming that the reader is working toward analyzing a contemporary landscape, Lewis suggests that these axioms also emphasize the importance of history in understanding present landscape and culture. Two axioms that seem particularly relevant for discussions of indigenous cultural landscapes are the sixth and the seventh. The sixth is titled "the axiom of environmental control" (25), which explains that an area's ecology, climate, and other physical non-human factors exert a great deal of influence over how any cultural landscape develops and changes. The seventh is titled "the axiom of landscape obscurity" (26). This axiom warns those reading the landscape that while most features of landscapes have messages or clues about culture to convey, it is very rare that those messages are obvious at first glance or at all. Reading the landscape is difficult and the interpretations researchers come up with are often uncertain.

Linebaugh, Donald W.
1994   "All the Annoyances and Inconveniences of the Country": Environmental Factors in the Development of Outbuildings in the Colonial Chesapeake. Winterthur Portfolio 29(1):1-18.

Linebaugh details the many factors that contributed to early colonial settlement in the Chesapeake region, and in doing so lays out models for the ways in which site selection and layout of buildings would occur. His model for determining settlement location is based on archival and archaeological research, and includes influences such as the availability of land, weather, access to navigable waters, traditions of previous settlers, natural environment, solar orientation, drainage, and view—all factors relevant for determining cultural landscapes. He provides several examples of ways in which human settlement relates to a group's environment and the ways in which environmental factors shape human settlement and use patterns.

Macphail, Mike
1999   A Hidden Cultural Landscape: Colonial Sydney's Plant Microfossil Record.
Australiasian Historical Archaeology 17:79-109.
Macphail's study looks at organic-rich sediments (including buried soil material) to help determine the cultural landscape of colonial Sydney, Australia. His study offers a way to trace landscape changes and changing community attitudes toward the domestic and natural environment by tracing changes in soil material—for example, which plants or animals may have been food, or existed in gardens, reveals attitudes regarding the organic material found. This points to the possibility of examining soil matter to determine what ornamental gardens, farmland, pastureland, and so on, would have looked like, in the sense of placement and timeframes certain plants were used in particular landscapes.

Merson, John and Shaun Hooper
2005   Mapping Country Project: Mapping the Aboriginal Cultural Heritage Values of the
Greater Blue Mountains World Heritage Area. Online
<http://www.bmwhi.org.au/what/projects/mappingcountry.html>. Accessed
December 5, 2012.
Merson Shaun Hooper provide an overview of the planned "Mapping Country" project that has developed as a partnership between the Blue Mountains World Heritage Institute, the Blue Mountains City Council, and the New South Wales Department of Environment and Conservation's National Parks and Wildlife Service. The project seeks to protect and conserve aboriginal cultural heritage values and knowledge, put into place processes for identifying and conserving these values, and involve aboriginal communities in the land management process. Plans for the project include accessing the "current knowledge of Aboriginal cultural values in the study area," creating a "computer-based data management system for an Aboriginal cultural Knowledge Database," recording additional cultural heritage data, and integrating already existing data into one system (6).

New South Wales Department of Natural Resource
2006   Project Summary Sheet (CCA 26): Aboriginal Cultural Heritage Mapping of
Coastal NSW. Online <http://www.planning.nsw.gov.au/cca-toolkit>. Accessed
December 5, 2012.
This document summarizes activities carried out in an Aboriginal mapping initiative by the New South Wales Department of Natural Resources. Working with aboriginal groups to identify different types of "country," the managers of this project produced maps prepared in a geographic information systems (GIS) format, a summary report and a historic document database. The stated goals of this project were to aid state and local government in managing New South Wales coastal areas while respecting aboriginal cultural values.

Northwest Territories Cultural Places Program
2007   **Living with the Land: A Manuel for Documenting Cultural Landscapes in the Northwest Territories. Yellowknife, NT, Canada: NWT Cultural Places Program. Online <http://www.pwnhc.ca/programs/downloads/Living_with_the_Land.pdf>. Accessed December 5, 2012.**

The authors define aboriginal cultural landscapes for the uses of their organization—the Northwest Territories—and give advice about anticipating questions that others might have about the concept (22). They identify several steps needed to designate aboriginal cultural landscapes and emphasize using a "community-based" research approach that keeps members of aboriginal communities involved and informed throughout the research and mapping processes. The authors ascribe importance to background, historical research but also to interviews with living aboriginal community members.

Rambaldi, Giacomo, and Jasmin Callosa-Tarr
2002   **Participatory 3-Dimensional Modeling: Guiding Principles and Applications. Los Baños, Philippines: ASEAN Regional Centre for Biodiversity Conservation (ARCBC). Online <http://sd2cx1.webring.org/l/rd?ring=ppgis;id=14;url=http%3A%2F%2Fwww%2Eiapad%2Eorg%2Fbibliography%2Ehtm>. Accessed December 5, 2012.** The authors make the case that three-dimensional modeling of landscapes can be useful for community self-determination, conflict resolution, and facilitating dialogues between local communities and government officials. They draw on examples of three-dimensional modeling initiatives in Thailand, Vietnam, and the Philippines as cases in which this collaborative mapping process has been used. The authors recommend that the knowledge about land use and ecology that community members share should also be included in geographic information systems (GIS) and global positioning systems (GPS). In this way, people around the globe who have use to these technologies would be able to access this local knowledge as well. Furthermore, including using GIS and GPS systems to store this knowledge would ensure that it remains accessible, even if a physical three-dimensional model is lost or damaged. Yet another advantage of integrating three-dimensional models with GIS or GPS data is that previous iterations of landscapes can be saved, even as community members create new versions. In this way, the process is able to document change in cultural perceptions and use of landscapes and in natural phenomena. One challenge that the authors encountered is that the participatory process is only useful to the extent to which government officials and organizations are willing to credit the models produced with authority (20).

Roper, Donna C.
1979   **The Method and Theory of Site Catchment Analysis: A Review. Advances in Archaeological Method and Theory 2:119-140.**

Roper reviews archaeological literature on the topic of site catchment analysis from both British and American sources. She explains that site catchment analysis is a method used in archaeological research, and that this method is concerned with the following factors: "availability, abundance, spacing, and seasonality of plant, animal, and mineral resources" (120). These factors are important because they may be used to determine the location of prehistoric

habitation sites. The term "catchment" is borrowed from the literature of geomorphology in which it refers to a "drainage basin or watershed and denotes the area from which a stream draws water" (120). In archeological analysis, the catchment of a site refers to the area from which the inhabitants of a site obtain their resources. One assumption of this method is that the farther a resource is located from an inhabited site, the more energy site inhabitants must expend in order to access that resource (120). Another assumption is that some resources are prioritized over others (121). While some studies employing these methods focus on the distribution of only one or two resources, others focus on a host of different resource distributions in the same area (126). In the course of her review, Roper points out several areas in which the application of these methods falls short. For example, she calls into question the reliability of resource distributions based on modern maps of natural resources (126-127). Roper concludes by identifying the areas of research in which site catchment analysis has been used: evaluating the feasibility of culturehistorical reconstructions, determining of the feasibility of forms of economy, modeling settlement patterns, and studying demographic processes of the inhabitants of a given site or area (135).

Shiner, Justin and Michael Morrison
2009   The Contribution of Heritage Surveys Towards Understanding the Cultural Landscape of the Weipa Bauxite Plateau. Australian Archaeology 68:52-55. Five years of cultural heritage surveys were conducted with "Traditional Owners" (indigenous communities) around the bauxite plateau at Weipa near Cairns in Australia. Whereas archaeological work conducted in the region focused on one type of site—shell matrix sites—common to the coastal environment bordering the plateau, the surveys helped identify other cultural landscape features, such as stone artifacts, scarred trees, and earth mounds. The inclusion of Native participants in this project led to a multi-temporal understanding of place and opened the door to future collaborative research with Traditional Owners. Shiner and Morrison suggest that reliance alone on archaeology in understanding cultural landscapes is limiting; oral history and traditional knowledge are helpful in broader cultural heritage assessments related to landscape.

Archaeological sites were identified during "systematic block surveying of proposed mining areas" (52). Traditional Owners of the sites surveyed were consulted, and archaeologists utilized Native traditional and historical knowledge to inform the surveys, keeping with their stated mission of "ongoing collaborative research with…Traditional Owners" (54). Archaeological findings are detailed.

Sletto, Bjorn
2009   "Indigenous people don't have boundaries": Reborderings, Fire Management, and Productions of Authenticities in Indigenous Landscapes. Cultural Geographies 16:253-277.
Sletto describes a participatory mapping project involving the indigenous Pemon people in Venezuela. Through this project, participants mapped settlements, locations of indigenous landuse, and places of cultural significance. Locals were also encouraged to develop hand-drawn maps that identify the group's territory. Sletto developed a workshop in which indigenous leaders revised existing territorial maps. He emphasizes that boundaries represent ownership and exclusion, stating that the "production of boundaries in indigenous mapping projects have

complex, sometimes contradictory bearings on indigenous identity politics, indigenous territoriality, and indigenous rights" (272) and that boundaries are symbolic rifts in space understood differently in different cultures. While many of the indigenous participants saw boundaries as a "tool for the separation and placement of things and people" they simultaneously "portrayed boundaries as a non-indigenous phenomenon" (266).

Sperling, Stephanie Taleff
2008   The Middle Woodland Period in Central Maryland: A Fresh Look at Old
Questions. *Maryland Archaeology* **44(1):22-36.**
This paper and its extensive bibliography provide a survey of the archaeological research that has been completed on the Middle Woodland time period (ca. 500 BCE –1000 CE) for Central Maryland. While Sperling's geographic focus is on Central Maryland, she includes some pivotal sources about the Middle Atlantic culture's mark on the archaeological record more generally. As Sperling lists, she covers the broad topics of "chronology, resource procurement, settlement patterns, and trade," along with the following more focused topics of "ceramic and lithic technology, types of features and pits, and results from radiocarbon dating analyses" in Central Maryland for the Middle Woodland period (22). She points out that many of the sources she relied on for this review were written during the 1980s, and calls for organizations to fund similar studies in the present so that 21st century archaeologists might be able to continue the conversation about that dynamic time period and place. Finally, Sperling concludes with some research questions and recommendations, which she has framed as helping to guide future archaeological studies of the Middle Woodland period in Central Maryland. She identifies research questions about regional settlement patterns, bringing up that these patterns could be more closely examined through further analysis of shell middens, storage points, point type distributions, and lithic types as distributed in relation to drainage systems. Sperling also makes the case that sites that may seem insignificant at first, as a result of their low concentrations of artifacts, should be given attention because they are useful for the ways in which they contribute to a fuller picture of regional settlement and natural resource use patterns over time.

Sperling, Stephanie Taleff with Jane C. Cox
2009   Survey and Assessment of Middle Woodland Period Sites in Anne Arundel County,
Maryland. Volume I. Report prepared for the Maryland Department of Planning by
the Lost Towns Project. Al Luckenbach, principal investigator. Online.
<http://www.losttownsproject.org/projects/MiddleWoodlandResearch/
MiddleWoodlandTool.htm>. Accessed March 3, 2013.
This report—the year one report for a multi-year study funded by Maryland Historic Trust— discusses a detailed analysis of eight Middle Woodland period (ca. 500 BCE – 1000 CE) sites in Anne Arundel County located in Central Maryland. The authors, members of the Lost Towns Project staff in Anne Arundel County, begin by explaining that they first re-examined a total of 169 previously documented Middle Woodland Anne Arundel County sites (ii). They ranked these sites according to their predicted archaeological evidence yields, and settled on eight sites on which to focus: Greenspring #1, Governor's Bridge Site, Limehouse Cove, Quiet Waters Farm I, Snowden's Landing, Martin's Pond, Leon site – a.k.a. Pig Point, and Grunwald II (iv). While the report provides brief descriptions of each of these sites and identifies research questions, it explains that the Lost Towns Project archaeologists will revisit and partially

reexcavate at least four of these eight sites during year two of the Maryland Historic Trust grant funding.

Spruce, Duane B. and Tanya Thrasher, eds.
2008   The Land Has Memory: Indigenous Knowledge, Native Landscapes, and the National Museum of the American Indian. Chapel Hill, NC: University of North Carolina.
The authors outline the planning and designing of the National Museum of the American Indian (NMAI) in Washington, DC. The authors emphasize the collaboration that took place and continues to take place between curators and members of indigenous communities living across the Americas. The book helps make the point that ICLs are not invariably naturally occurring landscapes or landscapes occurring in the place of their origin. In the case of the NMAI, ICLs were consciously constructed on the museum's grounds to represent Native relationships with the environment. The authors highlight the reasoning behind specific design choices that contribute to the landscape surrounding NMAI and the architecture of the museum building. Wide in scope, the book also contains a brief history of indigenous groups in the Chesapeake, a section on the relationship between indigenous art and landscape, and some examples of how traditional ecological knowledge serves to sustain plant and animal populations by promoting practices that discourage overharvesting.

White, Marian E.
1963   Settlement pattern change and the development of horticulture in the New York-Ontario Area. Bulletin of the Society for Pennsylvania Archaeology 63(1-2):1-12.
The author contends that studies of settlement pattern change can illuminate how the practice of maize-based horticulture developed and spread in the eastern United States prior to European settlement. White assumes that increased "sedentarization" is associated with increased reliance on agriculture (2). While she predicts that direct evidence of local corn horticulture during the Early to Middle Woodland Periods will never be found in the northeastern United States, she argues that evidence of increased long-term settlements demonstrate a corresponding increase in dependence on horticulture in this time and place. In order to determine settlement patterns—which White divides into four categories (recurrent, semi-sedentary, semi-permanent sedentary, and permanent)—she uses information gained from "refuse bone," referring to collections of animal bones that are thought to be discarded during food preparation and consumption (11). She asserts that the refuse bone can reveal information about whether a site is occupied seasonally or year-round and about whether those who left the refuse bones were moving continually or periodically (11).

Andrews, Thomas D. and Susan Buggey
2012   Canadian Aboriginal Cultural Landscapes in Praxis. *In* **Managing Cultural Landscapes. Ken Taylor and Jane L. Lennon, eds. Pp. 253-271. London: Routledge.**
Andrews and Buggey credit Canada's recognition of aboriginal cultural landscapes (ACLs) with laying the basis for "acknowledging alternative worldviews in a values-based approach to cultural heritage" (253). They provide a brief history of the concept's evolution in practice and give examples of how federal law surrounding ACLs has been implemented. They note that the primary basis for determining significance in aboriginal cultural landscapes is "community involvement in identification of the place and its values, an integrated worldview of humananimal-land relationships, and traditional knowledge practices associated with the landscape" (254), although they also argue that when aboriginal people operate within the ACL framework they are required to use "concepts foreign to their own worldview to explain their position in land use planning and environmental assessment" (256). The authors warn that there are many challenges to putting the ACL concept into action. "Because of their large size, their propensity for change and their invisible bond with oral culture, Indigenous knowledge and spirituality, [ACLs] challenge conservation principles that find their genesis largely in the arena of built heritage and tests of integrity and authenticity" (264-5). That is, ACLs may challenge historic preservation and other conservation professionals steeped in Western notions of authenticity and material culture as evidence of the past. The ACL is often defined through oral culture and cosmology, and is a dynamic landscape. Despite these obstacles, the authors suggest that ACLs can be powerful tools of environmental conservation, and for taking steps to reverse a long history of exploitation.

Barsh, Russell L.
2000   Grounded Visions: Native American Conceptions of Landscapes and Ceremony. St. Thomas Law Review 13:127-154.
Barsh argues that conserving the integrity of landscapes is an essential process in supporting living, distinctly indigenous cultural traditions, systems of knowledge, and languages. He suggests that indigenous cultural landscapes include more than distinctive geographic features, explaining that groupings of plants and animals and places associated with stories or songs may play important parts as components of cultural landscapes. Barsh provides a detailed explanation of the different pieces of legislation in place in the United States and internationally that provide limited avenues for conserving indigenous cultural landscapes. He notes the limits of each of these pieces of legislation and concludes that the United States has failed to put into place any comprehensive legislative framework that supports efforts to conserve indigenous cultural landscapes and to support indigenous cultural traditions. He calls for the United States to amend the American Indian Religious Freedom Act (AIRFA) and the National Historic Preservation Act (NHPA) in order to "embrace the UNESCO conception of cultural landscapes explicitly"(149). He also calls for government support for American Indian leaders' initiatives to conserve religious and cultural landscapes. Finally, he provides an alternative to making these changes through legislation alone, claiming that creating consensus and support for indigenous cultural landscape conservation among the American public is another process that may lead to

increased recognition of these landscapes and support for sustaining the living cultural traditions associated with them.

Benally, Jeneda
2012   The Holy San Francisco Peaks, Arizona: Cultural and Spiritual Survival of SouthWestern Indigenous Nations. *In* Sacred Species and Sites. Gloria Pungetti, Gonzalo Oviedo, and Della Hooke, eds. Pp. 409-413. Cambridge: Cambridge University Press.
Benally describes the spiritual meanings that Navajo, Apache, and Hopi groups ascribe to the Holy San Francisco Peaks in Northern Arizona. These indigenous groups link their well-being and identity to this unique landscape. The Holy San Francisco Peaks are managed by the U.S. Forest Service, and a ski resort has been permitted on the land since the 1930s. In 1979, the resort was expanded despite legal challenges made by indigenous groups. A current controversy exists over the ski resort's desire to manufacture snow using wastewater. The Navajo, Apache, and Hopi groups object to this plan, and Benally cites U.S. Forest Service reports that explain how manufacturing snow has the potential to disrupt these groups' religious ceremonies and identities. Benally concludes that altering the landscape of the Holy San Francisco Peaks would alter these groups' "spiritscape," which in turn would disrupt the "living lifeways" they are maintaining (410). This example illustrates how cultural landscapes are essential for indigenous groups in maintaining beliefs and traditions and how they can be threatened by activities like tourism that seek to alter the landscape and ecology.

Brown, Jessica and Nora Mitchell
2000   Culture and Nature in the Protection of Andean Landscapes. Mountain Research and Development 20(3):212-217.
Brown and Mitchell highlight successful initiatives to conserve inhabited Andean cultural landscapes. They stress the value of drawing from traditions of "caring" for natural and cultural heritage that are found regionally. They write that "the convergence of strategies in nature conservation and cultural heritage protection creates an important window of opportunity for the protection of special landscapes," (217) and cite relatively recent steps taken toward conserving landscapes (dubbed cultural landscapes or other), such as NGO involvement, legislation for private reserves in Latin America, and UNESCO designations. The authors emphasize that landscape conservation models must be tailored to particular cultural and ecosystem contexts.

Brown, Jessica, Nora Mitchell, and Michael Beresford
2005   Protected landscapes: a conservation approach that links nature culture and community. *In* The Protected Landscape Approach: Linking Nature, Culture, and Community. Jessica Brown, Nora Mitchell, and Michael Beresford, eds. Pp. 3-19. Gland, Switzerland: World Conservation Union (IUCN).
Brown, Mitchell, and Beresford explain the protected landscape approach as growing out of conversations that took place at the Fifth World Parks Congress in 2003. This approach was first conceived of as a way to manage "Category V" protected landscapes and seascapes. In the category system created by the World Conservation Union (IUCN), "Category V" refers to "protected areas based on the interaction of people and nature, and the principal designation for

lived-in landscapes" (8). However, as the authors suggest, the protected landscape approach—an approach that forms the basis for this introduction and generally for the edited volume in which this article appears—can be expanded and applied to landscapes that fall under other categories. This approach recognizes that in areas where large-scale swaths of land are to be protected, managers must plan according to a "mosaic" of different landscape types and uses (5). Several other ideas are central to this approach. For example, the idea that cultural diversity and biological diversity can support each other is key (5). The concept of stewardship also undergirds the protected landscape approach; those individuals and communities living on the land and continuing their cultural practices are seen as "stewards" or caretakers (5-6). The authors preview the articles that follow in this edited volume and emphasize that all understandings of landscape and wilderness have a "cultural" basis (18).

Cowley, Jillian P.
2011 Visitors' Creative Responses to protected Landscapes. *In* **Rethinking Protected Areas in a Changing World: Proceedings of the 2011 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites. Samantha Weber, ed. Pp. 418-423. Hancock, MI: The George Wright Society.**
Cowley suggests that studying visitors' creative responses to protected landscapes can help land managers understand how people relate to those landscapes. She describes her research at Ghost Ranch in New Mexico, which showed that the paintings artists produced during a workshop held at the ranch reflected gendered constructions of landscape. Research of this kind can be used to gather feedback regarding which parts of a landscape people see as important and can inform land managers' decisions about development and interpretation.

Fowler, P. J.
2003 World Heritage Cultural Landscapes 1992-2002. World Heritage Papers. Paris: UNESCO World Heritage Centre.
 Fowler recounts the UNESCO World Heritage Committee's adoption of a cultural landscape concept. In 1992, the World Heritage Committee recognized cultural landscape as one of the categories of sites inscribed on the World Heritage List. By 2002, 30 landscapes had been inscribed on the list. Fowler points out that while another 70 sites on the World Heritage List could potentially be considered World Heritage cultural landscapes, these sites were designated before cultural landscape had been recognized as a category by the World Heritage Committee. The majority of both official and unofficial cultural landscapes inscribed on the list are located in Europe. Fowler calls for greater representation of landscapes in Africa, the Arab States, western Asia, Latin America, and the Caribbean. He concludes with 12 recommendations to the World Heritage Committee.

Goetcheus, Cari
2002 Cultural Landscapes and the National Register. CRM 25(1):24-25.
Goetcheus traces the development of the cultural landscape concept and its application by the National Historic Register and the National Park Service. She lists documents that have been developed to guide the processes of identifying, describing, and documenting cultural landscapes and describes two National Park Service initiatives designed to aid parks and communities in

documenting cultural landscapes: the Historic Landscape Initiative and the Park Cultural Landscapes Program. Goetcheus argues that the National Park Service and National Register have become more sensitive to including cultural landscapes in their designations since the 1980s, but she also identifies challenges that these organizations face in designating cultural landscapes. A primary challenge is one of inconsistent terminology between organizations. Goetcheus calls these organizations and others to coordinate with each other to streamline the terminology they use to describe and designate cultural landscapes.

Goetsch, Elizabeth
An Integrant Part: Using Cultural Landscapes in Interpretation of Difficult History. *In*
> **Rethinking Protected Areas in a Changing World: Proceedings of the 2011 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites. Samantha Weber, ed. Pp. 407-411. Hancock, MI: The George Wright Society.**

Goetsch draws on the history of the Stones River National Battlefield to discuss how using a cultural landscape approach can aid in interpreting a painful and contested history. She explains how using the landscape as a "character" (407, 411) allows park interpreters to connect disjointed histories that occurred in the same place. In the case of Stones River National Battlefield, focusing on the landscape as a changing "character" allows interpreters to transition from narrating a Civil War battle to telling stories about an African American community that lived on the same landscape decades after the battle. In turn, continuing to focus on the landscape as a character, allows interpreters to bring visitors into the story; now, visitors are interacting with this memorialized landscape in different ways from the other characters, Civil War soldiers and African American residents. Goetsch explains further that using the landscape as a character or perspective helps to contextualize sensitive topics (411). In the course of history narration, different groups interact with the landscape in varying ways, and Goetsch argues that these groups are less easily classified as "good guys" or "bad guys" if the landscape is serving as a character in the narrative because focusing on the relatively neutral landscape allows interpreters to avoid "blame and victimization" (411).

Hunter-Central Rivers Catchment Management Authority
2009 Aboriginal Culturally Significant Landscapes in the Hunter-Central Rivers Region.
> **Online**
> **<http://www.hcr.cma.nsw.gov.au/articles/news.asp?news_id=49#!prettyPhoto>.**
> **Accessed December 5, 2012.**

Created by the Hunter-Central Rivers Catchment Management Authority (CMA)—part of the New South Wales government—this contribution recognizes that aboriginal cultural history, knowledge, and practices are valuable assets in land management planning. This document was created in association with the Australian government's National Historic Trust. It serves as a regionally specific resource for landowners and managers. The authors describe a number of different types of culturally significant aboriginal sites, indicate what those sites might look like, where they might be found, and what the best management practices for conserving them might be. They emphasize the importance of engaging with aboriginal communities before altering the landscape of either public or private lands. Even if there is no physical evidence of aboriginal occupation or use, the authors point out that the landscape features, flora, and fauna may be culturally significant to aboriginal people.

King, Thomas F.

Places that count: Traditional cultural properties in cultural resource management.
> **Walnut Creek, CA: AltaMira Press.**

King—co-author of the 1990 publication "National Register Bulletin 38" that coined the term "traditional cultural properties" (TCP)—offers this book as a resource for those "struggling with TCP issues" as part of their jobs, as members of indigenous groups, or as other concerned individuals (2). King emphasizes that every individual has places he or she views and remembers as significant, but he adds that a society with competing values cannot chose to "protect" everyone's meaningful places from change. Determining which places are important to protect, King argues, is a process in which cultural resource managers must consider a complex set of factors, including how many people see a given place as meaningful and whether the groups involved are groups whose cultural interests have been "easily bowled over by the interests of majority society" (5). He mentions Indian tribes, Native Hawaiian groups, and other ethnic minorities as examples of these types of marginalized groups that he sees as deserving of extra help protecting their significant places. However, he also points out that communities that are not ethnic minorities may struggle with gaining protection for their significant places precisely because they are "not easy to recognize" as distinct communities (5-6). He predicts that increasing numbers of nonindigenous groups will begin to see their meaningful places as TCPs and seek this designation (255-256). Pointing out a term that he has become very cautious of using, King discusses how the word "sacred" often does not translate accurately between cultural groups and results in misunderstandings and differing expectations for place protection (8-10; 259-263). King touches on other issues that involve TCPs and that cultural resource managers might need to negotiate, including how much TCP studies cost, and how they are related to archaeological sites, the idea of environmental justice, and intangible cultural resources (255276). In each case, he attempts to provide some context for the issue and share his interpretation of best practices.

King, Thomas H.

First Salmon: The Klamath Cultural Riverscape and The Klamath River Hydroelectric
> **Project. Klamath River Intertribal Fish and Water Commission.**

This report was prepared for the Klamath River Intertribal Fish and Water Commission and is based on studies done by or on behalf of Native American tribes dealing with the Klamath Riverscape in the western United States. It addresses questions regarding responsibilities of the Federal Energy Regulatory Commission (FERC) under Section 106 (NHPA) in considering relicensing the PacifiCorp Klamath River Hydroelectric Project. King defines and provides characteristics of the riverscape (e.g., types of fish and plants, cultural uses and perceptions of its value by affiliated tribes), and determines that the riverscape meets the National Register Criteria (36 CFR 60.4). The term "cultural riverscape" is defined here as an adaptation of the U.S. Secretary of the Interior's usage of *cultural landscape*: "a river and its environs, including their natural and cultural resources, wildlife, and domestic animals, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values" (4). King considers potential deleterious effects, environmentally and culturally, of the Hydroelectric Project on the riverscape, and offers recommendations to interested parties about addressing conservation through means beyond the National Register (e.g., the National Environmental Policy Act, the

American Indian Religious Freedom Act, and Executive Orders 12898and 13007which address issues of environmental justice and Indian sacred sites, and the California Environmental Quality Act).

Larsen, Soren C.
2006   The Future's Past: Politics of Time and Territory Among Dakelh First Nations in British Columbia. Geography Ann. 88B (3):311-321.
Larsen examines the ways in which Dakelh First Nations in British Columbia have been assertive in "politicizing the connections between time and place" amidst Canadian industrial progress (311). That is, the Dakelh make explicit their connection to their territory and use this connection for political exposure and gain. He finds that this is done through the performance of historical narratives, media exposure, development projects, and the establishment and interpretation of cultural landscapes. Dakelh territories have come to serve as spaces for enacting alternative (political) development agendas. Larsen also offers an overview of Canadian government policy regarding aboriginal peoples, and how the Dakelh have come to use this policy and newfound political power to restore elements of their cultural landscape (e.g., land management authority).

Lennon, Jane L.
Cultural Landscape Management: International Influences. *In* Managing Cultural Landscapes. Ken Taylor and Jane L. Lennon, eds. Pp. 45-70. London: Routledge.
Lennon suggests that "cultural landscapes are artefacts created by humans in the natural environment" and that "their material and intangible values require management to conserve and transmit these values in the context of a landscape continually being used, shaped, and changed" (45). Values discussed vary from site to site, and include spiritual values, values associated with natural beauty, and values associated with traditional life-ways. Lennon examines UNESCO's development of the cultural landscape concept as well as trends and management issues related to the designation of cultural landscapes with a focus on the Asia-Pacific region. Key management issues that she identifies are:

>Lack of awareness of and general education about World Heritage values….
>Need for site-specific training for those working in World Heritage cultural landscapes….
>Using farming and forestry policies to define what changes can be permitted in the landscape while still maintaining their outstanding universal values….
>Managing tourism to ensure continuing visitor access to and appreciation of the landscape.
>Finding resources to ensure economic viability of operations…including user-pays concepts and other external income.
>Developing landscape conservation treatments and new techniques for managing essential components….
>Coping with impacts caused by threatening processes and events or developments external to the site or in the buffer zone affecting or threatening the integrity of the…cultural landscape.

Supporting communities that maintain heritage values within the cultural landscape especially where the associative values of the landscape reside with those communities. (55)

Though Lennon encourages developing partnerships with local communities to address the above concerns, she writes that critical issues for the conservation of cultural landscapes include educating communities about the heritage values of their landscapes, which notably requires a top-down approach to heritage conservation.

Lennon, Jane and Steve Mathews

1996   Cultural Landscape Management: Guidelines for Identifying, Assessing and Managing Cultural Landscapes in the Australian Alps National Parks. Cultural Heritage Working Group Australian Alps Liaison Committee. Jane Lennon and Associates. Online <http://www.australianalps.environment.gov.au/publications/index.html#research>. Accessed December 5, 2012.

This publication examines what cultural landscapes are, how their boundaries and features may be defined, and, in particular, how aboriginal cultural landscapes function. The authors' focus is on cultural landscapes, conservation policy, and management issues related to the Australian Alps national parks. They divide cultural landscapes into several categories (e.g., associative landscapes, including landscapes of religious meaning; places representing layers of history; and landscapes reflecting cultural processes that are still alive). Several distinguishing features of cultural landscapes are provided, as well as examples of these features from their research. Legislation relating to cultural landscapes in Australia is also provided 15), along with a step-bystep plan for assessing the cultural significance of landscapes (16).

Lennon and Matthews define cultural landscapes as "those parts of the land surface which have been significantly modified by human activity" and "rural and urban settings (spaces) that people have settled or altered through time" (1). Aboriginal cultural landscapes are not given a separate definition; rather, aboriginal peoples are simply among those who might affect a landscape, though the authors suggest the need for separate research devoted to aboriginal cultural landscapes (9).

Maretti, Claudio C. with Lucia H. O. Wadt, Daisy A. P. Gomes-Silva, Wanda T. P. de V. Maldonado, Rosely A. Sanches, Francisco Coutinho and Severino da S. Brito

2005   From pre-assumptions to a 'just world conserving nature': the role of Category VI in protecting landscapes. *In* The Protected Landscape Approach: Linking Nature, Culture, and Community. Jessica Brown, Nora Mitchell, and Michael Beresford, eds. Pp. 47-64. Gland, Switzerland: World Conservation Union (IUCN).

Maretti et al. write about how the protected landscape approach put forth by the World Conservation Union (IUCN) can be used in the context of landscapes that are designated as "Category VI" within the ICUN system. This category of protected area is used for "extractive reserves, combining nature conservation and sustainable use of natural resources by local communities" (54). The author points out that the protected landscape approach, especially as it relates to Category VI, must rely on "participatory processes and integration within regional

planning and management" (47). This designation restricts the extraction and use of natural resources to practices that are seen as "traditional," and it restricts these practices to groups that the IUCN views as local communities who have practiced these resource use traditions over the long-term (53). The authors do not specify a length of time that would constitute traditional use.

Mitchell, Nora, Jessica Brown, and Michael Beresford
2005 Conclusions – the protected landscape approach: conservation for a sustainable future. *In* **The Protected Landscape Approach: Linking Nature, Culture, and Community. Jessica Brown, Nora Mitchell, and Michael Beresford, eds. Pp. 231-244. Gland, Switzerland: World Conservation Union (IUCN).**

The authors provide a summary of how the case studies included within this edited volume illuminate the benefits and challenges of using the World Conservation Union's (IUCN) "protected landscape approach" (231). They first review the ideas behind this approach: "This approach does not focus solely on the protection of nature and biodiversity but rather recognizes the critical links between nature, culture, and community for long-term sustainability of conservation…. This approach confirms that stewardship depends on people and recognizes the importance of an inclusive, participatory, and democratic process for accomplishing conservation" (231). Drawing from the examined case studies, they propose an "operational framework" for this approach that includes two dimensions: place and process. They list the characteristic of place that they recommend analyzing and the processes that they recommend should be included in the approach. The following table is copied directly from the text (244):

Framework for the protected landscape approach

Characteristics of place	Characteristics of process
1. Bioregional with mosaic of designations and land uses	4. Community-based, inclusive and participatory
2. Interrelationship of nature and culture	5. Cross-sectional partnerships
3. Relationship between tangible and intangible values	6. Planning and legal frameworks for engagement through equity and governance
	7. Contributes to sustainable society

Ultimately, the authors assert that the bulk of challenges hindering the application of this approach arise from community members' negative perception of conservation areas. They argue that the processes suggested above can help to mitigate those challenges.

National Park Service
N.d. Cultural Landscapes. Online <http://nps.gov/tps/how-to-preserve/culturallandscapes.htm>. Accessed December 5, 2012.

The U.S. National Park Service (NPS) introduces the concept of cultural landscapes, distinguishing between four types of cultural landscapes (historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes). This report points out that the Secretary of the Interior's *Standards for the Treatment of Historic Properties* apply to cultural landscapes. While there are specific guidelines focusing on how to apply these standards to cultural landscapes, these standards apply to all types of historic properties. Highlighting six

case studies, NPS asserts that these projects have successfully applied the above-mentioned standards.

National Park Service
N.d. Guidelines for the Treatment of Cultural Landscapes. Online
   <http://www.nps.gov/tps/standards/four-reatments/landscapeguidelines/index.htm>.
   Accessed December 5, 2012.
The U.S. National Park Service (NPS) illustrates how the Secretary of the Interior's *Standards for the Treatment of Historic Properties*, as revised in 1992, apply to the management of cultural landscapes. The four treatments for historic properties that these standards specify are "preservation," "rehabilitation," "restoration," and "reconstruction." The report suggests that assessing the integrity and significance of a landscape or property will provide insights about which of these treatments is appropriate. While acknowledging that landscapes are always changing, this report asserts that planned management of landscapes can intentionally seek to ensure that some landscapes characteristics remain unchanged. These intentionally preserved landscape characteristics may provide a sense of continuity for those that experience these landscapes overtime. Definitions of cultural landscape terminology are provided along with a bibliography of works focusing on cultural landscape preservation.

Parker, Patricia L. and Thomas F. King
1998[1990]   Guidelines for Evaluating and Documenting Traditional Cultural Properties.
   National Register Bulletin. Washington, D.C.: U.S. Department of the Interior.
   Online <http://www.nps.gov/nr/publications/bulletins/nrb38/>. Accessed September
   8, 2012.
In this National Register Bulletin, Parker and King define "traditional cultural properties" (1) and provide detailed directions for identifying, documenting, and nominating these properties for inclusion in the National Register of Historic Places. The authors use the word traditional to refer to "those beliefs, customs, and practices of a living community of people that have been passed down through generations, usually orally or through practice" (1). In this way, a property may be defined as a "traditional cultural property" as a result of the role it plays in "a community's historically rooted beliefs, customs, and practices" (1). The authors mention landscapes as types of traditional cultural properties throughout the text. They also link sustaining traditional beliefs, values, and practices with group "identity" and "self-respect" in the present (2). Parker and King explain that the bulletin was in part written in response to federal legislation intended to conserve intangible cultural heritage, such as the 1980 amendments to the National Historic Preservation Act and the American Indian Religious Freedom Act of 1978 (2-3).

Pletinckx, Daniel, Neil Silberman, and Dirk Callebaut
Heritage presentation through interactive storytelling: a new multimedia database
   approach. The Journal of Visualization and Computer Animation 14:225-231.
The authors discuss the rationale and methodology for implementing an interactive storytelling approach in heritage interpretation. The Ename Centre for Public Archaeology and Heritage Presentation in Belgium has developed and implemented a system called TimeScope 3, which allows heritage site visitors to select "nuggets" (226) of architectural, historical, and archaeological information and connect these pieces of information into narratives. This system

is in use at the St. Laurentius Church in Ename, a one-thousand-year old church which has been excavated, otherwise studied, and put to use as a public site for interested visitors (226). Visitors use a touch-screen interface to access a database of heritage information and create their own interpretation from that database. They select pieces of information about the site's history and link them—using "standard story links" (226)—in order to form new narratives. In doing this, visitors can chose to follow a story "trajectory": through "time," space," or "by theme" (226). Visitors can add even more variability by combining or switching trajectories. The authors point out that this model of interactive storytelling allows users to follow their own interests and enables system managers to quickly update information according to new research. The authors acknowledge that this medium of heritage presentation still needs further refinement and experimentation, but they recommend it as a highly engaging method of interacting with heritage site visitors.

Pollock-Ellwand, Nancy
1992   Heritage Advocacy in the Cultural Landscape. Association for Preservation
        Technology International [APT] Bulletin 24(3/4):71-78.
Pollock-Ellwand describes the efforts of a heritage advocacy group near Toronto, Ontario, to preserve roadside trees framing an agricultural landscape (cultivated and fenced fields, grazing livestock, historic stone houses) amid the threat of deforestation by government road and power projects. The author details the advocacy group's strategies for changing attitudes toward the landscape, leading to social, political, legal, and economic change, and the challenges faced in bringing about major values changes. This article reveals ways in which attitudes toward roadsides and other cultural landscapes are embedded in laws and institutions, customs, and traditions.

Prosper, Lisa
Wherein Lies the Heritage Value? Rethinking the Heritage Value of Cultural Landscapes
        from an Aboriginal Perspective. George Wright Forum 24(2):117-124.
Prosper notes that there is an emphasis on material and morphological artifacts in the National Register's identification of cultural resources and landscapes as valuable heritage. In her use of the word morphological, Prosper refers to non-human formations, including mountains and rivers. She argues that cultural landscapes should be designated and their value determined based on both their tangible and intangible heritage. Pointing to cases of American Indian heritage in North America, she asserts that these groups' cultural landscapes must be approached in terms of sustained practices and performances that maintain relationships between culture and place. She provides two examples of designated aboriginal cultural landscapes in Canada, both of which have been designated as cultural landscapes because of their associations with intangible cultural heritage. Sahoyúé-edacho National Historic Site is associated with the Sahtu Dene and Métis peoples of Canada's Northwest Territories. This cultural landscape is recognized as significant for the Sahtu Dene and Métis because its features, including mountains and rivers, are used as "memory 'hooks'" (120) for oral storytelling traditions. The landscape features are associated with specific stories and seeing or visiting them is an important part of passing these stories to the next generation. The oral tradition constitutes intangible heritage specific to this landscape. Arvia'juaq and Qikiqtaarjuk National Historic Site constitute similar Canadian examples. This pair of sites serves as a "summer hunting camp" for the Paallirmiut Inuit and a sacred site. Each

summer Paallirmiut hunters return, and perform ceremonial practices that are "associated with undertaking this seasonal migration" (121). Prosper emphasizes how this landscape is meaningful because of its association with the intangible practices and performances.

Rogers, Jerry L.
2004 Expanding the Meaning of Heritage: The New Mexico Heritage Preservation
Alliance. Protecting Our Diverse Heritage: The Role of Parks, Protected Areas, and
Cultural Sites. David Harmon, Bruce M. Kilgore, and Gay E. Vietzke, eds. Pp. 196-
199. Proceedings of the 2003 George Wright Society/National Park Service Joint
Conference. Hancock, MI: The George Wright Society.
Rogers situates himself as a professional who has spent his career using the National Historic Preservation Act and the National Register of Historic Places to protect places and resources in New Mexico. He is the current president of the New Mexico Heritage Preservation Alliance, and in this role he has been able to use the same legislation to call for the preservation of more "outside-the-box" state heritage resources, including the night sky, the waters of New Mexico, and a mountain. Rogers argues that calling for the preservation of such places and features has engaged new segments of the population that were not previously involved in discussions of heritage preservation and has generated wide-spread public support. He calls for the National Park Service to work more closely with partners, which he sees as having more freedom to stretch the preservation legislation.

Ruppert, David
2009   Rethinking Ethnography in the National Park Service. The George Wright Forum
26(3):51-57.
Ruppert discusses the National Park Service's (NPS) ethnography program, acknowledging that it emerged, in part, from changing political dynamics that called for more input from indigenous communities in park management. Ruppert explains that he sees NPS ethnography as playing a role in examining both NPS and indigenous group assumptions about what is significant, claiming that research with this focus can inform cooperative management decisions that resolve conflicts over controversial histories and present uses. Ruppert also provides an overview of the legislation that has influenced NPS relationships with indigenous groups.

Schuster, Laura C.
Pelehonuamea: Managing an Active Lava Landscape. *In* **Rethinking Protected Areas in a**
Changing World: Proceedings of the 2011 George Wright Society Conference on
Parks, Protected Areas, and Cultural Sites. Samantha Weber, ed. Pp. 412-417.
Hancock, MI: The George Wright Society.
 Schuster discusses the traditional and sacred meanings that indigenous Hawaiians associate with the landscape of Hawaii Volcanoes National Park. She contrasts these indigenous perspectives and desired uses with those of non-indigenous residents and tourists. Bringing up the park's multiple missions, Schuster recognizes that one mission of the park is to allow visitors to see the active lava flow, and thus serve one of the missions of all U.S. National Parks: to manage natural resources for the "benefit" and "enjoyment" of U.S. citizens. Yet, if the park—or part of the park—were to be designated as a traditional cultural property (TCP), this would increase the amount of consultation required between park management and indigenous groups and

potentially place restrictions on the activities that allow for public access to this landscape. Schuster calls for increased consultation between stakeholders and conscious consideration of indigenous groups' wishes when plans are made for new roads or other projects.

Smythe , Charles W.
The Historical and Cultural Significance of Kunáa (Redoubt Lake Village). Juneau, AK:
    Sealaka Corporation.
The Redoubt Bay Village on the west coast of Baranof Island near Sitka, Alaska is a valued resource for fishing and hunting, and Sitka Tlingit leaders have attempted to protect the site from industrial development. The ethnographic and historical data found in this report supplement previous site investigation data regarding bay use, and are being used as additional documentation in an ongoing study related to application for historical place status under the Alaska Native Claims Settlement Act 14(h)(1). Redoubt Bay Village is here asserted to be an integral part of the Tlingit cultural landscape. The defining features which make it so include Redoubt Lake and a salmon spawning stream, both important in the fishing tradition, with ancient and historic significance evident by several cultural factors, including folk-life traditions, material culture, and food-ways.

Stoffle, Richard W., David B. Halmo, and Diane E. Austin
1997 Cultural Landscapes and Traditional Cultural Properties: A Southern Paiute View
    of the Grand Canyon and Colorado River. American Indian Quarterly
    21(2):229249.
Stoffle, Halmo and Austin bring up a discrepancy, which they see as widespread, between American Indian groups' desires for protection of cultural resources and the protection that federal and state agencies deliver. Highlighting how cultural and natural resource management practices and regulations are divided and defined by categories of resources within a given landscape, the authors call for a re-recognition of landscapes as valuable because of the relationships that exist between resources rather than the qualities of segmented resources. This is an approach that they argue is more reflective of American Indian perspectives on landscapes. The authors draw on the experiences of the Southern Paiute—specifically and Paiute associations with the Grand Canyon and Colorado River—to illustrate how the Traditional Cultural Properties (TCP) concept put forth by the National Register fails to serve the interests of this American Indian group. The authors concede the TCP designation has been useful in protecting small significant places, but they argue that the Paiute (and, to some extent, American Indian groups in general) to do see cultural resources as divided up into manageable categories. Instead they see cultural resources—"plants, animals, artifacts, and minerals" for example (230)—as all connected and as made more meaningful by their relationships to each other. It is for this reason, this holistic perspective on cultural and natural resources, that the authors assert "cultural landscape" (230) is a more relevant concept to use for American Indian places, rather than traditional cultural property or other terms that help to divvy up resources into categories. While they experiment with the terms holy land, storyscape, regional landscape, ecoscape, and landmark, the authors settle on the phrase cultural landscape as they bring their text to a close. They make case that this is the most appropriate phrase and legal category for capturing American Indians' conceptualization of landscapes and for furthering their efforts to ensure the protection of culturally meaningful places.

Underwood, Stephen, Leonel Arguello, and Nelson Siefkin.
2003 Restoring Ethnographic Landscapes and Natural Elements in Redwood National
       Park. Ecological Restoration 21(4):278-289.
Underwood, Arguello, and Siefkin provide a case study of changing management practices at the Bald Hills of Redwood National Park. They note that the National Park Service's mission of resource protection becomes highly complex when "ethnographic landscapes," "archaeological sites," and "cultural landscapes" overlap with areas labeled as "natural." In these cases, resource conservation must be prioritized because policies that protect one resource may alter another. For example, policies designed to ensure biodiversity may conflict with other policies that allow traditionally associated groups to continue to harvest specific forest products. The authors note that the reintroduction of American Indian fire use has resulted in an increase in biodiversity and decreases in the numbers of post-colonization invasive species. However, the Park's management was initially reluctant to allow fire use, as a result of their established management practices. The Park's management has sanctioned only certain traditional practices, while continuing to prohibit others.

van Riper, Carena J., Gerard T. Kyle, Stephen Sutton, Renae Tobin, and Amanda Stronza
2011 Place Meanings among Resource and Recreation Managers of the Great Barrier
       Reef. *In* **Rethinking Protected Areas in a Changing World: Proceedings of the 2011**
       George Wright Society Conference on Parks, Protected Areas, and Cultural Sites.
       Samantha Weber, ed. Pp. 344-349. Hancock, MI: The George Wright Society.
The authors studied the construction of "place meanings" by managers at the Great Barrier Reef Marine Park. Managers are an especially empowered stakeholder group in the process of determining the meanings and uses of places within the Park. The authors identify four main categories of "place meanings" that managers associated with places within the Park: natural, functional, experiential, and interpersonal. Managers spoke of places that they valued for their natural meanings, speaking of places' "biological and physical forces that existed independent of human presence" (345). Concerning other places, managers spoke of their "functional" (347) meaning; these places were used for by fisherman to support their livelihood and by a broad range of people for recreational activities (347). Places associated with "experiential" meaning were conceptualized as familiar places for mangers that had provided "individually-oriented experiences that facilitated connections between mangers and their environments" (347). Drawing on shared experiences of social interactions, managers described some places as having "interpersonal" meanings. In some cases, these places were meaningful because mangers associated them with their desires to provide for future generations" (347) by acting as stewards in their present capacities. The authors highlight that park managers should consider their connections with the places they manage and the different meanings they assign to these places as a part of their planning processes.

World Heritage Centre
2012   Operational Guidelines for the Implementation of the World Heritage Convention.
Paris: UNESCO World Heritage Centre. Online <http://whc.unesco.org/en/guidelines>.
        Accessed December 5, 2012.
The World Heritage Centre, an organization of the United Nations Educational, Scientific, and
Cultural Organization (UNESCO), provides the *Operational Guidelines for the Implementation
of World Heritage Convention* to describe procedures for the following actions: inscribing
properties on the "World Heritage List and the List of World Heritage in Danger;" protecting and
conserving "World Heritage properties;" "granting of International Assistance under the World
Heritage Fund;" and mobilizing "national and international support in favor of the Convention."
The authors offered a definition of "cultural landscapes" as one category to which some sites on
the World Heritage List are assigned:
Cultural landscapes are cultural properties and represent the 'combined works of nature and of
man' designated in Article 1 of the *Convention*. They are illustrative of the evolution of human
society and settlement over time, under the influence of the physical constraints and/or
opportunities presented by their natural environment and of successive social, economic and
cultural forces, both external and internal.

World Heritage Centre
N.d. Cultural Landscape. Online <http://whc.unesco.org/en/culturallandscape/#1>.
        Accessed December 5, 2012.
The World Heritage Center, an organization of the United Nations Educational, Scientific, and
Cultural Organization (UNESCO), provides a description of the concept of a cultural landscape,
a list of sites designated as cultural landscapes by UNESCO, the history of the development of
this designation category, a list of meetings that have been organized focusing on this topic, and
a bibliography on cultural landscapes. The World Heritage Convention recognized the concept of
cultural landscapes in 1992 as being made of the "combined works of nature and man." The
World Heritage Centre divides the designation into three categories: the "clearly defined
landscape designed and created intentionally by man," the "organically evolved landscape," and
the "associative cultural landscape." Landscapes designed by man, the first cultural landscape
category, often take the form of a "garden" or "parkland." Their aesthetic qualities are
prioritized. Sometimes they are associated with sacred meanings or with memorializing events,
people, or concepts. Turning to the second category, an organically evolved landscape "result[s]
from an initial social, economic, administrative, and/or religious imperative." Rather than being
"designed" with aesthetic qualities in mind, these types of landscapes take shape as humans use
the natural landscape for various purposes. Finally, the associative cultural landscape category
includes those landscapes which may not exhibit material evidence of human use but nonetheless
are have "powerful religious, artistic or cultural associations" for specific groups of people.

Wray, Jacilee

2009   Foreword. Ethnography in the National Park Service: Past Lessons, Present Challenges, Future Projects. The George Wright Forum 26(3):40-42.

Wray introduces a special issue of The George Wright Forum, entitled Ethnography in the National Park Service: Past Lessons, Present Challenges. She explains that the articles included cover the history of the National Park Service's (NPS) ethnography program, some contemporary research, and ideas for the future role of ethnography for NPS. The generalized role that she proposes ethnography in NPS has been playing is that of amplifying the voices of communities with traditional associations with NPS lands. In this way, ethnographic fieldwork may be an important part of identifying indigenous cultural landscapes, and amplifying the voices of indigenous groups for whom these landscapes continue to be significant in the present.

Provided below are websites and other online resources dealing with indigenous cultural landscapes, cultural landscapes, and related concepts. Mission statements and general information come directly from the related website, linked.

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Australia International Council on Monuments and Sites (ICOMOS): Charters
http://australia.icomos.org/publications/charters/
General Information: This Australia ICOMOS page contains its charters, among them the Burra Charter (most recent version, 1999). The Burra Charter and its accompanying guidelines are considered the best practice standard for cultural heritage management in Australia.

Blue Mountains World Heritage Institute (Australia) http://www.bmwhi.org.au/index.html
Mission Statement: "To broker and facilitate research and community engagement that supports the conservation and management of the Greater Blue Mountains World Heritage Area."
Cultural Landscape Project: Mapping Country
"Mapping Country" General Information: "Cultural heritage values are significantly underrepresented in policy and management decisions for the GBMWHA. Research and better documentation of cultural information, and raising of public awareness of the cultural heritage, particularly indigenous cultural heritage, are essential to overcome this under-representation and to ensure protection of these values. This research program sought to address these needs."

The Cultural Landscape Foundation (United States) http://tclf.org/
Mission Statement: "Through education, technical assistance, and outreach," the Cultural Landscape Foundation (TCLF) seeks to "broaden awareness of and support for historic landscapes," in hopes of "saving" this heritage for future generations.

Cultural Landscape Legacies (United States) http://www.clli.org/
Mission Statement: "Provide education, protection and preservation of the cultural heritage of the indigenous people who left their legacy on the landscape of the Upper Midwest."

Landscope America: Landscope Chesapeake http://www.landscope.org/chesapeake
General Information: "LandScope America uses an interactive map viewer to bring together maps, data, photos, and stories and provides useful tools and resources for strategic conservation planning and priority-setting."
Relevance for Chesapeake ICL Project: The featured interactive map provides photos of places and some articles relating to places. Many of the articles attached to places on the map in the Chesapeake region and other regions focus on environmental challenges. Adding material about indigenous history and significance would enrich the information provided about places.

Living Landscape Observer http://livinglandscapeobserver.net/
Mission: "To provide observations and information on the emerging fields of landscape scale conservation, heritage preservation, and sustainable community development."
Relevance for Chesapeake ICL Project: This website serves as a space to learn about ongoing projects, events and history related to landscape conservation efforts, including those efforts that use the terms "cultural landscape" and "indigenous cultural landscape." This site also offers opportunities for others to share information about landscape conservation efforts by contributing pieces to be published on the site. Sharing information on this site and reading the information others share may benefit those involved in indigenous cultural landscape conservation in the Chesapeake region.

National Geographic lesson plan "The Evolution of Cultural Landscape"
http://education.nationalgeographic.com/archive/xpeditions/lessons/06/g912/cultural.html?ar_a=1
Lesson Overview: Students should be able to appreciate how cultural change causes people's perceptions of places and regions to change. This lesson focuses on the sequential occupancy of a specific habitat and is created for twelfth grade students.

New South Wales (NSW) Environment and Heritage: Cultural Landscapes
http://www.environment.nsw.gov.au/chresearch/ResearchThemeCulturalLandscapes.htm
General Information: NSW government research seeks to illustrate "people's attachment to landscape," study the process of attachment, and "provide practical guidance to land managers in the conservation of community heritage." Research is interdisciplinary, although emphasis is given to "history, memory and working with local families, communities and land managers." The NSW government "advocates for a change in the management of landscapes from a sitebased approach to a landscape approach" (i.e. conserving specific sites and understanding a landscape holistically and working with constituent communities to conserve the cultural landscape).

Pacific Worlds
http://www.pacificworlds.com/
Mission: "*Pacific Worlds* serves two roles: first, it is a vehicle for cultural preservation and the perpetuation of indigenous traditions in the Pacific. In this role, it presents Pacific Islands—from Pacific-Islander perspectives—to the entire world. Whether you are a tourist or a scholar, this site will transform your understanding of Pacific cultures and environments. Second and more specifically, *Pacific Worlds* comprises an indigenous-geography education project serving Hawai'i-Pacific Schools."
Relevance for Chesapeake ICL Project: This website is useful for how it serves as an example of the following activities: 1.) creating an online resource to communicate indigenous knowledge and perspectives on landscape; 2.) partnering with schools to create curriculum material about indigenous geographies.

Parks Canada: Aboriginal Cultural Landscapes http://www.pc.gc.ca/eng/docs/r/pca-acl/index.aspx General Information: Website for the Historic Sites and Monuments Board of Canada's commemorative approach to aboriginal history in Canada, focused on recognizing aboriginal cultural landscapes.

State University of New York-College of Environmental Science and Forestry Center for Cultural Landscape Preservation (United States) http://www.esf.edu/cclp/
Mission Statement: The Center "supports the education of landscape architects and other environmental professionals as stewards of their cultural environment." It brings together interdisciplinary expertise from across "the college, the National Park Service, state parks, and other partners to address challenges in preserving our landscape heritage."

University of Georgia Cultural Landscape Laboratory (United States)
http://www.ced.uga.edu/index.php/ced-cll/detail/Vision/
General Information: The Cultural Landscape Laboratory is "structured around long-term partnerships with organizations and people who steward nationally significant cultural landscapes. With a research focus on heritage conservation and sustainability, the lab explores how society may best sustain the ecological, social, and cultural systems that constitute America's landscapes. The laboratory's conception of 'cultural landscape' is that of a 'landcommunity'—an idea that situates humans within an intricate web of relationships with other animals, plants, and minerals."
Mission Statement: "To cultivate a world where every human being has a symbiotic, heartfelt, and transcendent relationship with landscapes."

University of Maryland, College Park American Studies Cultural Landscape Bibliography (United States)
http://www.amst.umd.edu/Research/cultland/index.html
General Information: The Cultural Landscape Bibliography is an ongoing project associated with University of Maryland American Studies course AMST 851: Interpretation of Cultural Landscapes. It contains several annotations of sources related to the cultural landscape concept, as well as specific landscapes, management practices, and methodology for working in cultural landscapes. The bibliography was compiled by Mary Corbin Sies, Gilda Anroman, Claudia Rector, and Krista Park, with the annotations contributed by students in the fall 1997,1999, and 2001 classes.

UNESCO World Heritage Center
http://whc.unesco.org/en/culturallandscape/
General Information: UNESCO-recognized cultural landscapes are listed, along with references, documents, and website links related to cultural landscapes.
Statement on Cultural Landscape: "There exist a great variety of Landscapes that are representative of the different regions of the world. Combined works of nature and humankind, they express a long and intimate relationship between peoples and their natural environment. … Certain sites reflect specific techniques of land use that guarantee and sustain biological diversity. Others, associated in the minds of the communities with powerful beliefs and artistic

and traditional customs, embody an exceptional spiritual relationship of people with nature. To reveal and sustain the great diversity of the interactions between humans and their environment, to protect living traditional cultures and preserve the traces of those which have disappeared, these sites, called cultural landscapes, have been inscribed on the World Heritage List. Cultural landscapes—cultivated terraces on lofty mountains, gardens, sacred places...—testify to the creative genius, social development and the imaginative and spiritual vitality of humanity. They are part of our collective identity." Cultural landscapes are listed.