

Prehistoric Southwest Virginia Aboriginal Occupation, Land Use, and Environmental Worldview

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Native-American land and resource use in Southwest Virginia spans almost the entire scope of North-American prehistory, and includes evidence of early Paleo-Indian hunters all the way up to tribal peoples who met the impact of Euroamerican occupation. Southwest Virginia prehistory shares much in common with archaeological patterns in the Southern Appalachians and greater southeastern United States, but, like any subregion, remains ultimately unique. In fact, some archaeologists argue that the western Virginia highland presents a singular version of an intermontane prehistoric culture distinct even from its neighboring mountain aboriginal cultures. One important feature of prerecorded human occupation in Southwest Virginia entails less human-induced environmental change compared to surrounding lowland areas or even the proto-Cherokee highlands to the south.

Long before the Virginia mountains became a Euroamerican frontier on the edge of advancing agricultural settlement, the region had functioned as something of a “natural reserve” for cohesive native groups (later designated “tribes”) situated in comparatively larger numbers around the area. While such groups traveled and temporarily camped in the mountains for hunting, fishing, resource gathering, or trading purposes, certain smaller groups of aboriginal peoples also lived in Southwest Virginia for prolonged periods. All left behind archaeological evidence. Following is a synopsis of this evidence, an assessment of land use and environmental impact, and finally an attempt to appreciate the prehistoric environmental worldview.

During the past 20,000 years, both natural and human-induced causes have rendered dramatic changes in the environment of Southwest Virginia. The end of the Wisconsin glaciation, 18,000-12,000 B.C., ended the Pleistocene period and introduced the Holocene with radi-

cally modifying effects. The end of the Wisconsin glaciation also raised sea levels, and submerged the land bridge between Siberia and Alaska, which archaeologists commonly believe was the route ancient Asian peoples used in populating North and South America. As the earliest hunters began traversing the new continents, a spruce forest gradually evolved into one dominated by hemlock, which in turn gave way to a deciduous forest. Oak species became prevalent between 3000-2500 B.C., and a warm and dry climate encouraged the development of subsequent deciduous combinations involving oak, chestnut, and hickory trees.¹

While few archaeologists or anthropologists argue for exclusive environmental determinism, much evidence in the Southern Appalachians suggests that natural land forms had significant influences on prehistoric human behavior. In general, low-lying areas associated with rivers and flood plains became the most conducive for the most elaborate cultural development, while rougher topography proved the least.² Other natural land forms of Southwest Virginia appear to have had significant influences on prehistoric human behavior, with rivers, flood plains, mountains, and natural salt sources providing some of the most conspicuous evidence.

From the earliest days of the Paleo-Indian era, rivers became natural corridors for travel among the mountains. The New, Clinch, Tennessee, Holston, and Powell rivers all flowed toward the greater Mississippi drainage area, and provided natural travel routes into and through the western-most section of Virginia. The Roanoke and James flowed toward the Atlantic Ocean, and offered travel routes into the mountains from the east. As prehistoric Indian lifestyles became progressively more sedentary, the flood plains of these rivers became the most common sites of permanent and semi-permanent villages and horticultural activity. River valleys also became the routes through which various Indian groups interacted and exchanged culture. In this sense, local cultural traditions — expressed through ceramic variations and trade goods — arose in association with various waterways, and thus even the Dan, Shenandoah, and Potomac rivers influenced Southwest Virginia's easternmost prehistoric culture.³

Along with rivers, geological sources of salt figured very importantly in Southwest Virginia's prehistory. Ancient clays imbedded with salt in the present-day Roanoke area and a more concentrated salt formation in Rich Valley attracted mammals, which in turn lured hunters of mast-

odon, giant sloth, and later creatures such as white tail deer, eastern elk, and black bear. As America's first humans evolved from a highly nomadic lifestyle to a more stationary one, their culture grew more complex, characterized by the gradual rise of such activities as ceramic manufacture, plant cultivation, and eventually the crafting of ritual goods and burial items from materials such as mica and copper. Archaeologists have distinguished three broad stages to delineate these changes in culture. The Paleo-Indian, Archaic, and Woodland eras all distinguish themselves with unique cultural attributes in Southwest Virginia and other parts of North America. The Mississippian tradition arose as sort of a hybrid and ultra-sophisticated version of the Woodland. While centered along the Mississippi Valley itself, this tradition also coincided and overlapped with the Woodland tradition in the areas contingent to the Mississippi Valley. In this manner, the Mississippian made its mark even as far away as the upper Tennessee valley and Southwest Virginia.

Paleo-Indian Period (*ca* 9500 B.C. – *ca* 8000 B.C.)

During the past century, archaeologists have found numerous Paleo-Indian artifacts throughout eastern North America. The basin areas of the Mississippi, Ohio, Cumberland, and Tennessee rivers have especially divulged rich finds in Paleo-Indian projectile points. In fact, despite the early fame of Folsom and Clovis finds in New Mexico and the American Southwest, present-day Kentucky and Tennessee and many parts of some of their bordering states have yielded the very richest sources of Paleo-Indian points (arrowheads or spearheads) in North America. The Southern Appalachians, including all of Southwest Virginia, were part of this early hunting period and, remarkably, the Paleo-Indian finds of eastern coastal areas of Virginia and other states have revealed notably fewer projectile points than have the highlands themselves.⁴ But despite extensive evidence reflecting transient hunting practices, archaeologists studying Southwest Virginia and other parts of the Southern Appalachians in West Virginia, eastern Kentucky, and western North Carolina have yet to find evidence of larger Paleo-Indian settlements, such as the Flint Run or Thunderbird sites in eastern Virginia.⁵ Thus, the evidence to date — though incomplete and partially destroyed through looting, past indiscriminate artifact gathering, and road and building construction — would suggest that nomadic hunters traversed all of Southwest Virginia. Particularly indicative are the numerous Paleo-Indian projec-

9500 B.C.	8000 B.C.	1000 B.C.	500 B.C.	1000 A.D.	1500 A.D.
Paleo-Indian Period	Archaic Period	early	Woodland		
			middle		
			Adena		Hopewell
			Mississippian		
	Southern Cult →				

Paleo-Indian, 9500 B.C.—8000 B.C.

Archaic, 8000 B.C.—1000 B.C.

Woodland, 1000 B.C.—European contact (1607 for eastern Virginia)

early, 1000 B.C.—500 B.C.

middle, 500 B.C.—900 A.D.

late, 900 A.D.—1607 A.D.

Adena, 500 B.C.—700 A.D.

Hopewell, 900 A.D.—1150 A.D.

Mississippian, 700 A.D.—European contact

Appalachian variations: Dallas, Pisgah, Fort Ancient,

1000 A.D.—European contact

Southern Cult phenomenon, 1100s—European contact

tile points found in Rich Valley, where animals roamed in high numbers seeking the natural salines.⁶ About 10,000 years ago all these animals became extinct. Why they died remains mysterious and controversial, and archaeologists and paleontologists have pondered a number of possible causes, including climate change, disease, natural evolution, human predation — or a combination of some or all of these factors, or from additional causes not yet known.⁷ In any case, their demise, and the effect of their demise on early humans, brought the Paleo-Indian era to a close.

Archaic Period (*ca* 8000 B.C. – *ca* 1000 B.C.)

Archaeologists distinguish the Archaic Period from the Paleo-Indian Period by both natural changes and modifications in human behavior. The final stages of the climatic transition from the Pleistocene arrived, creating remarkable environmental changes, and thus interrelated human behavioral changes. During the early Archaic, a pine and oak forest began to replace natural grasslands, the mastodon became extinct, and bison numbers decreased.⁸ The climate followed a general warming trend. Somewhere around 5000 B.C., the basic flora and fauna of the modern era's eastern United States established itself and provided Indians with vast new food sources, such as shellfish, acorns, chestnuts, and wild turkeys. Again, the broad riverine area associated with the Mississippi, including the Ohio, Cumberland, and Tennessee rivers, became a concentration of Archaic culture.⁹ Early people altered their behavior from primary reliance on hunting to a more diverse, less itinerant way of life that involved a heavier use of plant foods, both wild and cultivated. Indians in west central Illinois apparently began domesticating gourds and squash as early as 5000 B.C., and such horticultural practice seems to have reached the Tennessee and Kentucky area by 2500 B.C.¹⁰ Such plant cultivation apparently spread into Southwest Virginia as well, and by the end of the Archaic Period, aborigines in this area seem to have used a wide range of the area's natural food resources.¹¹

Prehistoric sites and artifacts from the Archaic Period in Southwest Virginia mostly reflect tool-making, tool maintenance, and the hunting and food-processing practices associated with them.¹² Indians developed new tools to fulfill new functions, such as the stone milling equipment used for greater utilization of plant foods. Archaic people in Southwest Virginia used manos, a hand-held globular rock, to grind food substances

against flat rocks called metates. Indians also began to make more refined types of stone tools resembling axes and adzes. Additionally, they manufactured stone weights fitted for a new weapon called an atlatl, which utilized leverage through a simple yet highly effective hinged device for throwing spears. Finally, they sometimes developed specific tools in particular areas which reflected local uses, such as nut-harvesting, fish weir production, seed-processing, and forest clearing.¹³

Around 3000 B.C., Archaic people in various parts of the eastern United States began practicing a new subsistence pattern involving annual migrations between summer and winter camps, thereby utilizing seasonal resources.¹⁴ The Grayson County area of Southwest Virginia reflected a regional variation of this new development in which flood plains and uplands grew interrelated. Here, Indians established their more substantial hunting camps in low-lying areas, from which they traveled into the mountains to smaller, more transient camps.¹⁵

The oldest known aboriginal occupation in Southwest Virginia occurred between 8240-7440 B.C. at the Daughtery Cave in Russell County. Indians living at this rock shelter appear to have been transient hunters.¹⁶ As mentioned, shellfish represented a new food source during the Archaic Period, and the Daughtery Cave site has revealed the earliest known evidence of shellfish consumption in Southwest Virginia. A growing reliance on shellfish may have contributed to the progressively stationary behavior that characterized the Archaic Period, and prehistory in general.¹⁷ Certainly a heightened degree of more settled activity and accompanying cultural development occurred around 1000 B.C., distinguishing an entirely new cultural tradition, commonly called the Woodland.

Woodland Period

(1000 B.C. – ca 1607: i.e., European Contact)

As the Archaic Period evolved into the Woodland Period, Indians developed North America's most sophisticated prehistoric culture. This culture reached its climax in certain locations with the Mississippian tradition, which began around 700 or 800 A.D. and continued until European Contact. The Mississippian cultural tradition itself became complex enough to generate local variations, and several of these traditions — including the Pisgah, Dallas, and Fort Ancient — directly or indirectly influenced prehistoric culture in Southwest Virginia. Where Mis-

Mississippian influences were *not* felt in eastern North America, the relatively less elaborate Woodland tradition persisted. Thus, depending upon the location, the first Europeans encountered either a Woodland or a Mississippian people, with numerous unique local cultural idiosyncrasies.

After about 1000 B.C., the eastern woodlands saw the rise of numerous politically autonomous and economically self-sufficient groups which increased in population, engaged in more intensive horticulture, and began to exchange tools, pottery, ornamental items, and other trade goods with neighboring groups. Eastern Native Americans, particularly around the Mississippi and Ohio River valleys, settled along flood plains where they began an unprecedentedly intense cultivation of food, especially the much-noted triad of maize, beans, and squash. Horticulture and its associated sedentary behavior inspired profound cultural changes, both locally and in regard to exchange with other Indian groups. Indians made more use of pottery, traded “wealth items” (copper-ware, shell, and mica jewelry and ornaments), developed new tools, used tools more extensively, performed fairly elaborate burials, and developed (in some cases) relatively complex political systems, commonly called chiefdoms.¹⁸

Archaeologists have found sites reflecting Woodland Indians’ hunting, gathering, and plant-cultivating Woodland culture throughout Southwest Virginia.¹⁹ As in other places in the eastern United States, palisaded villages, circular dwelling places, flexed burials, triangular projectile points, various distinctive ceramic styles, and horticultural evidence characterize Woodland Period occupations in Southwest Virginia.²⁰ Woodland sites range in size and complexity from single family units to larger, more diverse sites that reflect a high degree of cultural interaction with neighboring peoples.²¹ A crucial development of this era in the eastern United States lay in a much more sophisticated pottery manufacture involving the first fired ceramics, which were capable of withstanding high temperatures and drastic temperature changes. Such a capability allowed Indians to engage in more sophisticated cooking activities, particularly the cooking of starchy seeds and the leaching of acorns. In eastern Kentucky, such new food-processing technology revolutionized Indian use of the forest cover, from about fifteen percent in 2000 B.C. to more than eighty percent a thousand years later.²²

The first fired ceramics appeared in most of Virginia by about 1200 B.C. This new technology likely arrived in eastern Virginia from the In-

dian peoples of coastal South Carolina and Georgia. Evidence of this newer pottery, however, does not appear in Southwest Virginia until 300 years later, when Swannanoa ware (a sand- or grit-tempered pottery) arises, apparently through exchange with southern peoples.²³ Archaeologists categorize and attempt to trace subsequent ceramic types through their differing surface designs and their tempering medium. Indians of the Southern Appalachians used devices such as fabric, cords, and carved wooden paddles to decorate pottery, and used a variety of materials, including shells (mostly periwinkle and mussel), sand or grit, and limestone to temper their ware.²⁴

Ceramic types help archaeologists determine different time periods, cultural groups, and possible exchanges between groups. As Sebert Sisson wrote in regard to the Pot Rock Cliff Shelter in Carroll County, Virginia, "the relatively great amounts of pottery, with the evidence of type changes through time, prove that the shelter was extensively used during Woodland times."²⁵ Pot sherds found in Southwest Virginia help reveal much about the complex story of cultural interchange, particularly with regard to localized peoples and influences from neighboring groups, or the lack of such cultural interchange. For instance, certain sites in Lee County have revealed pottery types distinctly associated with the Dallas and Pisgah cultures (local, distinct Mississippian cultural variations) to the west and south. On the other hand, the nearby Crab Orchard Site in Tazewell County divulged almost only indigenous-type pottery remains, reflecting little or no interaction with Dallas or Pisgah peoples.²⁶ The Brown Johnson Site in Bland County produced similar conclusions; the ceramic evidence was relatively meager, but nevertheless clearly reflected native pottery as opposed to outside influences.²⁷ On the other hand, the Flannery Site in Washington County contained a varied collection of ceramic artifacts that indicated early, indigenous Indian occupation, followed by later outside influences.²⁸ Obviously, pot sherds are among the most important artifacts that archaeologists find.

During the Middle Woodland Period (ca. 500 B.C.–ca. 900 A.D.), the use of Indian corn or maize spread throughout the eastern United States, bows and arrows replaced spears, and the first socially stratified cultures arose among aborigines, particularly in two cultural areas. Beginning around 500 B.C., the Adena culture developed primarily in southern Ohio, but extended into all adjacent states until around 700 A.D. Indians of the Adena culture built the famous burial mounds of the Ohio

Valley region and beyond, which remain in evidence across the landscape today. Around 900 A.D. the Hopewell cultural tradition also arose in southern Ohio, overlapping to some extent with the Adena, but extending over a much broader area of eastern North America in what is sometimes called the Hopewellian Influence (or Interaction) Sphere. Within only a couple of hundred years the Hopewellian Interaction Sphere reached as far north as Montana and Michigan, as far south as the Gulf Coast, and as far east as the Appalachian Mountains of North Carolina and Virginia. Increased production of maize and other cultigens introduced from Mesoamerica as well as indigenous domesticates provided an economic basis from which Indians all over eastern North America began interchanging ideas, raw and manufactured goods, and various cultural practices.²⁹

The Middle Woodland Period in Virginia reveals characteristics typical of a broader eastern North America trend as well as unique local traits. In general, Indians of the eastern forests experienced an increasingly settled lifestyle accompanied by population growth and a greater degree of social stratification. Various groups became more territorial and, by extension, began to develop regional cultural characteristics.³⁰ Indians in Southwest Virginia manufactured a distinct style of ceramics that apparently reflects some degree of cultural interaction with other southern mountain aboriginals. Around the Blue Ridge area, however, ceramic traits seem to resemble those found to the east. Social characteristics probably ranged from non-stratified societies typical of earlier eras to the more sociopolitically complex relationships that were developing among other eastern Indian groups of the period. Additionally, Southwest Virginia's Middle Woodland sites reveal explicit differences in artifacts depending upon elevation. Thus, the distinction between valley settlements and highland hunting camps continued.³¹

Horticultural practices intensified during the Late Woodland Period in Virginia (900-1607), when Indians began employing slash and burn techniques, including the girdling of trees. As with fired ceramics, horticulture arrived somewhat later in Southwest Virginia compared to the eastern piedmont and coastal areas. Archaeological evidence reflects a late, rather than early, Woodland horticultural configuration in the Virginia mountains. But during this late Woodland Period, flood plains and associated plant cultivation became the sites of major, semi-permanent occupations.³² This situation is reflected quite prominently in the

Crab Orchard Site in Tazewell County near the headwaters of the Clinch River. Indians built the 400-foot long, palisaded Crab Orchard village around the year 1500. Inside the palisade, archaeologists discovered circular homes arranged in rows, about 180 burials, and various storage pits. Researches have surmised the population of the village at about 400 people. Outside the palisade, the Indians had a large, semi-subterranean "council house," and beyond this complex, along the Clinch River, they cultivated food.³³

To date, the Crab Orchard Site remains unique in Southwest Virginia, for no other site displays its particular arrangement of circular dwellings, palisade, council house, and mixture of two distinct ceramic types (shell-tempered, plain-surface, and Radford Series). The Crab Orchard Site becomes especially significant when we consider, as is true for much of Southwest Virginia, the absence of indigenous inhabitants during the subsequent Contact Period (that is, after 1607). With such a dearth of documentary evidence, the Crab Orchard Site is so far the sole and most important resource for understanding late prehistoric life ways in the Tazewell County area.³⁴ The Crab Orchard complex also, to some extent, reflects part of a broader prehistoric highland culture in Virginia.

During the late Woodland Period, "distinct natural areas" developed in Virginia based on the various zones of geography, such as the coastal plain, piedmont, Blue Ridge, and Appalachian plateau regions. Distinct natural areas arose when the particular traits of an area's natural features began to distinguish markedly the local Indian population, now increasingly based in specific locales. In addition to this growing indigenous Indian population, Southwest Virginia became an area traversed by neighboring groups (also growing in cultural distinction), particularly along river ways. Indians from eastern Virginia used the James, Dan, and Roanoke rivers to reach Southwest Virginia, often for hunting purposes and concurrent weapon manufacture. Indians from various Mississippian cultural areas to the north, west, and south traveled into Southwest Virginia along the Kanawha, New, Tennessee, and Holston rivers.³⁵ It was up from the Tennessee River that Virginia received its most significant Mississippian influences.

Beginning around 700 A.D., Mississippian culture began to replace or evolve out of the Woodland culture in the valley areas associated with the Mississippi, Illinois, Tennessee, and Ohio rivers. An enhanced strain of corn, the addition of beans, and an overall increase in horticultural

production contributed to an increase of population among Mississippian peoples. Mississippian culture and its horticultural food dependence initiated the earliest known effects on Indian social hierarchy by creating stratified social and political patterns, and may well have fostered a class-ranked society in areas as distant as Southwest Virginia.³⁶ As the core of Mississippian culture developed in the lowland areas, populations on the fringes of these areas moved into higher, more remote river valleys, such as the Powell in far Southwest Virginia. Since the more remote valleys were smaller, had less arable land, a shorter growing season, and generally offered fewer natural resources, Indians living there tended to develop communities of somewhat less elaborate social and political structure compared to the core Mississippian locales.³⁷ Furthest Southwest Virginia, around Lee, Scott, and Wise counties, experienced just such a “later developing” influence — but, in any case, Virginia’s *only* resident Mississippian culture.

Southwest Virginia’s Mississippian traits, as seen in items such as ceramics, reflected distinct elements of localized Mississippian traditions that had developed immediately to the south, west, and north. Around 1000 A.D., the Pisgah variation of the Mississippian culture arose in western North Carolina, as did the Dallas cultural tradition in eastern Tennessee and the Fort Ancient tradition in southern West Virginia and eastern Kentucky. The Fort Ancient influence possibly entered Southwest Virginia through the Kanawha and New River Valley route, and the Dallas and Pisgah definitely did via the Tennessee River.³⁸

The Mississippian mound builders represented some of the most advanced of late prehistoric peoples, and, without question, Lee County’s truncated pyramids represent Virginia’s most outstanding Mississippian sites. Lucien Carr, of the Peabody Museum, excavated the Ely Mound in Lee County during the early 1870s, and was among the first archaeologists to identify Southwest Virginia’s burial mounds within the greater Mississippian cultural complex.³⁹ Carr discovered various burials, projectile points, Indian corn, pottery, horn implements, “small disks of stone, pottery and hematite [and] shells of *Melania*, converted into beads.” Two remarkable Ely Mound artifacts included a chunky stone, associated with an Indian game, and a weeping eye ornamental shell pendant. The Ely Mound burials generally corresponded with similar customs of the later Cherokee and Chickasaw tribes.⁴⁰

Where the Dallas variation of Mississippian culture spread of its own accord to the area around the Ely Mound, other Indians of Southwest Virginia borrowed various aspects of the Pisgah variation. Therefore, where Lee County reflects "true" Mississippian cultural, biological, and ethnic traits, Washington and Smyth counties, further to the east, reflect an indigenous non-Mississippian population adopting Mississippian traits. A number of rock shelters found in far Southwest Virginia also indicate contact with Pisgah peoples through trade items such as artifacts containing marine shell and mica fragments.⁴¹ Since these Indians voluntarily borrowed and interacted with the Pisgah culture and people, the interchange did not entail an invasion from an outside group, and thus represented gradual and elective cultural development.⁴² Exchange among Indians participating in the Mississippian culture also involved the Southern Cult phenomenon.

Archaeologists and anthropologists have identified the Southern Cult by an array of religious, ornamental, and other types of artifacts that many southeastern United States Indian groups traded among themselves. The climax of this cultural exchange phenomenon seems to have occurred sometime during or shortly after the 1100s. Native Americans in Southwest Virginia definitely participated in the Southern Cult, and artifacts recovered in the Rich Valley area appear to reflect interchange or influence from both the ancestors of the Cherokee to the south and the antecedents of the Siouan Indians to the east.⁴³ The proto-Cherokee immediately south of Rich Valley would have been part of the Pisgah version of Mississippian culture, while the late prehistoric eastern Siouan Indians would have practiced a Woodland culture. And for all the magnificence and prominence of the Mississippian cultures in the southern highlands and to the west, the peoples of the Atlantic coastal and piedmont areas certainly developed significantly during the final stage of prehistory. Their influences also figure into Southwest Virginia's aboriginal story.

The eastern-most area of Southwest Virginia involved a notably different prehistoric cultural complex focusing on the Roanoke and James rivers. Here too, rock shelters constitute some of the most significant prehistoric finds. Geological formations fundamentally dictated local stone tool manufacture, and where western Virginia rock shelters reflect the surrounding sedimentary geology and yield almost only chert artifacts, eastern rock shelters' proximity to the igneous Blue Ridge render mostly

quartz and quartzite, and some jasper artifacts.⁴⁴ It was precisely stone that the noted Powhatan Indians of extreme eastern Virginia lacked in any sufficient local amount, and thus they had to rely upon western rock sources — either directly or through trade — for most of the stone tools they wished to make or use. The Blue Ridge area abutting the foothills and piedmont also served as a hunting and fishing area for Indians living to its east, likely the Siouan peoples of the Monacan alliance who periodically rivaled the Algonquian Powhatans for control of piedmont and foothill territory. Within the cultural exchange, eastern sources provided Southwest Virginia with Southern Cult artifacts, while exotic ornamental items such as mountain lion claws ended up among eastern Indians and probably ultimately derived from the highlands.⁴⁵

Obviously the exchange of goods occurred in many directions among many groups of Indians through a number of direct and indirect channels that superseded local political antagonisms. Southwest Virginia's prehistory reflects numerous attributes during various periods of the distant past. Aborigines traversing and living in Southwest Virginia selected and developed particular cultural traits and created a unique hybrid culture.⁴⁶ Singular cultural traits aside, Indians living in the western Virginia mountains impacted their natural environment, as all humans must. This impact generally strikes a contemporary observer as minimal. A relatively sparse population combined with a worldview not oriented toward concerted natural resource exploitation largely explains this minimal impact.

Environmental Prehistory

Prehistoric southeastern U.S. Native Americans may have contributed to the extinction of various animal species through their hunting practices over very long periods of time, a time period that also experienced greater climatic changes that naturally altered ecosystems. But that their lifeway strikes contemporary observers as relatively harmonious with biological or other natural forces remains generally accurate. Given this situation in the greater southeastern environment, Southwest Virginia in particular probably remained one of the areas least affected by prehistoric human activity. As a fringe area of mostly seasonal hunting and fishing throughout most of prehistory, and apparently supporting only a few permanent or semi-permanent camps fairly late in the prehistoric record, it stood to experience some of the most dramatic trans-

formations upon and following Euroamerican occupation. Considering this radical alteration, the prehistoric Indian worldview as it focused most especially on the land becomes all the more intriguing, for it entails both a particular landscape and a regard for it, both lost long ago.

Since the 1970s, certain writers have created an image, in their own environmentally-correct likeness, of prehistoric Native Americans as the first “ecologists.”⁴⁷ This most recent version of the Noble Savage myth has unfortunately obscured what little may be concluded about prehistoric Indian attitudes toward, and practices affecting, the environment. This obfuscation is doubly unfortunate when we consider the actual contrast between Indian and European attitudes toward their natural surroundings during the sixteenth and seventeenth centuries, not to mention the environmental conceptual difference between early European migrants and successive American generations.⁴⁸

Native American interaction with the natural surroundings in the southeastern United States comprised a mixture of pragmatic manipulation and carefully ritualized reverence, respect, and awe.⁴⁹ As with all earthly creatures, the Indians’ survival depended upon exploiting their environment, though this exploitation sometimes highly impacted the land in proportion to aboriginal population sizes. Hunting, fishing, and cultivating food sometimes involved setting deliberate fires, girdling trees, and utilizing natural poisons. Certainly prehistoric and especially historic-era Indians contributed to the decimation if not outright extinction of certain animal species through overhunting.⁵⁰

Long before Native Americans in the southeastern United States began cultivating food, their hunting and fishing practices had impacted the environment. As previously mentioned, the Archaic Period began with a dramatic change in fauna, perhaps partially attributable to human hunting practices. In the later prehistoric and early historic eras, of course, Indian subsistence hunting continued. A sense of survival combined with a religious respect for the natural world stemming from animism and totemism generally dictated conservative fishing and hunting practices, though Indians ingeniously employed a number of sophisticated methods for obtaining wild food.

In addition to spearing, hooking, netting, and other common methods of catching fish, Native Americans used organic poisons derived from various indigenous plants to stun the creatures for easy capture. Buckeye nuts used elsewhere in the southeast for poisoning fish were certainly

available in the Virginia mountains, and Indians may well have used them there for this purpose.⁵¹ Southeastern Indians also commonly used fire to flush game into a killing ground.⁵² Around the Southern Appalachian region, aboriginal fire — both as a hunting device and as part of slash-and-burn horticulture — had the most drastic effect on the environment. Indians also girdled trees to create more enduring cleared areas that attracted game. The slash and burn practices associated with Woodland Period horticultural activity intensified aboriginal use of fire, and a general increase of Indian population throughout the prehistoric era also intensified human impact upon the environment.⁵³

Even though fire obviously dramatically altered an area's ecology, it did not do so in a completely destructive manner. Fires caused by lightning long preceded human-induced fire, and various flora evolved survival mechanisms that actually came to *depend* upon fire for survival. So, as scientists working during the past half century have increasingly appreciated, fire serves important ecological functions and facilitates the growth of certain plant (and by extension consumer-animal) species, even at the detriment of others. Indians readily employed fire as a practical tool.

The overall low aboriginal population and their relatively conservative hunting and fishing practices put their use of fire closer to the natural lightning-induced-fire side of a spectrum, the other extreme of which came to be defined by nineteenth and twentieth century Euroamerican practices of deliberate burning in association with intense agricultural activities. Smaller population numbers would probably mitigate the environmental impact of almost any human group. So the more interesting aspect of a particular group involves specific cultural orientations that include conscious decisions regarding the surrounding world and its resources.

Prehistoric Environmental Worldview

Beyond the available details involving aboriginal environmental interaction, the much trickier question arises concerning Indian *conceptions* of their environment: their “environmental philosophy,” if the term may be used. The fact is, exactly how the Indians of the Southern Appalachians felt about the land will never be known. The closest approximation of their perspective may only be approached through several filters, where time (in itself a culturally-loaded concept), evolved tradition, and

various unavoidable subjective interpretations modify ancient perspectives.⁵⁴ Through contemporary Euroamerican observations, modern anthropology, James Mooney's late nineteenth-early twentieth century anthropology, and latter day Indian mythology (gathered from old people in a language other than their native tongue and through a medium — the written word — novel even among the Cherokee with their Sequoyan syllabary), plenty of speculation, imagination, guesswork, fantasy, and romanticism may be generated. In the case of Southwest Virginia, an additional geographic barrier arises in that no prominent cultural tradition comparable to the Cherokee actually permanently occupied the territory in question, at least into the historic era. But given the proximity of the Cherokee, whose ancestors probably traversed and lived in Southwest Virginia at various times during their prehistory, some extrapolation of their environmental worldview seems worthwhile. Similarly, the Shawnee and Tutelo, who also had some involvement with Southwest Virginia, may offer important variations of an overall approximation of the aboriginal perspective. Finally, despite all the historic era's modifications that affected later versions of Indian traditions, it seems reasonable to expect a certain amount of continuity stemming from a fundamentally distinct regard for the environment ultimately rooted in prehistory.⁵⁵

Amidst all their activity, Indians were intimately aware of their natural surroundings, as could only be expected from a people who lived in such daily close proximity to it, and whose daily subsistence depended directly upon it. Like other non-literate peoples whose intellectual faculties are used to other ends (such as memorizing literally hours of detailed oral tradition), the southeastern Indians were experts on the details of their landscape. They drew excellent maps and could recount intricate details such as individual trees next to specific bends in a particular river, sometimes hundreds of miles from their home base.⁵⁶

The aborigines' environmental intimacy contributed to a view of their world steeped in natural forces and phenomena, such as weather features and animals. In many ways, their perspective was typically animistic, and similar to other animistic cultures such as the Shinto of the Japanese. Animism entails the regard of all objects — plants, animals, rocks, water — as possessing spiritual qualities.⁵⁷ But contrary to recent romantic stereotypes, the spectrum of the southeastern U.S. Native American worldview ran the gamut from deep veneration to fierce hatred. Among snakes, for instance, the Cherokee greatly revered rattle-

snakes, but absolutely despised spreading adders and copperheads. They would not eat birds of prey, or any carnivores (omnivorous black bears excepted), based on concepts of cleanliness and the idea that animals that ate meat were unclean.⁵⁸

The Cherokee outlook was also generally anthropomorphic in that Indians assigned human qualities to non-human entities, such as arranging animal groups in totems resembling human family or clan groupings.⁵⁹ Thus Little Deer became a deity of sorts and acted as chief of the deer tribe. They believed that other animals, such as bear, were really human underneath a guise of animalness. What might be called the Indian conservation ethic was obviously interwoven with their animistic outlook.⁶⁰ To a certain extent, it was out of religious respect for a deity such as Little Deer that the Cherokee would avoid wanton killing of the deer species. John Lawson encountered a similar ethos in 1700 among the mountain Indians northwest of High Point, North Carolina. He wrote:

All the Indians hereabouts carefully preserve the Bones of the Flesh they eat, and burn them, as being of Opinion, that if they omitted that Custom, the Game would leave their Country, and they should not be able to maintain themselves by their Hunting.⁶¹

The particular caution that the Cherokee associated with the killing of wolves mixed their need to eliminate a competing predator with their special respect for the wolf, and thus required a specialist properly ordained for such an act. On the other hand, their general aversion for killing snakes fell more purely into the religious realm, and represented an interestingly obverse taboo compared with the Judaic-Christian fear of serpents.⁶²

Such an animistic outlook, of course, certainly extended far beyond animals, and encompassed seemingly every aspect of the world around them. Rivers figured centrally in this worldview. Beyond their obvious facility as transportation corridors and sources of fish and shellfish, Southwest Virginia's rivers might be considered from an Indian's spiritual perspective. The Cherokee assigned anthropomorphic qualities to rivers, thinking of them as giant men whose heads lay high in the mountains and whose feet stretched down into the lowlands. Daily purification in such waters became profoundly important. James Adair, a trader and resident among the Cherokee from 1736–1743, wrote that they were

“strongly attached to rivers, — all retaining the opinion of the ancients, that rivers are necessary to constitute a paradise.”⁶³

In some ways the Cherokee regard for rivers captured the entire range of their environmental perspective, with all its multifaceted aspects of utilitarianism, animism, and religious purification. Beyond this, something might be said for the “energy” surrounding bodies of water that has always captivated all peoples in one form or another. This energy, of course, supersedes aquatic biology, the distinct aromas that arise from such ecosystems, or even the physical details of such environments. This phenomenon, perhaps more conveyed to human instinct or emotion rather than to human intellect, has long been the domain of mystics and artists, and really remains impossible to pin down logically. But this limitation does not or should not detract from its importance. Perhaps the most that can be said is that what many contemporary people might now sense in admiring rivers, the Indians sensed at least in equal measure and, with all romanticism or idealization aside, probably to a significantly greater degree.

Prehistoric southeastern Indians, finally, did not share the uniquely post-seventeenth century Western attitude of “progress” in regard to their environment or anything else. Despite such dramatic innovations as the gradual adoption of plant cultivation over a strictly hunting, fishing, and foraging lifestyle — or the invention and utilization of such weapons as the atlatl spear thrower or bow and arrow — Indians nevertheless continued to live a highly diverse and thus ultimately less disruptive existence.⁶⁴ Their behavioral modifications, therefore, did not resemble linear change as much as it did lateral change. In this sense, the Native Americans shared a generally non-linear outlook commonly found among many non-European peoples.⁶⁵ Thus, in terms of worldview, the American Indians probably could not have encountered a people more diametrically opposed to them than the Europeans. These contrasting peoples’ differing actions toward the natural environment and the ultimate results of these behaviors reflected, in part, this greater cultural clash.

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The first people of Southwest Virginia left behind a prehistoric record that archaeologists and other scholars, particularly those working during the last half century, have only begun to divulge and understand. Clearly the area represents a specific subregion, and details have begun to distin-

guish the western Virginia highlands within wider contexts of the Appalachian region and the greater southeastern United States. Some surrounding lands experienced more intense human occupation, but many of these peoples depended upon Southwest Virginia for crucial natural resources. In utilizing those resources, Indians obviously impacted the environment; how they impacted it has become more clear than how they felt about it. But, certainly, over thousands of years of prehistoric occupation and traveling across Southwest Virginia, they left an area still rich in natural flora and fauna, with little and perhaps no devastating human-induced environmental change. All of this behavior and its consequences, of course, stand in marked contrast to subsequent Euroamerican occupation. And while the fact of comparatively smaller Indian populations partially explains this contrast, the more profound basis for Indian behavior and attitude toward the environment lay in their view of the world and their concept of their own place within it.

Endnotes

1. James B. Griffin, "Eastern North American Archaeology," *Science* 156, no. 3772 (April 14, 1967): 176; J. Sanderson Stevens, "A Story of Plants, Fire, and People: The Paleoecology and Subsistence of the Late Archaic and Early Woodland in Virginia," in Theodore R. Reinhart and Mary Ellen N. Hodges, eds., *Late Archaic and Early Woodland Research in Virginia: A Synthesis* (Richmond: Archeological Society of Virginia, 1991), pp. 188–89.
2. See Edward V. McMichael, "Environment and Culture in West Virginia," *Proceedings of West Virginia Academy of Science* 33 (1961): 146–50; Burton L. Purrington, "Ancient Mountaineers: An Overview of the Prehistoric Archaeology of North Carolina's Western Mountain Region," in Marck A. Mathis and Jeffrey J. Crow, eds., *The Prehistory of North Carolina* (Raleigh: North Carolina Division of Archives and History, 1983), pp. 132–35.
3. Keith T. Egluff, "The Late Woodland Period in Southwestern Virginia," in Theodore R. Reinhart and Mary Ellen N. Hodges, eds., *Middle and Late Woodland Research in Virginia: A Synthesis* (Richmond: Archeological Society of Virginia, 1992), p. 215; Helen C. Rountree, "Powhatans and Other Woodland Indians as Travelers," in Helen C. Rountree, ed., *Powhatan Foreign Relations, 1500–1772* (Charlottesville: University Press of Virginia, 1993), pp. 30, 33; Helen Horbeck Tanner, "The Land and Water Communication Systems of the Southeastern Indians," in Peter H. Wood, ed., *Powhatan's Mantle: Indians in the Colonial Southeast* (Lincoln: University of Nebraska Pr., 1989), pp. 10, 16.
4. Ronald J. Mason, "The Paleo-Indian Tradition in Eastern North America," *Current Anthropology*, 3, no. 3 (June 1962): 239, 253. Also see J. Mark Wittkofski and Theodore R. Reinhart, eds., *Paleoindian Research in Virginia: A Synthesis*, 2nd ed. (Courtland, Va.: Archeological Society of Virginia, 1994).

5. Don W. Dragoo, "Some Aspects of Eastern North American Prehistory: A Review 1975," *American Antiquity* 41, no. 1 (Jan. 1976), map, p. 6; R.C. Dunnell, "Prehistory of Fishtrap, Kentucky," *Yale University Publications in Anthropology* no. 75 (New Haven: Yale University, 1972), p. 73; R. Barry Lewis, ed., *Kentucky Archaeology* (Lexington: University Press of Kentucky, 1996), pp. 22, 35; Purrington, "Ancient Mountaineers," pp. 107–8.
6. By 1988, archaeologists had documented an interesting distribution of fluted Paleo-Indian points in and around Rich Valley in what is now Washington, Smyth, and Tazewell counties. See E. Randolph Turner, "PaleoIndian Settlement Patterns and Population Distribution in Virginia," in J. Mark Wittkofski and Theodore R. Reinhart, eds., *PaleoIndian Research in Virginia: A Synthesis*, Special Publication #19 of the Archeological Society of Virginia (Richmond: ASV, 1989), p. 80.
7. Robert J. Wenke, *Patterns in Prehistory: Humankind's First Three Million Years*, 3rd ed. (New York: Oxford University Pr., 1990), pp. 218–19. Also see P.S. Martin and H.E. Wright, Jr., eds., *Pleistocene Extinctions: The Search for a Cause* (New Haven: Yale University Pr., 1967).
8. The presence or absence of bison in Southwest Virginia has been a matter of some dispute, and involves several disciplines. The most sophisticated and recent paleontological analysis of bison in Southwest Virginia may be found in Jerry N. McDonald, *North American Bison: Their Classification and Evolution* (Berkeley: University of California Pr., 1981), pp. 104, 251–56. A summary and sometimes dismissal of historic sources claiming eye witness accounts of bison or buffalo in Southwest Virginia may be found in Frank G. Roe, *The North American Buffalo: A Critical Study of the Species in its Wild State*, 2nd ed. (Toronto: University of Toronto Pr., 1970), pp. 228, 245–47. Also see Samuel Cole Williams, *Adair's History of the American Indians* (New York: Argonaut Pr., 1966; originally published in London, 1755), p. 27; Joel A. Allen, *The American Bisons: Living and Extinct* (New York: Arno Pr., 1974; reprint of Cambridge University Pr. ed., 1876), pp. 85–87, 92, 225; Rountree, "The Powhatans and Other Woodland Indians as Travelers," p. 45. For examples of primary reports of buffalo in Southwest Virginia, see Robert G. Albion, ed., *Philip Vickers Fithian: Journal, 1775–1776: Written on the Virginia-Pennsylvania Frontier and in the Army Around New York* (Princeton: Princeton University Pr., 1934), p. 147; Adelaide L. Fries, ed., *Records of the Moravians in North Carolina*, vol. 1 (Raleigh: State Department of Archives and History, 1968), pp. 50–51; Louis B. Wright, ed., *The Prose Works of William Byrd of Westover: Narratives of a Colonial Virginian* (Cambridge: Harvard University Pr., 1966), pp. 402–4.
9. Dragoo, "Some Aspects of Eastern North American Prehistory," pp. 11–12; Wenke, *Patterns in Prehistory*, p. 219.
10. Wenke, *Patterns in Prehistory*, p. 561. Many archaeologists distinguish Native American plant cultivation as "horticulture" rather than "agriculture" since Indians did not plow the soil nor broadcast seed. See, for example, Carl O. Sauer, *Sixteenth Century North America: The Land and the People as Seen by the Europeans* (Berkeley: University of California Pr., 1971), pp. 286–87.
11. Michael B. Barber, "Human Prehistory Beyond the Blue Ridge: A Brief Introduction" (revised version, 1989; unpublished manuscript on file with Jefferson National Forest Cultural Resources Division, Roanoke, Va.), p. 25; Dunnell, "The

- Prehistory of Fishtrap," p. 73; Keith Egloff and Deborah Woodward, *First People: The Early Indians of Virginia* (Richmond: Virginia Department of Historic Resources, 1992), pp. 12, 22.
12. Jay F. Custer and Dennis C. Curry, "Prehistoric Settlement-Subsistence Systems in Grayson County, Virginia," *Quarterly Bulletin of the Archeological Society of Virginia*, 41, no. 3 (Sept. 1986): 126. In his study of the Gilbert Site in Tazewell County, Emory Jones wrote, "the high percentage of broken Archaic Period projectile points demonstrates that the site was a convenient, perhaps sought out, stopping place for early hunter-gatherers to rest and to refurbish or replace any damaged or worn-out hunting equipment." (Emory Eugene Jones, Jr., "The Gilbert Site, Tazewell County, Virginia," *Quarterly Bulletin of the Archeological Society of Virginia*, 44, no. 4 (Dec. 1989): 222. Also see Howard A. MacCord, Sr., "The Dalton Site, Pulaski County, Virginia. A Report on Phase III (Date Recovery) Excavations," *Quarterly Bulletin of the Archeological Society of Virginia*, 39, no. 4 (Dec. 1984): 216; Howard A. MacCord, "The Flannery Site, Scott County, Virginia," *Quarterly Bulletin of the Archeological Society of Virginia*, 34, no. 1 (Sept. 1979): 29-30.
 13. Barber, "Human Prehistory Beyond the Blue Ridge," p. 15; Michael B. Barber, personal communication, February 24, 1993.
 14. Lewis, *Kentucky Archaeology*, p. 46; Wenke, *Patterns in Prehistory*, p. 561.
 15. Custer and Curry, "Prehistoric Settlement-Subsistence Systems in Grayson County, Virginia," p. 127.
 16. U.S. Forest Service Archaeologist Michael B. Barber stresses that the Daughtery's Cave site is the only extensive occupational Archaic site in Southwest Virginia that archaeologists have scientifically examined, and that examination of other sites could significantly modify the current picture of the Archaic Period in Southwest Virginia. Michael Barber, personal communication, February 24, 1993. Also see Barber, "Human Prehistory Beyond the Blue Ridge," p. 17; Egloff and Woodward, *First People*, p. 13.
 17. Barber, "Human Prehistory Beyond the Blue Ridge," pp. 20, 22; Joseph R. Caldwell, "Eastern North America," in Stuart Struever, ed., *Prehistoric Agriculture* (Garden City, N.Y.: American Museum of Natural History, 1971), p. 367.
 18. For general discussions of Woodland cultural development, see Dragoo, "Some Aspects of Eastern North American Prehistory," pp. 18-19; Griffin, "Eastern North American Archaeology," p. 175; and especially Charles Hudson, *The Southeastern Indians* (Knoxville: University of Tennessee Pr., 1976), pp. 55-66, 77-80, 95, 327.
 19. Barber, "Human Prehistory Beyond the Blue Ridge," p. 18; Egloff, "The Late Woodland Period in Southwestern Virginia," p. 187; Clarence R. Geier, "Development and Diversification: Cultural Directions During the Late Woodland/Mississippian Period in Eastern North America," in Theodore R. Reinhart and Mary Ellen N. Hodges, eds., *Middle and Late Woodland Research in Virginia: A Synthesis* (Richmond: Archeological Society of Virginia, 1992), pp. 279, 291. For similar developments in neighboring western North Carolina, see Purrington, "Ancient Mountaineers," p. 136; for eastern Kentucky, see Dunnell, "Prehistory of Fishtrap," pp. 74-75.
 20. Joseph L. Benthall, "The Litten Site: A Late Woodland Village Complex, Washington County, Virginia," *Quarterly Bulletin of the Archeological Society of Virginia*, 26, no. 1 (Sept. 1971): 34; Jones, "The Gilbert Site," pp. 222-23; Howard A.

- MacCord, Sr., "The Brown Johnson Site - Bland County, Virginia," *Quarterly Bulletin of the Archeological Society of Virginia*, 25, no. 4 (June 1971): 268; Howard A. MacCord, Sr., "The Sullins Site, Washington County, Virginia," *Quarterly Bulletin of the Archeological Society of Virginia*, 36, nos. 3&4 (Dec. 1981): 120.
21. William T. Buchanan, Jr., "The Hall Site, Montgomery County, Virginia," *Quarterly Bulletin of the Archeological Society of Virginia*, 35, no. 2 (Dec. 1980): 97-99. Buchanan surmises that the Hall Site probably reflects a single family unit. The Litten Site in Washington County divulged various types of pottery and projectile point styles resembling traits from other groups, such as the Saponi and Occaneechee of Central Virginia, and peoples of the eastern Tennessee Mississippian (Dallas) culture. See Benthall, "The Litten Site," p. 33. The Crab Orchard site in Tazewell County also reflected trade with southern and distant northern peoples with copper and marine shell bead artifacts. See Keith Egloff and Celia Reed, "Crab Orchard Site: A Late Woodland Palisaded Village," *Quarterly Bulletin of the Archeological Society of Virginia*, 34, no. 3 (March 1980): 147.
22. Dunnell, "Prehistory of Fishtrap," pp. 74-75. Wenke recognizes this kind of ceramic development as part of a cultural phenomenon occurring at various times with various peoples throughout the world. See Wenke, *Patterns in Prehistory*, p. 563.
23. Barber, "Human Prehistory Beyond the Blue Ridge," p. 18; Egloff and Woodward, *First Peoples*, p. 23; Lewis, *Kentucky Archaeology*, p. 81; Douglas C. McLearn, "Late Archaic and Early Woodland Material Culture in Virginia," in Theodore R. Reinhart and Mary Ellen Hodges, eds., *Later Archaic and Early Woodland Research in Virginia: A Synthesis* (Richmond: Archeological Society of Virginia, 1991), pp. 114, 125.
24. Caldwell, "Eastern North America," p. 368; Keith T. Egloff, *Ceramic Study of Woodland Occupation Along the Clinch and Powell Rivers in Southwest Virginia*, Research Report Series #3 (Richmond: Department of Conservation and Historic Resources, Division of Historic Landmarks, 1987).
25. Sebert L. Sisson, "Pot Rock Cliff Shelter, Carroll County, Virginia," *Quarterly Bulletin of the Archeological Society of Virginia*, 34, no. 1 (Sept. 1979): 56. Bott observed that shell-tempered ceramics predominated at the Hansonville Site in Russell County, and noted "the importance of the temporal and regional relationships between shell and limestone tempered ceramics." [See Keith Edward Bott, *44RU7: Archaeological Test Excavations at a Late Woodland Village in the Lower Uplands of Southwest Virginia* (Richmond: Virginia Division of Historic Landmarks, 1981), p. 12]. For analysis of ceramics and their possible indications for a New River site, see William T. Buchanan, *The Trigg Site, City of Radford, Virginia* (Richmond: Archeological Society of Virginia, 1984).
26. Egloff, *Ceramic Study*, pp. 6-8, 48, 49.
27. MacCord, "Brown Johnson Site," p. 264.
28. MacCord, "The Flannery Site," p. 27.
29. Dragoo, "Some Aspects of Eastern North American Prehistory," p. 18; Douglas C. McLearn, "Virginia's Middle Woodland Period: A Regional Perspective," in Theodore R. Reinhart and Mary Ellen N. Hodges, eds., *Middle and Late Woodland Research in Virginia: A Synthesis* (Richmond: Archeological Society of Virginia, 1992),

- p. 56; Purrington, "Ancient Mountaineers," p. 139; Wenke, *Patterns in Prehistory*, pp. 565–67, 569.
30. Dennis Blanton, "Middle Woodland Settlement Systems in Virginia," in Theodore R. Reinhart and Mary Ellen N. Hodges, eds., *Middle and Late Woodland Research in Virginia: A Synthesis* (Richmond: Archeological Society of Virginia, 1992), pp. 68, 69.
 31. Blanton, "Middle Woodland Settlement Systems in Virginia," pp. 75, 77, 81, 82; McLearn, "Virginia's Middle Woodland Period," pp. 53–55.
 32. Barber, "Human Prehistory Beyond the Blue Ridge," pp. 19, 20; Lewis, *Kentucky Archaeology*, p. 117. Also see Caldwell, "Eastern North America," p. 368.
 33. Egloff and Woodward, *First People*, pp. 29–30. Also see Egloff and Reed, "Crab Orchard," pp. 146–47. The Crab Orchard village complex epitomizes prehistoric horticulture in Southwest Virginia, and the Indians there were possibly influenced by the nearby Saltville Valley, an important Indian hunting ground, and where Indians possibly made salt to exchange with other groups (Michael B. Barber, personal communication, February 24, 1993).
 34. Egloff and Reed, "Crab Orchard Site," pp. 146–47.
 35. Egloff and Woodward, *First People*, pp. 25, 27. Similar Mississippian evidence appears in adjacent areas of Kentucky during this period. See Lewis, *Kentucky Archaeology*, p. 86.
 36. Caldwell, "Eastern North America," p. 361; Egloff, "Late Woodland Period in Southwestern Virginia," p. 213.
 37. Dragoo, "Some Aspects of Eastern North American Prehistory," pp. 20–21; Geier, "Development and Diversification," pp. 279, 281.
 38. Barber, "Human Prehistory Beyond the Blue Ridge," pp. 22–23; Joseph L. Benthall, *Archeological Investigation of the Shannon Site* (Richmond: Virginia State Library, 1969), pp. 145–48; Roy S. Dickens, Jr., *Cherokee Prehistory: The Pisgah Phase in the Appalachian Summit Region* (Knoxville: University of Tennessee Pr., 1976), pp. 14, 172–88, 191–92, 201, 206, 210–14; Dunnell, "Prehistory of Fishtrap," p. 76; Egloff, *Ceramic Study*, p. 3; Lewis, *Kentucky Archaeology*, pp. 150, 177; MacCord, "Flannery Site," p. 30; Jacquelyn G. Piper, "An Interpretation of Mount Rogers National Recreation Area" (M.S. thesis: University of South Florida, 1977), p. 147; Purrington, "Ancient Mountaineers," pp. 144–45; Ralph S. Solecki, "An Archeological Survey of Two River Basins in West Virginia," *West Virginia History*, 10, no. 4 (July 1949): 319–432.
 39. Egloff and Woodward, *First People*, p. 32. For the actual report, see Lucien Carr, "Report on the Exploration of a Mound in Lee County, Virginia," in the *Tenth Annual Report of the Peabody Museum* (Cambridge: Salem Pr., 1877), pp. 75–94.
 40. Carr, "Report on the Exploration of a Mound," pp. 79–83; Egloff and Woodward, *First People*, p. 32.
 41. The rockshelter occupations themselves reflect "short-term exploitative camps" used during hunting and gathering activities. Many of these rockshelters are located on the Jefferson National Forest's Clinch Ranger District, and easily comprise, to date, the Forest's most significant archaeological sites. During 1981, Anne Frazer Rogers and her field crew from Western Carolina University studied eight of these rock shelters in Wise County. See Anne Frazer Rogers, ed., "The Jaybird Branch

- Project: Report of Investigations" (Cullowhee: Western Carolina University, 1982), pp. 5, 6, 39. Neighboring Kentucky rock shelters may have been occupied in similar, sporadic fashion or year-round, the latter possibly coinciding with abandonment of area bottom lands and rise of hillside horticulture. See Lewis, *Kentucky Archaeology*, pp. 86, 110.
42. Barber, "Human Prehistory Beyond the Blue Ridge," 22–23; Michael B. Barber, personal communication, February 24, 1993; Jeffrey L. Hantman, "Between Powhatan and Quirank: Reconstructing Monacan Culture and History in the Context of Jamestown," *American Anthropologist* 92, no. 3 (Sept. 1990): 684; Rountree, "Summary and Implications," in Helen C. Rountree, ed., *Powhatan Foreign Relations*, pp. 216–17.
43. Jon Muller, "The Southern Cult," in Patricia Galloway, ed., *The Southeastern Ceremonial Complex: Artifacts and Analysis* (Lincoln: University of Nebraska Pr., 1989), pp. 11–26.
44. JNF archeologist Mary Louise Arend, personal communication, June 10, 1992. And, as Douglas McClearan noted, where quartzite dominated Savannah River points in general, Indians living in Southwest Virginia also used locally-available rhyolite and limestone or chert in addition to quartzite. See McClearan, "Virginia's Middle Woodland Period," pp. 95, 97, 98.
45. Blanton, "Middle Woodland Settlement Systems in Virginia," pp. 75, 77; Helen C. Rountree, *The Powhatan Indians of Virginia* (Norman: University of Oklahoma Pr., 1989), pp. 32, 71, 120.
46. Barber, "Human Prehistory Beyond the Blue Ridge," pp. 26–27; Michael B. Barber Interview, June 3, 1992 (tape on file with Jefferson National Forest Cultural Resources Division, Roanoke, Va.); Michael Barber, "Continued Archaeological Reconnaissance of the Coeburn Exchange, Wise County, Virginia," (Roanoke, Va.: Jefferson National Forest, 1985), pp. 7, 8, 50, 57.; Bott, 44RU7: *Archaeological Test Excavations*, p. 37. Also see Geier, "Development and Diversification," pp. 290–91.
47. One of the more prominent examples lies in J. Donald Hughes, *American Indian Ecology* (El Paso: Texas Western Pr., 1983). Also see Robert F. Berkhofer, Jr.'s false dichotomy in "Cultural Pluralism Versus Ethnocentrism in the New Indian History," in Calvin Martin, ed., *The American Indian and the Problem of History* (Oxford University Pr., 1987), pp. 35–45; Peter Heinegg, "Lessons from the Indians: Ecological Piety," *North American Review* 163 (Spring 1978): 66–69; Calvin Martin, "Fire and Forest Structure in the Aboriginal Eastern Forest," *Indian Historian* 6, no. 4 (Fall 1973): 38–42, 54; and Chris Vecsey and Robert W. Venables, *American Indian Environments: Ecological Issues in Native American History* (Syracuse: Syracuse University Pr., 1980), though the latter focuses more on the post-contact era.
48. Probably the most discerning assessment of the topic, as well as a very useful historiographic analysis, lies in J. Baird Callicott, "American Indian Land Wisdom? Sorting out the Issues," *Journal of Forest History* 33, no. 1 (Jan. 1989): 35–42. Other interesting observations dealing with varied environmental attitudes may be found in Cornelius J. Jaenen, "Thoughts on Early Canadian Contact," and Frederick Turner, "On the Revision of Monuments," both in Calvin Martin, ed., *The American Indian and the Problem of History*, pp. 55–56, 116.

49. Indications of this abound; following are a few printed primary sources pertaining to the southern highlands: Williams, *Adair's History of the American Indians*, p. 27; Anon., "The Indians of Virginia . . . 1689," *William and Mary Quarterly* 3rd ser., 16, no. 2 (April 1959): 230–43; Louis B. Wright, ed., *The History and Present State of Virginia by Robert Beverley* (Chapel Hill: University of North Carolina Pr., 1947), pp. 202, 210; Stanley Pargellis, "An Acct of the Indians of Virginia," *William and Mary Quarterly* 3rd ser., 16, no. 2 (April 1959): 228–29.
50. Robert Heizer addresses this general topic with much wisdom and within a world-wide context. See Robert F. Heizer, "Primitive Man as an Ecological Factor," *Kroeber Anthropological Society Papers* 13 (Fall 1955): 1–31. Also see Michael P. Hoffman, "Prehistoric Ecological Crises," in Lester J. Bilsky, ed., *Historical Ecology: Essays on Environment and Social Change* (Port Washington, N.Y.: Kennikat Pr., 1980), pp. 33–42; Cornelius J. Jaenen, "Thoughts on Early Canadian Contact," in Martin, *The American Indian and the Problem of History*, pp. 55–66.
51. The most extensive study on this topic lies in Erhard Rostlund, *Freshwater Fish and Fishing in Native North America* (Berkeley: University of California Pr., 1952). For other primary and secondary accounts focusing specifically on Southeastern Indians, see Frank G. Speck, "The Ethnic Position of the Southeastern Algonkian," *American Anthropologist*, n.s. 26 (1924): 191; and Frank G. Speck, *Ethnology of the Yuchi Indians* (University of Pennsylvania Museum of Anthropological Publications, no. 1; Philadelphia: University Museum, 1909–1911), pp. 23–24.
52. Williams, *Adair's History of the American Indians*, p. 248; Pargellis, "An Acct of the Indians of Virginia," p. 243; Stephen J. Pyne, *Fire in America: A Cultural History of Wildland and Rural Fire* (Princeton: Princeton University Pr., 1982), p. 74; Sauer, *Sixteenth Century North America*, p. 285; Stevens, "A Story of Plants, Fire, and People," p. 209; William L. Thomas, Jr., *Man's Role in Changing the Face of the Earth* (Chicago: University of Chicago Pr., 1956), pp. 115–33.
53. Clarence W. Alvord and Lee Bidgood. *The First Explorations of the Trans-Allegheny Region by the Virginians, 1650–1674* (Cleveland: Arthur H. Clark Co., 1912), p. 73; C.G. Holland, "The Ramifications of the Fire Hunt," *Quarterly Bulletin of the Archeological Society of Virginia*, 33, no. 4 (June 1979): 134–40; Hugh T. Lefler, ed., *New Voyage to Carolina by John Lawson* (Chapel Hill: University of North Carolina Pr., 1967), pp. 215–16; Pargellis, "An Acct of the Indians of Virginia," p. 243; Speck, "The Ethnic Position of the Southeastern Algonkian," p. 191; Williams, *Adair's History of the American Indians*, p. 248.
54. For a fascinating essay on Indian concepts of time, space, and metaphysics, see Benjamin Lee Whorf, "An American Indian Model of the Universe," in Dennis Tedlock and Barbara Tedlock, eds., *Teachings from the American Earth: Indian Religion and Philosophy* (New York: Liverwright, 1975), pp. 121–29. Another excellent essay offering indications of an Indian world view is N. Scott Momaday, "Native American Attitudes to the Environment," in Walter H. Capps, ed., *Seeing with a Native Eye* (New York: Harper and Row, 1976), pp. 79–85. Also see Sam D. Gill, *Beyond "The Primitive": The Religions of Nonliterate Peoples* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1982), pp. 6, 16, 18–19, 81.

55. As late as 1929 Robert Mason claimed a persistence of tradition among the Cherokee. See Robert L. Mason, "The Myths of the Cherokees," *American Forests and Forest Life* 35 (1929): 259–62, 300.
56. For a contemporary early eighteenth-century observation of this phenomenon, see Lefler, *A New Voyage to Carolina by John Lawson*, p. 214. For a comprehensive secondary study, see Gregory A. Waselkov, "Indian Maps of the Colonial Southeast," in Wood, *Powhatan's Mantle*, pp. 292–343.
57. James Mooney, *Myths of the Cherokee* (New York: Johnson Reprint Corp., 1970), p. 445; Sokyo Ono, *Shinto: The Kami Way* (Rutland, Vt.: Charles Tuttle Co., 1962), pp. 7–8; Floyd H. Ross, *Shinto: the Way of Japan* (Boston: Beacon Pr., 1965), p. 49; Noel W. Schutz, Jr., "The Study of Shawnee Myth in an Ethnographic and Ethnohistorical Perspective" (Ph.D. diss., Indiana University, 1975), p. 101.
58. Williams, *Adair's History of the American Indians*, pp. 137–43; Mooney, *Myths of the Cherokee*, pp. 295–97. An interesting exception to generally restrained hunting practices, which included avoidance of killing young animals, John Lawson encountered Indians in the North Carolina highlands who enjoyed eating fawns as a distinct delicacy. See Lefler, *New Voyage to Carolina by John Lawson*, pp. 58, 182.
59. Calvin Martin admirably criticizes much "Indian-white"-biased history of the past, rightfully distinguishes between Euroamerican and Indian worldviews, and accurately emphasizes the mystic component of the native perspective. Martin, however, ends up substituting a "biological perspective" for earlier Eurocentric approaches to aboriginal thinking and thus perpetuates the problem of translation between two culturally distinct worldviews. (See Martin, *American Indian and the Problem of History*, pp. 6–34; especially pages 8, 9, 15, 24, 27, 28, 29, 30). In the final analysis all intellectual disciplines possess irrevocable limitations, and probably none of them will ever really approximate the Native-American prehistorical perspective.
60. J. Baird Callicott, "Traditional American Indian and Western European Attitudes Toward Nature: An Overview," *Environmental Ethics* 4, no. 4 (Winter 1982): 305; Heizer, "Primitive Man as an Ecological Factor," pp. 4–7; Charles Hudson, "Cherokee Concept of Natural Balance," *Indian Historian* 3, no. 4 (1970): 54; William C. McCleod, "Conservation Among Primitive Hunting Peoples," *Scientific Monthly* 43 (Dec. 1936): 562–66; Pargellis, "An Acct of the Indians of Virginia," p. 240; Ruth E. Suddeth, "The Myths of the Cherokees," *Georgia Review* 10, no. 1 (Spring 1956): 85. The Shawnee apparently extended such anthropomorphism even further in relation to their "Female Deity." See C.F. Voegelin, "The Shawnee Female Deity," *Yale University Publications in Anthropology* #10 (New Haven: Yale University, 1970).
61. Lefler, *A New Voyage to Carolina by John Lawson*, p. 58.
62. Mooney, *Myths of the Cherokee*, pp. 263–65, 294. The Shawnee apparently held a similar regard for snakes. See Schutz, "Study of Shawnee Myth," pp. 196–97, 201.
63. James Mooney, "The Cherokee River Cult," *Journal of American Folklore* 13, no. 48 (Jan.-Mar. 1900): 1–10; Williams, *Adair's History of the American Indians*, p. 239.
64. Neal Salisbury, "American Indians and American History," in Calvin Martin, ed., *The American Indian and the Problem of History*, p. 50.
65. Some insightful observations of this may be found in Neal Salisbury, "American Indians and American History," in Martin, *The American Indian and the Problem of History*, pp. 46–54, and Clarence J. Glacken, *Traces on the Rhodian Shore: Nature and*

Culture in Western Thought from Ancient Times to the End of the Eighteenth Century (Berkeley: University of California Pr., 1967), p. 494. For an interesting example of co-existing African tribal and “state-oriented” societies, see Paul Bohannon, *Africa and Africans* (Garden City, N.Y.: Natural History Pr., 1964), pp. 188-205. An introduction to the traditional Chinese cyclical view of human events can be found in Colin A. Ronan, *The Shorter Science and Civilisation in China: An Abridgement of Joseph Needham's Original Text*, vol.1 (Cambridge: Cambridge University Pr., 1978), or see the original multi-volume project begun by Joseph Needham, *Science and Civilisation in China*.
