Ancient Peoples of the Great Basin & Colorado Plateau

Steven R. Simms

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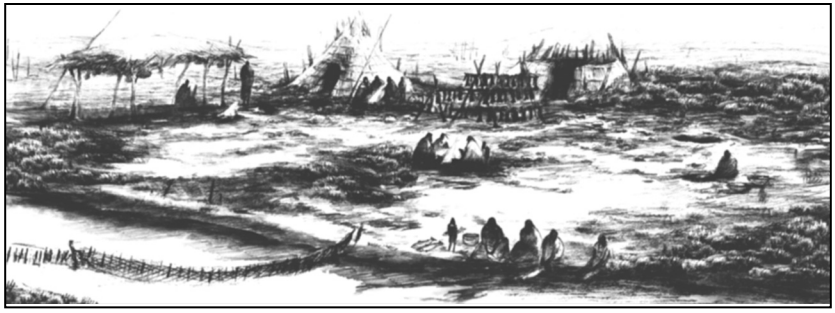

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Preface

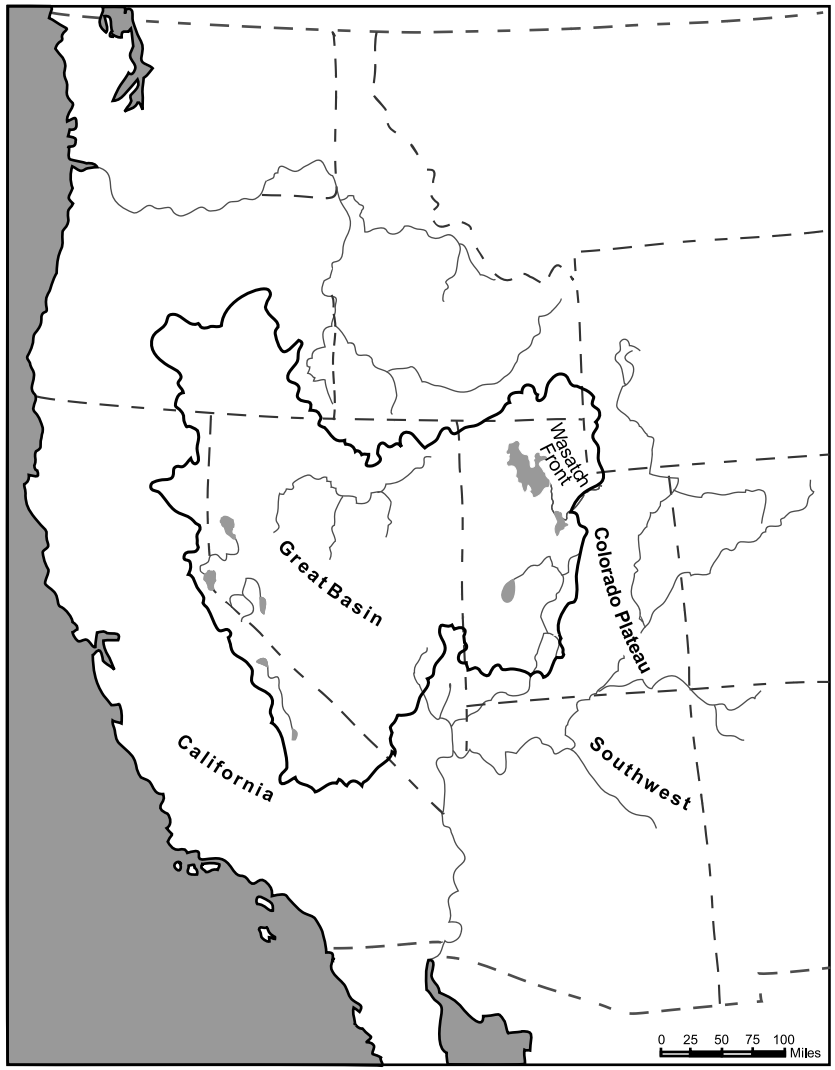
This book is about the ancient peoples of the Great Basin and the northern Colorado Plateau, a region occupying most of Nevada and Utah and portions of California, Oregon, Idaho, Wyoming, and Colorado.[1] It is an investigation of once real lives across an expanse of time too large to comprehend in terms of our short lives, through empathy, or by appeal to our imagined histories.

My aim is toward those who know something about the region and something about archaeology, and who want to understand why the ancient histories happened the way they did. This book is not a compendium of archaeological "digs," or a list of relics found, or a guide to identifying arrowhead collections. Neither is it an exhaustive textbook recitation of the scholarly studies pertaining to the region. It is an interpretation of the physical record of past cultures, ecosystems, and climates. As such, it includes examples of the evidence found at archaeological sites to back up my interpretations, although this treatise is certainly not encyclopedic. I intend it to be synthetic, but it is my own set of perceptions and interpretations.

Two premises anchor my story. The first is that a scientific approach must be the foundation for knowing the past. This is not because science is truth, but because all interpretations of the past,

FIGURE P-1

Western North America showing the Great Basin, a land of internal drainage and the Colorado Plateau, a land of high mesas dissected by deep canyons. They constitute the Basin-Plateau because of the cultural similarities of Native American groups and some degree of unity in the ancient history of the region. What occurred in the Basin-Plateau was shaped by what went on around it, especially in the Southwest and California; hence these regions are also identified. The Wasatch Front of Utah is depicted because it provides a perceptual anchor to the narrative and serves as a springboard into the region's deep past.



whether they arise from religious conviction, ethnic identity, politics, folklore, or written history originating in the blink of the past two centuries, must be evaluated against empirical evidence that actually originated in that past. Why? Ancient times are too large to know if we are armed only with our modern understandings. To know a past different from our present requires a fundamental acknowledgment: Regardless of what one believes happened in the past, and no matter how strongly one's convictions are held, something did happen . . . and this reality may hold little resemblance to modern people's beliefs or perceptions. The only way to navigate the diversity of stories and the inevitable contention among people's beliefs is to appeal to the evidence no matter how fragmentary, while acknowledging the vagaries of the scientific process.

The second premise of the book evolves from the first. The main reason for studying the past is because it is relevant now. The past is with us in the present. It is, as the historian Barbara Tuchman called it, "A Distant Mirror," or as the anthropologist Clyde Kluckhohn preferred, a "Mirror for Man."[2] The images in the mirrors are our selves. Knowledge about a past that might not conform to our initial perceptions or to our traditional knowledge challenges us to see the modern world differently.

Even after practicing archaeology in the Great Basin and the Colorado Plateau regions for 35 years, I still find excitement in a landscape that I like to say is "a study in pastels." I continue to find intrigue in archaeological remains that are often so subtle, visitors wonder what it is we are looking at, let alone finding. Over the years of teaching, I realized that audiences want the past interpreted and explained, not just described. Even for those whose initial interest in archaeology arose from the mere collection of objects, the deeper desire is to climb into a time machine and find out what these distant peoples and cultures were like. Finally, I believe there are educated readers seeking to go deeper into the Ancient Desert West but who don't want to work through the highly specialized and technical articles in professional journals.

At some risk of bringing too much conclusiveness to the story, I try to strike a balance between breadth, depth, scientific responsibility, and audience sensitivities. To facilitate this goal, I employ the notion of place as a vehicle for the narrative. The cultures of the Basin-Plateau conceptualized sense of place in vastly different ways, not only from us but among themselves. And sense of place changed fundamentally over the centuries and millennia. At times place was

plural among different peoples of the region. As the writer Eudora Welty observed: "Location is the ground conductor of all the currents of emotion and belief and moral conviction that charge out from the story in its course."[3]

My goal is nevertheless to tell a story that is scientifically responsible, and thus one that can be supported with observed evidence. Extensive end notes are a significant element of this book. They constitute a book within a book for those who want to know what supports my interpretations. They offer avenues for further reading, and on many topics they are a subtext under the narrative. The book can be read with them or without them, and in this way I hope it can find accessibility for the educated lay reader, students, and perhaps colleagues.

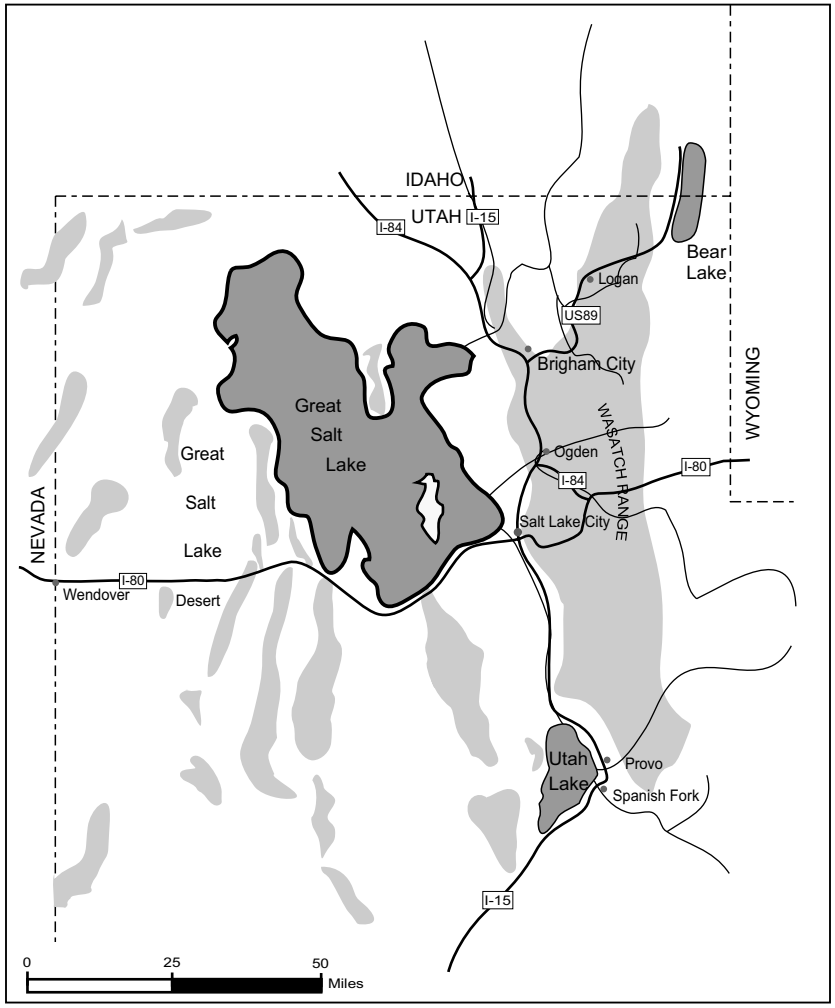
The story is bigger than we think in two ways. First, the temporal scale is staggering. People have called the Basin-Plateau home for over 13,000 years. Although this number rolls easily off the tongue, to translate it into human terms requires us to consider a genealogy of over 430 generations; over five times as long as the history of Christianity. The resulting temporal cavern houses a staggering diversity of behaviors, cultures, and historical circumstances that beg not to be homogenized as "prehistory."

The past is also bigger than we think in terms of space. I start small by using the Wasatch Front of northern Utah as a source of examples and as a point of departure into a much larger region. My colleague David Madsen likes to say that the Wasatch Front was the most populous part of Utah in ancient times, just as it is today. The urban strip anchored by Salt Lake City is known to many people who do not live there, and I hope this familiarity will help the reader gain purchase on the larger but less known region. The Wasatch Front also houses much of the diversity that we find across the Great Basin and the northern Colorado Plateau.

Most of the story, however, is about the larger expanse of the Basin-Plateau. But even that is not enough. Archaeology is so specialized that we sometimes unwittingly expect the answers to our questions to be found within our "study area." I think this often misleads us, much like the drunk looking for his keys under the lamppost. Significant cultural and historical trajectories in the ancient Basin-Plateau were shaped by what happened elsewhere on the continent, especially the Southwest and California. For this reason, the narrative moves repeatedly from the local of the Wasatch Front, to the scale of the Basin-Plateau, and outward to continental levels. I call this "a spiral of contexts," and I choose this metaphor because all cultural contexts

FIGURE P-2

Examples of past cultures and landscapes are drawn from the Wasatch Front as a point of departure into the region. The Wasatch Front is now one of the most populous areas of the Basin-Plateau and is thus familiar to many people who do not live there. It also houses much of the variation we see elsewhere in the region, from alpine mountains to salt flats, enormous wetlands, and craggy desert mountains.



are linked to others, not only in space but through a "spiral" of time that swirls cultures together to create new contexts.

Each of these ascending scales of geographic and temporal space was important to the unfolding of prehistory. Rather than being isolated "Robinson Crusoes," ancient peoples inhabited a social

tapestry on an occupied landscape. We are unaccustomed to using the term "cosmopolitan" to describe ancient Native America, but America before the arrival of the Europeans was a cosmopolitan place. It was a fully occupied, socially integrated, multicultural fabric. Humans were a driving force in the nature of America's ecosystems. What people did in one place mattered for those in other places. If an area became overhunted, demands were placed on others. If farmers immigrated to a place previously occupied only by foragers, the lives of both peoples changed. If a place became overpopulated, it sent ripples and even waves of change into the rural areas around it. In the ancient past, just as today, to know the local, one must know the regional and the continental.

I begin with a fictional Prologue to set the stage for an excursion into a life that was far more expansive, more diverse, and deeper in time than granted by our modern images of Indians riding horses and living in tipis.

Chapter 1 provides a baseline for the Ancient World of the Basin-Plateau by emphasizing variations on themes that help us imagine

FIGURE P-3

The Deep Creek Mountains located on the Utah-Nevada border rise above the floor of the Bonneville Salt Flats. This view is from Floating Island Cave, first occupied over 8,000 years ago. (Courtesy of David Rhode)

a past that can be gleaned only from the archaeology. We will find that to understand the past, we need to abandon the stereotype of a single type of society called "hunters and gatherers," or "Indians." This chapter relies on knowledge of the world's foraging societies and on knowledge gained in the past century or two of the "old ways" of Basin-Plateau Native Americans. I introduce some basics about the kinds of societies that constituted most of the region's past and organize these into interconnected themes of mobility, settlement patterns, subsistence, social organization and politics, and ideology.

Chapter 2 is an excursion into ancient environments that become more and more foreign as we press deeper into time. It provides some examples of how past environments and climates are known and explores climate and ecosystems as never in "balance," never "pristine," but as a relentlessly dynamic tyranny of circumstance for the people who lived here.

Chapters 3 through 6 make up the shank of the story and describe what happened during different periods. Each chapter presents selected archaeological data to illustrate the past. We move chronologically from the Paleoindians, America's first colonists, to the diverse foragers of the Archaic period, to the Fremont farmers, and finally through the Late Prehistoric period to the edge of "contact" with Europeans that brought disease, metal, horses, guns, and change.

The chapters are subdivided into topical sections, but no chapter forms a neat chronological unit. They overlap, because past life was not neatly cut up into blocks of time. Nor are the past cultures best understood as insular packages spinning like billiard balls across a playing table. Each chapter intentionally overlaps categories traditionally kept separate by archaeologists, because I think the processes that caused the changes we observe run among those artificial categories.

Throughout the book, Sidebars on particular topics are provided to amplify themes and isolate topics. A central feature of the book is a portfolio of artwork by Eric Carlson and Noel Carmack. Each illustration is an original, achieved through collaboration. Many represent artistic interpretations of actual archaeological finds, and expansive captions accompany each one. These reconstructions are the artist's conceptions, and mine, too, with the intent of faithfulness to the empirical record.

An Epilogue returns to some of the basic themes: that the past is with us in the present and that we can transcend the differences

engendered by identity politics, religious dogma, and other differences in perspective only through empirical investigation. To have the latter we have to have the archaeological record. Yet it is under assault from urbanization, all manner of rural development, and from us—the general populace collecting arrowheads and flakes of chipped stone, and doing illegal digging. Our window into the past is a nonrenewable cultural resource. It is more fragile than an endangered species because it does not reproduce. When we allow its destruction, then we truly will be able to fictionalize any story our modern impulses desire.

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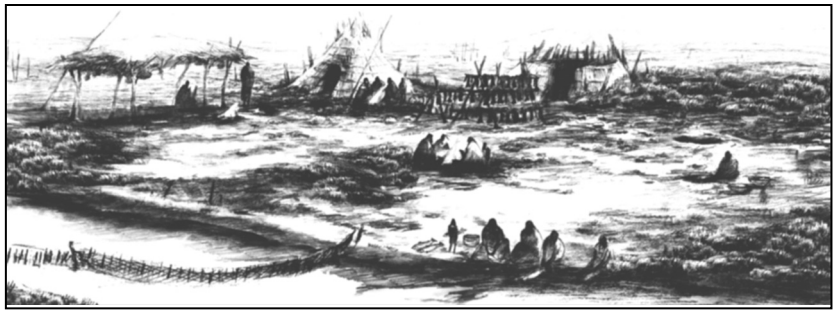
If I were to thank everyone for his or her contribution to this book, my list would include dozens of teachers, professors, family, friends, students, and colleagues from the 35 years I have been doing archaeology. The following is too selective, but recent enough to be appropriate. Money is the engine to have time for research, and it supports the creation of the beautiful artwork by Eric Carlson and Noel Carmack, as well as the preparation of maps by Nancy Kay Harrison and sketches by Jennifer Hulse. I thank Utah State University alumni Boyd Hayward and Richard Shipley for their generous support of archaeology. Utah State University has likewise supported me the whole way, with a sabbatical leave to get the research and writing off the ground, and abundant curiosity and encouragement from colleagues in many campus departments. Special thanks to Leticia Neal and Kate Toomey, who read early drafts. Their efforts dovetailed to provide the crucial vantage of readers with sharp intellect who represent different audiences. Mark Stuart not only wrote one of the sidebars in the book but also has taught me a great deal over the years about the archaeology of Utah. Colleagues Mark Allen, Joel Janetski, Robert Kelly, and Matt Seddon made astute comments and recommendations on a later draft. They not only raised the quality of the content but further stimulated me to convey a bit of the wonder that makes archaeologists love what they do. Thanks also to Bryan Hockett, David Madsen, Duncan Metcalfe, Dann Russell, Rich Talbot, and David Zeanah. Mitch Allen and Stacey C. Sawyer of Left Coast Press were the critical shepherds who led this work to publication. Sincere thanks to each of you.

Prologue



A smoky haze rises among five domed huts constructed by placing mats of cattail and bulrush over willow frames. There are many more people here than usual, and perhaps four dozen men, women, and children temporarily increase the size of the settlement. At least a dozen people shuffle across a patio sheltered by a thatched ramada, swaying gently in rhythm and chanting softly. Inside a nearby reed-covered house, a woman hovers over another woman who is reclined motionless on a woven mat. She bobs a sucking tube near her mouth, pushing it toward her patient and then back toward her lips. Her head, shoulders, hips, and knees synchronize a mime of spirits moving from the body of the ill woman. This is a curing, and this shaman from another valley was summoned because she is known to be the best. (See Art Portfolio, Illustration 1.)

The year is A.D. 1304, and the tiny village sits along a mildly saline and murky stream that meanders through a maze of ponds and sloughs in a convoluted effort to reach the open waters of the Great Salt Lake. A chilly October evening is deceptively darkened by an approaching storm. Musty smells of the marsh hover in the heavy, still air. In a living space burned into a clearing among the dense saltgrass and bulrushes, aromas of human, dog, and fermented fish mingle with the strong scents of burning driftwood.

This shaman is a woman. Both women and men could become shamans. Status and role are plastic and allocated by experience, ability, and charisma. If the shaman fails tonight, her reputation may be harmed, at least within this camp group of families. There are kin relations among most of the people here, some by blood and some by marriage. The kinship extends broadly outward, geographically linking villages, camps, valleys, and even regions with a set of memorized calculations. Should this curing be successful or go poorly, the word will be out, but the status and abilities of this famous woman shaman will be gauged according to those kinship calculations. That is how it worked.

The patient is a middle-aged woman, perhaps 35 years old, and the most respected basketmaker in the valley. Her family believes that a foreign matter, a force of some sort, has intruded upon her body and her being. Mind, body, soul, spirit, and all the things of the earth; they are the same thing. Animation and intent can arise from all things, including animals, plants, and rocks. They can be found in weather phenomena such as dust devils and especially in topographic features such as lakes, rock outcrops, springs, prominences, and even parts of canyons. There can be no distinction of church and state, because these things do not exist. There is no difference between the sacred and the secular. All things are entwined not only in people's minds but in the unfolding of everyday events of people, animals, plants, and even weather.

The shaman uses a sucking tube as part of the ceremony and to aid the healing. Tubes like this are used by indigenous curers in many societies around the world throughout history. This one is made of exotic stone from far beyond Utah and has been handed down among shamans living near the Great Salt Lake. Not all curing can be done this way, and shamans often specialize in the kinds of maladies they treat and in the methods of treatment they use.

The curing ceremony brings together two camp groups. Camp groups are associations of people bound by the daily demands of life and reflecting a variety of social networks. Camp groups can be amalgamations of people with contrasting life histories. The membership in camp groups can be fluid and is not strictly synonymous with boundaries of family, band, or tribe.

In the group assembled tonight for the curing, there are five or more extended families represented, two bands marking two extended lineages, at least four food-named groups, and there are several people

FIGURE P-4

This sucking tube was found many years ago at a Fremont site west of Ogden, Utah. Because it is part of an anonymous private collection, not much is known other than what we can glean from the object itself. Sucking tubes are used in curing ceremonies in many societies around the world. This one is made of a steatite reputed to originate near Spokane, Washington. The long distance movement of raw material used in such a powerful object is not unusual. (Photo by Laura Patterson and courtesy of Mark Stuart)

who speak more than one language. One way people keep track of who is who in a camp group is to refer to a *tebiwa* (in Shoshone), which means a living area or homeland. These are sometimes labeled according to distinctive features and have sometimes been called "food-named groups." They are common in the Great Basin but are also found among foraging societies elsewhere, such as in Australia. The Cattail-Eaters, the Pine-Nut Eaters, and the Ground-Hog Eaters are examples of food-named groups. Even if life takes a person across many valleys, across other food-named groups, across kin and band lines, and even across language boundaries, people know where they are from.

Men and women recognized as leaders among several different lineages are here tonight. Politics are founded on kinship ties, and power, like status and role, is plastic and achieved. This means that

the decisions of everyday life, such as those involved in food-getting, the collection of raw materials, whether to move or stay, and whether to break into smaller groups, are distinct from the larger networks that might be called political organization. The larger the group and the more settled the people, the stronger the influence of political organization on their lives.

If this curing goes well, the way is paved for marriages, greater alliance among camp groups, lineages, and bands, and even perhaps the sharing of risk by pooling valuable resources or sharing stored food. Marriages are often arranged or completed at such gatherings because individuals must marry outside the lineage and preferably across band lines. In a place of few people, living in shifting groups, opportunities for marriage are intermittent and must be exploited when an event such as this curing brings people together.

For these people, alliances are paramount for sharing information about where to find the best food and where other groups are camped, and for ensuring that networks of reciprocity provide support to those in need.

If the curing does not go well by tomorrow or the next day, distrust, conflict, and separation could arise. Scores may have to be settled in the future. This could pose difficult choices, because in a dispute, an individual's decision to align with one part of the family may strain ties with another. Cooperation and conflict are not distinct states of being but are entwined representations of a social ecosystem.

The past few generations brought change. Stories the elders tell to the young speak of a past, a spirit time when people lived by farming, and the stories suggest that these ancient farmers may have been a different people. The stories imply both connection and distance. They describe people moving away and others moving in. The 14th century was a time of upheaval across what is now the western United States. Warfare in California and mass migrations in the Southwest jostled the continent's populations and created new social networks. Immigrants were flung from once-successful places and now encountered strife and overpopulation. Even though northern Utah and the rest of the Great Basin and Colorado Plateau were far from the epicenters, ripples were felt.

The curing is just beginning as evening approaches, and it may last all night. Six men approach across the salt grass meadow, each with a string of muskrats dangling from his waist. The trap lines of snares and deadfalls are checked daily and the struggling animals

retrieved for meat and fur. Today it was muskrats. Another trap line set for meadow mice will be checked tomorrow. Several women set off that morning to catch fish for the event, and a pile of Utah sucker are now baking in rock-lined earth ovens. Baskets of bulrush seed and piles of starchy cattail roots will provide the foundation for a vegetable stew laced with tidbits of meat and spiced with tiny seeds of peppergrass.

A group of the younger men are not here tonight. They are in the mountains hunting bighorn sheep and mule deer. It is fall, and the animals are fat. Rutting season is about to begin, and this presents opportunities to exploit the animals' natural behavior. The people hunt in all seasons, but in the larger scheme of things, meat from large game constitutes a small fraction of the diet. The short, sinew-back "self" bows and cane arrows have an effective range of about 20 meters, and hunting requires persistence, skill, and remarkable stamina. Encounters with the animals may be few and reasonable shots hard to come by. Or, the hunters may simply miss. Large animals, however, are always sought, and when a bighorn sheep is brought into camp, the moment of plenty is shared widely, another process that knits people together through obligation.

The people are the main predators in this landscape. They are not like wolves who take only the young, old, and sick—people take what they need. The female sheep and deer are favored for their fat and hides unblemished by the fights common among males. If a pregnant female deer is taken, the fetus is a delicacy not wasted. Sometimes the people along the Wasatch Front could kill a bison. They are difficult and dangerous to hunt on foot, but if the opportunity arises, it will not be missed.

Winter is approaching, and clothing is being made and repaired. Large animal hides are valuable for clothes, bags, wrappings, and so much more. Hides are only one source of fabric, and most people wear fiber clothing as does the shaman at the curing. Skirts and breechclouts are woven from grass and bark. Long dresses, leggings, and thick, warm shirts are made of sagebrush bark. Woven cattail and bulrush leaves and stems provide another substantial fabric. Rabbit skin robes, made of strips of fur individually wrapped around strands of milkweed cordage and then sewn together, make thick, pliable, and very warm cloaks. These are the most coveted garments and are passed down among generations.

For an important event such as this curing, people will find enough food to sustain everyone for awhile. When an area is used

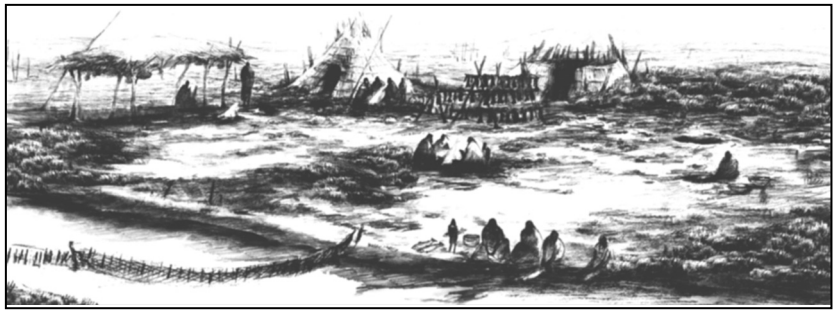
up, families relocate to exploit a different part of the wetlands. They might split into smaller groups, but when there is enough food they congregate as long as it lasts. Some times of the year, large groups assemble: during the spring sucker spawn, the fall pine nut trip, the biannual pronghorn migration, and the famous rabbit drives of early winter.

Firewood is collected relentlessly, and fires burn throughout the camp, because heat and fuel are constant needs. Fire is part of life and not restricted to the hearth. In summer, burning keeps insects at bay and is used to open up space for living. The people employ fire across the landscape to improve hunting, to improve seed bearing, and to maintain prime raw materials for basketmaking. The landscape is a mosaic of burned and less burned areas, which works for the people, because, unlike us, they are not fully settled. This landscape is burning and burned, but it is not denuded or even dangerous. Fire is part of everyday life.

The people move within their ancient Utah wilderness with the nimbleness of long familiarity. They have lived in the wetlands, deserts, and mountain valleys of northern Utah all their lives, as did their parents, grandparents, and all the people before them in a past they can only imagine. In their language, there is no word for "wilderness." They mark no separation between humanity and nature, and cannot conceive of our juxtaposition of humanity versus nature. There is harmony and balance, but these are not static. The people are shaping their wilderness. They use and even exhaust the resources. The balance they achieve is not a final state but rather an unsteady relationship between the impact of the people and the difficult realities that determine their choices. For the past 13,000 years, the wilderness of the Ancient Desert West was a human wilderness.

1

The Ancient World of the Basin-Plateau



The slice of time fictionalized in the Prologue belongs to a world obviously different from our own. It is different not just because people were "hunters and gatherers" and did not have automobiles, shopping centers, health care systems, armies, and schools. The differences are more fundamental and found in the arrangements and meanings of kinship, in the workings of politics and economics, and in worldview itself. The differences are not specific to comparisons of American Indians vs. modern Americans but are found in every comparison of simple and complex societies across the planet.

Life was not necessarily hard in small-scale ancient societies, and the word "primitive" is inappropriate, because depending on your point of view, aspects of modern American culture might just as easily

be dubbed "primitive." Nor was life in foraging societies a relentless and desperate quest for food. The people's work patterns were deliberate, informed, and structured. They had in some ways more free time than we do and like us, they had their trials and failures. Like people today, the ancient foragers of the Basin-Plateau shaped the world around them and in turn were shaped by the consequences of their choices. Like today, the "environment" consists of other people and the organizations of their behavior, not just the physical and nonhuman environment. Human culture is shaped by the twin forces of material circumstance and the historical hand we are dealt by those who preceded us.

The goals of this book are to describe what ancient life in the Basin-Plateau was like and explain why it happened the way it did. To do this, we need to "let the present serve the past" by employing a modern baseline of native cultures.[1] Baselines must begin somewhere; hence the idea of "contact" between the indigenous Native Americans and the Europeans to mark a beginning. In space, our baseline is anchored by the Wasatch Front of northern Utah.

Identifying a baseline risks casting precontact cultures as monolithic and changeless before the intrusions of history altered them from their "pristine" state. We will find that the economic moniker "hunter-gatherer" takes many forms and that it includes a great deal of cultural diversity. Moreover, for more than 1,000 years, over half the Basin-Plateau region was dominated by farming societies, not hunters and gatherers. Despite the utility of a cultural baseline, it is impossible to know the ancients by simply projecting historically known cultures backward in time. This chapter provides some guidelines for knowing the peoples of the past as diverse, dynamic, and sometimes quite different from the native cultures of the past two centuries.

Finally, we extend our baseline from the Wasatch Front outward, not only to the region but to surrounding regions and the continent as a whole. This is important because in order to know why things happened in the Basin-Plateau, we need to know what happened elsewhere. Despite the seeming remoteness of the mountains and the deserts, the Great Basin and the northern Colorado Plateau were part of a "spiral of contexts"—an interconnectedness of local, regional, and even continental contexts, historically linked through vast amounts of time.

NATIVE CULTURE BEFORE THE HORSE

All of us are familiar with images of horse-riding Indians who lived in tipis, hunted bison, shot bows and arrows, and wore buckskin clothing. These images are steeped in history and are based on the eyewitness documentation of Native American life by Euro-American explorers, pioneers, writers, and scholars. This knowledge is rich and vivid, and it is part of the traditions of contemporary Native Americans in the Great Basin and on the Colorado Plateau.

Horses were introduced to the eastern Ute in Colorado in the A.D. 1600s via the Spanish *entradas* to New Mexico. Horse adoption likely preceded the direct arrival of European visitors to the Northern Ute and Northern Shoshone, diffusing among the native Utah groups as early as A.D. 1700 and clearly by the mid to late 1700s. The horse reached the Wasatch Front before A.D. 1776, when the Dominguez-Escalante expedition visited villages of Utah Lake Ute near modern-day Provo. They had no horses but told the Spaniards that they feared the "Cumanches," horse-mounted peoples to the north. The Spaniards did not see the Salt Lake Valley, but the Utah Valley Ute described a "peaceful" people living around Great Salt Lake (Shoshone), with a lifestyle similar to their own and owning no horses.[2]

Horses brought fundamental change to how people obtained food, where they lived, and how they associated, married, led, and fought. Horses symbolized a suite of other changes brought by the associations of Europeans and natives, and natives with or without horses. The changes fall into three conceptual categories: sociopolitical, epidemiological, and demographic.

The effects of sociopolitical change are well documented, and for the Northern Ute and Shoshone they involved trading, especially the slave trade and raiding introduced by the Spanish. The new markets changed the organization of labor, leadership, and the interactions among tribes. The Ute of Colorado raided the more remote western groups of Ute in northern Utah, and by A.D. 1750, even Plains tribes were getting involved.[3]

These contacts provided vectors for European-introduced diseases, such as smallpox and measles passing among concentrations of indigenous groups. Since using horses promoted mobility and periodic large gatherings of people, the effects of disease were likely

significant, albeit difficult to fully document, because they appear to have occurred prior to direct European visitation and eyewitness accounts.[4]

The adoption of horses changed basic patterns of Indian life in only a few years, but we must remember that individual elements and strongly connected patterns of the previous life remained. Cultural change may tear the fabric of a society but rarely dissolves it completely. For instance, the people continued to harvest native plants, but those filled a different niche in the diet. The native pharmacopoeia was surely the same. Many of the same places were used, albeit in different ways. Time depth is apparent in some of the themes and characters of folklore.[5] Characteristics of social organization among the historic native cultures also give us some connection to a deeper past, or at least some analogies to point the way.

By the 19th century, only pockets of people remained who could help us glimpse the old world, and even in those cases, they had firearms and had been forced into the most marginal areas by Euro-American encroachment or by other Native Americans. By the early 20th century, when anthropologists set out to systematically reconstruct the precontact cultures, the memories of the few old people living in small enclaves of indigenous culture were fading. The extent to which these glimpses of life before the horse and tipi apply to the deep past is a matter of debate, but the classic ethnographies provide a rich accounting from informants who lived the "old ways."[6]

Anthropology extends this record by contributing evidence from hundreds of foraging societies and simple farming societies documented around the world in recent history. Many of these societies are classified as bands and tribes by anthropologists. Bands are the simplest form of human society. A band comprises a small group of kin related by blood and by marriage, often formed into clans that trace descent to a perceived common ancestor. Leadership is based on skills and charisma, bands have little economic specialization, and their population typically numbers a few hundred people often scattered over large areas. Tribes are associations of bands and signify that hunter-gatherer societies did exhibit complexity at times—greater economic specialization and differences in wealth and power among individuals, families, and clans.

The world's cross-cultural sample reveals that there are strong regularities in the way band and tribal societies are organized socially, politically, and in worldview and ideology. This knowledge

complements the information we have from our local historical and ethnographic records that describe the Native American cultures of the Basin-Plateau region.

The following sections of the chapter break native life before the horse into categories often used by anthropologists. We begin with tangible things such as technology and economics. These things shape people's food choices and how people moved across the landscape—two things archaeologists can usually see. The material foundations of cultures shape the abstractions of social life and the life of the mind; hence, these sections follow. They are more difficult to find in the archaeological "record."

The archaeological record includes the artifacts, their context, the remains of houses, hearths, refuse dumps, burials, and places where they hunt, collect plants, and find toolstone—places of resource extraction. Each of these kinds of places is a signature of the past. Mostly though, the archaeological record consists of the *patterns* created when thousands of sites and tens of thousands of artifacts are studied in systematic ways. Our excursion here, then, through the ethnographic and historical evidence for native life, is taken with an eye for what might be relevant for the archaeology. The following sections provide some analogies to help us step into a foreign past.

TECHNOLOGY

Technology determines how people get their groceries and their raw materials, and this fact holds regardless of whether food is taken with bow and arrow and nets or is dependent on the flow of oil that fuels modern agriculture around the world. The suite of food options that Mother Nature presents to foraging cultures, and the seasonal availability and their cost of acquisition, shapes where people live and in what size of a group. The patterning of settlements, where they are, their size, and how long they are used between moves are crucial to shaping human interactions—kinship, status, role, and the politics of alliance and conflict. Technology, subsistence, mobility, and settlement are thus entryways to describing the ancient lives and cultures.

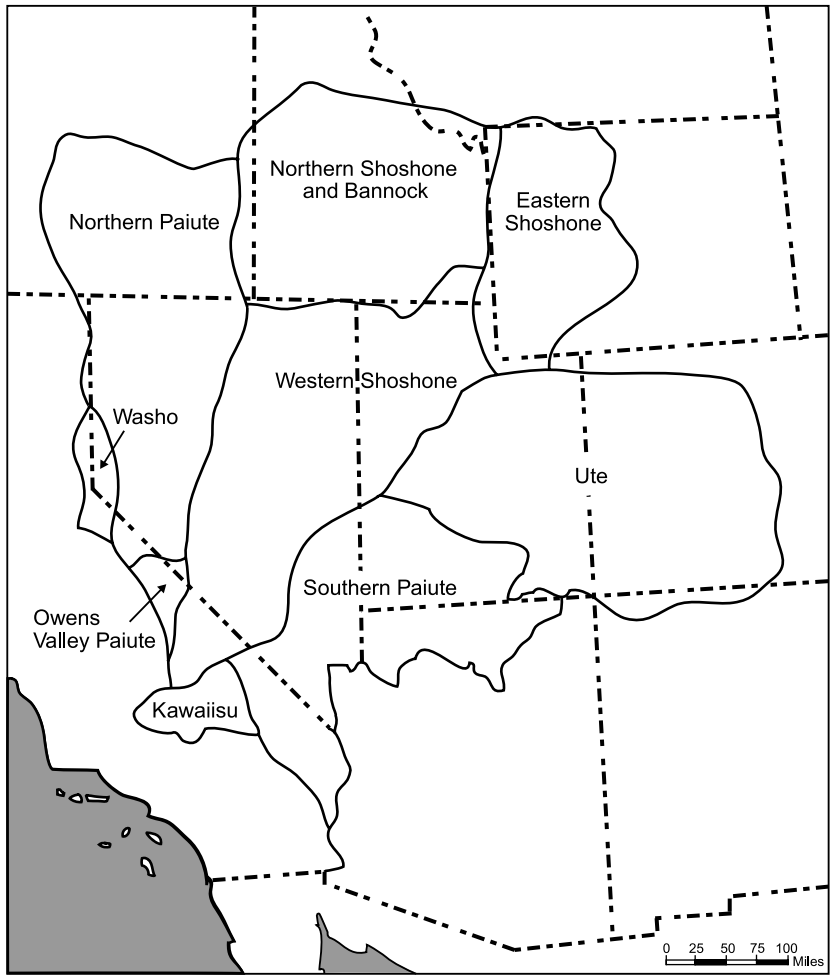
The indigenous technology of the Basin-Plateau region is ingenious, and it is one of the most simple found anywhere in the world. For the first few thousand years after the first people arrived to the region over 13,000 years ago, the stone-tipped thrusting spear was the primary large weapon. It is not known if the earliest spears were

assisted by the atlatl, or spear thrower, but by 8,000–9,000 years ago, the atlatl was clearly present and caused a shift from large tipped spears to smaller tipped "darts." This technology persisted for millennia until the bow and arrow entered the region between A.D. 0 and 500. These were the primary changes in weapon technology in the prehistory of this area until the introduction of firearms.

Atlatls and darts, and the bow and arrow, are only the most obvious food acquisition technologies. An array of gear aided the capture of

FIGURE 1.1

Map of the Basin-Plateau region showing historical tribal-linguistic boundaries.



small or specialized prey, including snares and traps, nets for fish and rabbits, throwing sticks, and slings. There were decoys, such as woven cattail duck decoys covered with duck skins. Pronghorn (antelope) head-dresses served the dual purpose of decoying these curious animals while enhancing the power of the shaman who "charmed" the creature into proximity.

Chipped-stone technology varied in style and specialization over the millennia, but the tool kit always included knives, drills, gravers, chisels, and scrapers; many of these objects were hafted to handles. There was a variety of handheld or hafted tools designed for wood and bone working, hide preparation, plant harvesting, and fiber cutting.

Wooden and bone tools were also used for wood shaping, for burnishing, and as wrenches and digging tools. Perhaps the single most utilized tool in the region's prehistory is the wooden digging stick, necessary for the many kinds of roots taken. Tools for grinding were just as important as the chipped-stone dart tips or arrowheads, because plant foods were the foundation of the diet.

Flat grinding stones called *metates* and handstones called *manos* were made of basalt, rhyolite, quartzite, and even soft rocks, such as sandstones. These tools were used to mill seeds into flour, hull pine nuts, pulverize roots, and puree vegetables. They also served to grind medicinal roots, minerals, and pigments. Mortars and pestles, long cylindrical hullers, shaft straighteners, stone balls, and v-edge cobbles were some of the other forms in the ground-stone tool kit.

One of the most important technologies was the fiber industry. Without looms, all cordage and fabric had to be twisted by hand, and woven, largely with awls. Most clothing was likely made of fiber. Basketry was fundamental to life from the earliest occupants of the region to historic times. Basketmaking requires astounding skill that could be transmitted only by a master teaching an apprentice, and this skill was passed down over generations. Basketmakers knew the proper cultivation and harvest of willow and other raw materials, skill in the manufacture of basketry, and they made special tools required by the industry. Both twining (woven) and coiling (wrapped) construction techniques were richly developed in the Basin-Plateau region, with coiling increasing in frequency after about 10,000 years ago. Coiled baskets improved the mass processing of small seeds and the transport of water in pitch-lined jugs. In later periods, a special basketry tool, the seed beater, was introduced to intensify the harvest of seeds beyond previous levels.[7]

The technology was ingenious in its simplicity and practicality. Compared to the constant change and complexity of modern technology, it seems stagnant. We will find, however, that significant changes occurred in technology, and these changes shaped where people lived and for how long, what they ate, and how their societies were organized.

MOBILITY AND SETTLEMENT

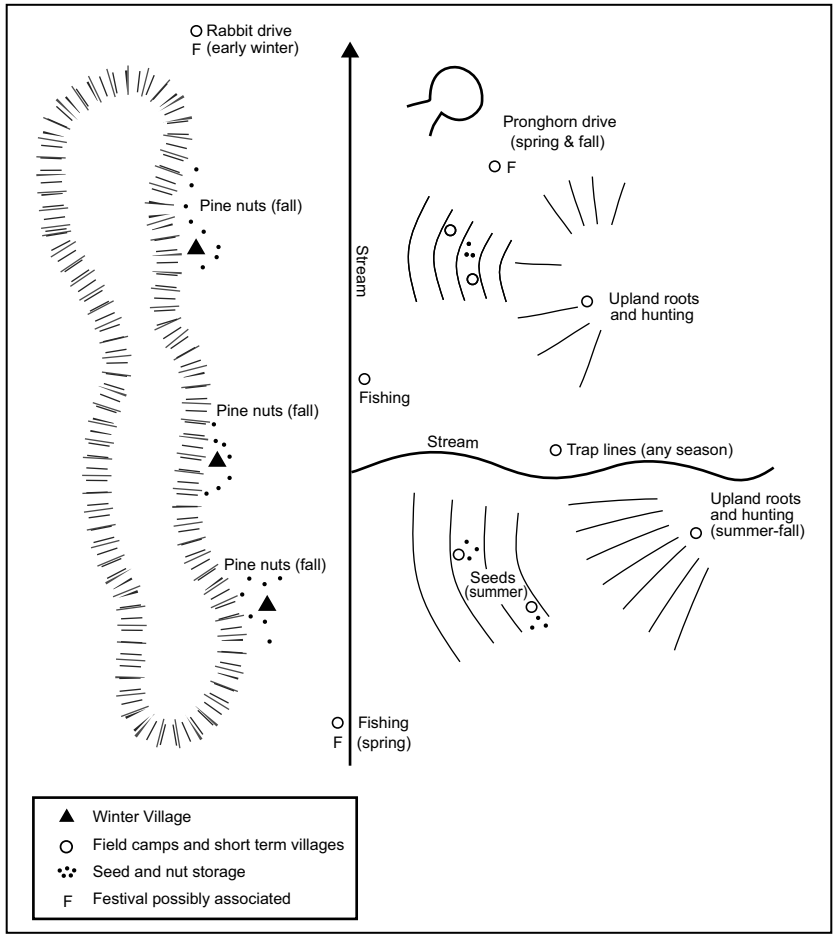
Many writers observe that a simple tool kit is appropriate to a mobile society; but much of the technology found in foraging societies was actually cached at key locations, creating a "built environment." The lifestyle was a traveling one, but like the high mobility we often observe in modern America, the mobility of ancient foragers was not aimless. In fact, the degree of mobility found in different places over the millennia varied greatly. The tempo, or the elapsed time between each move, also varied. During most periods, travel in the mountains and the deserts of the ancient American West is best described as intermittent. Some stops lasted weeks and months. Others lasted only a few days. It all depended on the circumstances.

Mobility is an aspect of settlement patterns—where people lived, how long, and with how many other people. Settlement patterns may have been altered by the introduction of the horse more than by any other cultural influence. Before horses were used, all transportation, whether it was the movement of people or goods, had to be done on foot—and horses changed all that. The settlement pattern among prehorse foragers of the Basin-Plateau can be generalized into two forms, each with its own themes and variations: the desert-mountain settlement pattern and the wetland settlement pattern.[8]

The desert-mountain pattern is the classic description of foragers of the Desert West: small groups of a single family, or extended families and perhaps some non-kin, moving among ecosystems ranging from valley bottoms, to foothills, and on up into the alpine zones of the highest mountains. A central feature of this pattern is that for much of the year people "mapped on" to their environment. The term "mapping on" signifies moving people to the resources rather than moving resources to the people, which is so familiar to modern people. Mapping on distinguished the desert-mountain pattern.

FIGURE 1.2

Schematic depiction of the Desert-Mountain Settlement Pattern. In this pattern, people tend to "map on" to resources and caches of food. This pattern did not have permanent villages, but it was not highly mobile either. Stays could be weeks at a time at a spring fish drive or a summer root-collecting camp, or for a special event such as a pronghorn drive or rabbit drive. Group size at special events could be large (100+ people) if the food take was large enough to support them. Smaller camps were established to collect seeds and upland roots, to run trap lines, and to hunt large game. Stays in winter villages could be several months, and they were placed near stored food, especially pine nuts. When the supply was gone, another winter village was used. People moved through the landscape in stops and starts, adjusting the group size and composition through the year. But each year was different, and there was no set pattern, nor was the cycle limited to only one valley or place, because kinship networks were far flung, enabling individuals to cycle across the landscape over the course of their lives.



However, these people were not ever-wandering nomads. In fact, of all the foragers in the world, the peoples of the Basin-Plateau were in the middle of the variation, and are best labeled semisettled foragers.[9] Further, movement was highly structured, and the people knew the camps and caches they could rely on. They knew where to find stone for tools, salt, plants for fiber, and other necessary nonfood resources at a more intimate level than many Americans know their own communities. Knowledge of the environment and information gleaned from other people enabled foragers to predict where food resources would be. Indeed, information about the condition of the environment and where the best food could be found may have been the most traded commodity when people got together. The mobility of ancient people was as deliberate as the routines of our modern lives.

Foragers of the desert-mountain pattern moved intermittently in stops and starts in response to a patchy distribution of food and nonfood resources. Food was "patchy," not only across space with different places offering different foods but also through time, with most foods at their peak only for a brief period. These circumstances determined the number of people who could live together and the length of their stay.

Some camps might consist of a family or two and last a few days or a few weeks. Others may be special task groups of men, or women with older children, while the older women and young children remained at a base camp. Larger groups of dozens, and occasionally over a hundred people, might have created a village for an event such as a fish drive, a pine nut harvest, a rabbit drive, or a pronghorn drive. These gatherings became significant social events attended by members of several extended families in a band, as well as people from other bands and places—even surprisingly far-flung places. Such events might last for a month. Winter camps range in size from a few families to over a hundred people. Winter camps required a wood supply, which was a significant determinant of camp location in a landscape of sparse timber and frigid winters.[10] People might move among several camps over the course of winter, each occupied a few weeks to a couple of months.

Movement in the desert-mountain settlement pattern was also determined by the need to store food to prepare for winter. Transportation costs were high, so people tended to store food close to where it was gathered. Dried meats and prepared foods may have been exceptions, because they were light and easily moved.[11] Storage

may be strategically placed to be near several kinds of foods, or near where people intended to camp for the winter.[12] In contrast to the summer settlement pattern, the winter pattern included a logistic component that relied on the extra cost of moving resources to a central location to be near the people and their wood supply.

The many variations and fluidity of this settlement pattern led anthropologists to use the terms "camp groups" or "kin clique," instead of more fixed terms such as family, lineage, band, and tribe, to refer to the composition of the group who occupied a place at any given time.[13]

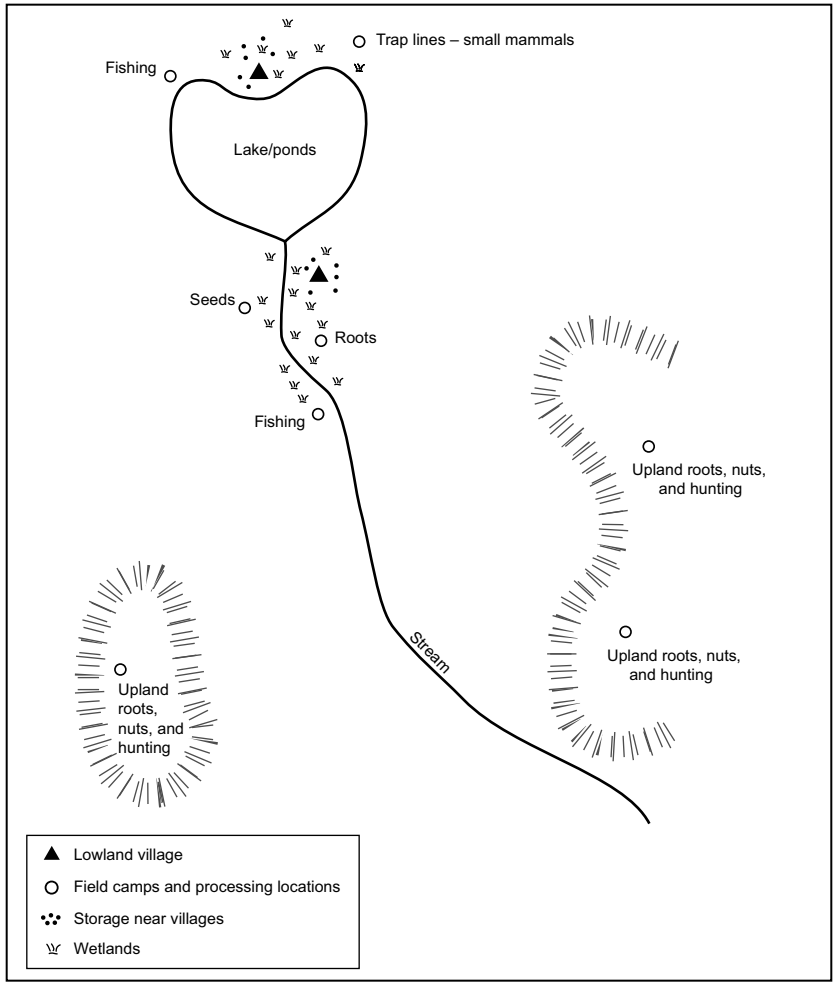
The wetland settlement system contrasts with the desert-mountain pattern in significant ways. It characterizes areas where concentrations of food and other resources caused more settling and greater reliance on a logistic system that transported food and materials to the people. The wetlands along the base of the Wasatch Front in Utah are a prime example, but many others exist where springs once flowed at the surface to create wetlands, or where mountain streams flowed year round and spread out into ponds and sloughs once they reached the broad valleys of the region.[14] Base camps and villages were typical of the wetland pattern. They were placed in different areas according to the seasons, and stored food was important. The greater concentration of habitats required less movement to exploit a variety of resources, a necessity when the logistic system is borne on people's backs instead of trucks and trains. Too, the built environment, consisting of camps, caches, and installations such as fish traps, was more concentrated in the wetland pattern, as was the human population.

Nevertheless, camps and villages were not permanent in the wetland pattern. Group size and the place of settlement still varied with the seasons and with the need to move around wetlands to exploit different resources. Camps and villages also had to be moved every now and then as local areas became depleted by concentrated human use.

People still needed to travel outside the wetlands for additional resources, such as particular toolstones, special woods, fiber, and medicinal plants that do not grow in the lowlands. Large game could be had at the wetland-valley margins; however, trips to the higher country were required to fully exploit these resources. Thus, the high country and more remote areas around the patches of concentrated resources in the Basin-Plateau wetlands remained linked by a logistic system.

FIGURE 1.3

Schematic depiction of the Wetland Settlement Pattern. In this pattern, the resources are moved to the people, using a logistic system. Even this pattern is not necessarily sedentary with permanent villages. Several villages might be used in any one year and over blocks of years. Lowland villages, however, formed the nexus of a logistic system. Task groups went out for days or weeks at a time, temporarily decreasing the village size. The groups returned with processed resources when the task locations were nearby. The logistic approach works because Great Basin wetlands offer concentrations of diverse resources. But longer trips were needed, too, and, some groups moved to the high mountains and upland lakes for the summer. The Desert-Mountain and Wetland patterns are not mutually exclusive, and people could live in both during their lives. Nor do they necessarily match tribal and linguistic boundaries. They do, however, mark distinctions in the conception of place.



The wetland settlement pattern contrasts with the desert-mountain pattern in population density, degree of residential stability, group size, and in the role of the logistic system. Variations on these two settlement themes are present during much of the region's ancient past.

SUBSISTENCE

Subsistence is part and parcel of technology and settlement, and classic images of ancient Native American diets range from noble hunters feasting on venison to starving savages nibbling on insects and leaves. Like mobility and settlement, subsistence also took different forms depending on the place and especially the period in prehistory.

The range of foods available to ancient foragers was staggering, with at least 150 vegetable foods and dozens of meat items available.[15] The variety of foods eaten through the year easily exceeded what modern shoppers see on any given day in their grocer's vegetable and meat sections. The availability of wild foods was, however, strictly determined by the seasons. This presented the people with an annual cycle and structured their food ways. Decisions had to be made whether to take or ignore particular foods. These decisions were neither random nor capricious and cannot be explained by appeals to personal or cultural preference, which beg the question of what caused the "preference" in the first place. Furthermore, there are broad patterns of subsistence choices across the region, and across cultures, and there are food trends that span millennia, transcending the lives of individuals.

One way to consider patterns in subsistence is to contrast broad with narrow diets. This is an important distinction that helps us describe the composition of diets, not only with lists of foods but also with attention to the roles different foods played in diets and economic systems. Distinguishing between broad and narrow diets helps us to understand why some foods were taken and others ignored, why some foods were keystones in the economy, and why cultural conventions, such as food taboos and food folklore, are built around these decisions. The large-scale "decisions" that led to subsistence systems revolve around the relative merits of alternative foods, including the cost of their acquisition, their nutritional

benefits, transportability, and storability. These things mattered just as they do with modern, large-scale patterns of food use.[16]

During most of prehistory the diet of the Basin-Plateau region was astonishingly broad, and this pattern persisted in historical times. The classic ethnographies done by anthropologists in the early 20th century show an economy anchored by gathered plant foods. Meat was always sought but constituted a minority of the diet.[17] Indeed, while conducting fieldwork in the Great Basin in 1935, the anthropologist Julian Steward wrote to his professor, Alfred Kroeber: "This comes near to being a woman's economy."[18]

The annual cycle began in the spring, when the first shoots and greens could be gathered and small mammals emerged from their burrows. Migrating waterfowl were taken individually, and their eggs were sought. In scattered places, plant growth around hot springs enabled the gathering season to begin a few weeks early to ease people out of winter.

A major attraction in the late spring was spawning fish, driven into weirs made of brush and sticks, where they were scooped up with nets and by hand. Several species of suckers were harvested in huge numbers as they swarmed upstream, and eyewitness accounts describe these spectacles occurring on the tributaries of Great Salt Lake and Utah Lake.[19]

In the desert foothills and flats, some types of roots fleshed out early and large stands such as bitterroot produced their edible roots every year, sometimes for centuries. These stable sources attracted people each year in significant social gatherings. Marilyn Couture described Northern Paiute "root camps" in southeastern Oregon that attracted different bands and even language groups to a single location. These people often communicated by "sign language"; the root camp phenomenon is a good example of people being tethered, even if only temporarily, to predictable resources and the fluid social networks that accompanied this pattern of movement.[20] The biological persistence of root stands over lifetimes, and even centuries, fostered traditions, and, as we will see, when we examine social organization, provided a mechanism for both territorial identification and for networks across territories.

Spring presented an opportunity to drive pronghorn into enclosures as they migrated from the low flats toward the foothills. Pronghorn had to form large enough groups to make a group hunt feasible, and traps were positioned differently for the spring hunt

versus the hunt during the fall migration. The location of drives had to be moved widely across the landscape among years. Thus, pronghorn hunting required large foraging ranges and often brought together people from different places, families and bands. Pronghorn drives are known along the Deep Creek Mountains on the Utah-Nevada border, and there are driving fences in Park Valley, northwestern Utah. Many others are known from northeastern Nevada all the way to eastern California.[21]

Spring signaled the end of winter, but in many ways was a difficult time of the year. Most of the stored food from winter was gone. It was too early for many foods, and the starchy filler foods, such as roots, had yet to flesh out. The high protein and fatty grass and shrub seeds had yet to come on. Large animals were scrawny and moving upslope into the high country. Spring started off sparse but became richer and richer as it unfolded.

Summer brought the seeds. Wild seeds provided the most storable food available, and they contained more fat and protein than did modern domesticated seeds such as wheat and rice. In the desert habitats, people gathered seeds in succession as they ripened, storing them close to the point of gathering, but in strategic locations to be available for winter.

Small and medium mammals put on weight and were constantly hunted, trapped, skewered in their holes, or flushed and clubbed. The archaeology of the Basin-Plateau region is clear that cottontail rabbits and especially jackrabbits were the most consumed meat through virtually all of prehistory.[22]

Periodic superabundance occurred when grasshoppers and crickets emerged. These were taken in a variety of ways, such as driving them into a hole full of brush and igniting it. An intriguing image comes from the Great Salt Lake where grasshoppers were sometimes blown ashore, leaving windrows of salted, dried grasshoppers many kilometers long.[23]

In August and September, the larvae of brine fly could form windrows that ringed the shorelines of Mono Lake in eastern California, Great Salt Lake, and many others in between. One early observer described the masses of larvae as "about two feet high by three or four in thickness, (it) extends like a vast rim around the shore of the lake." And an observation about brine-fly larvae by none other than Mark Twain: "If you dip up a gallon of water, you will get about 15,000 of these."[24] Word of such bounty could travel quickly,