## THE FIRST SOUTH DAKOTANS

Three and a half to five million years ago the earth's atmosphere began to cool. The reasons for this cooling are still unclear, but this climatic change marked the beginning of the Pleistocene geological epoch or the so called "Ice Age" during which vast ice sheets formed in the north and advanced to cover northern Europe and northern North America. There were some slightly warmer periods of time, or interglacial periods, when the glaciers melted, but they formed once more as the atmosphere cooled. Most scientists feel that the Ice Age ended about 10,000 years ago, but some claim that the Pleistocene is still continuing, with today's climate simply representing another interglacial period.

One of the effects of the glacial advances was the lowering of sea levels because so much of the earth's water supply was frozen in the great ice sheets. As the seas receded, new land surfaces were exposed, and sometimes areas that were normally separated by bodies of water were connected by land bridges. North America and Asia became one land mass in this manner when the present Bering Strait between Siberia and Alaska was replaced by a piece of land commonly called Beringia which may have been as much as a thousand miles across. Beringia was probably a gently rolling plain containing numerous lakes, ponds and streams and covered with lush grass which supported large herds of game animals like mammoth and bison.

Nomadic hunters from Asia, travelling in small bands, evidently followed the game herds across the Beringia land bridge and entered the New World during the last part of the last glacial advance of the Pleistocene. These movements were not large-scale, planned migrations, but were simply slow, gradual wanderings of the nomadic bands in pursuit of game. Indeed, the first inhabitants of America probably did not even realize that they had entered a new continent. Once in the New World, men and animals, over generations, moved into the Yukon Valley in Alaska, over to the MacKenzie River and then down an intermittently ice-free corridor east of the Rocky Mountains into what is the present-day United States. The Great Plains were probably cooler and more moist than they are today, and provided good grazing for the herds of animals. Attracted to these choice hunting grounds, the early hunters moved onto the Plains, and then eventually into the rest of North and South America, reaching the tip of South America at least 8000 years ago.

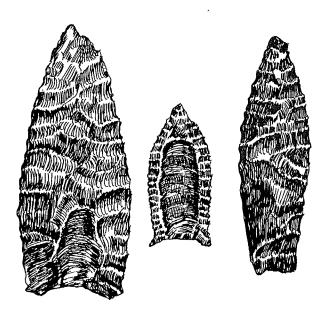
In order to have successfully travelled into the New World during the Ice Age, these first Americans must have possessed a knowledge of fire, must have had at least simple clothing and shelter, and most importantly, must have made and used spears and butchering tools in order to ob-



Possible route taken by the first migrants to America.

tain meat. Crude scrapers, flakes, and choppers have been found at scattered sites in the Americas, and some charcoal samples associated with them have been dated to as early as 38,000 years ago. However, these finds and the dates are controversial and not universally accepted. Little is actually known about the very first arrivals in America.

The first archaeologically well-defined early American or Paleoindian period is the Llano tradition. The Llano peoples were mammoth hunters who lived about 12,000 years ago. They used the earliest known type of American projectile point, the Clovis point, which was a large, leafshaped spearhead with a concave base and a shallow groove or "flute" on each side. At the Clovis site in New Mexico these points were first found with the bones of mammoth, camel, horse and bison. This may have been a camp site and/or a kill site. The Clovis hunting technique probably involved tracking, wounding, harassing and then finally killing individual large game animals which had been driven into lakes or swamps where escape was impossible. There are no known Clovis sites in South Dakota, but some may exist in areas like the Badlands where deeply buried sites may eventually be exposed by erosion. Isolated Clovis points have been found in South Dakota and in other Plains states, however, so it is hoped that eventually entire Clovis hunting sites or living sites will be discovered and excavated in South Dakota.



Clovis Point

Folsom Point

Angostura Point



Hunters of the Llano tradition probably drove mammoths into areas like swamps, where escape was impossible, to kill them.

As the mammoth became scarce, giant bison were hunted, and the Folsom tradition began. The Folsom points used were smaller and more delicately made than Clovis points; they also had a concave base, but with longer flutes on both sides. Hunting patterns probably changed somewhat for there is evidence at Folsom sites that herds of game were surrounded and then killed in large numbers

rather than being killed individually as in Clovis times. Again, the Folsom hunters are not well represented by archaeological remains in South Dakota. A few scattered Folsom points occur, but as in the case of the Clovis hunters, no camp or kill sites have been found.

About 8,000 B.C., the Plano tradition began. This period was characterized by the use of a variety of projectile point types at different sites across the Plains. Some of the variations include: Plainview, Alberta, Midland, Scottsbluff, Eden, and Agate Basin points. Basically, the Plano spearheads were long, leaf-shaped and unfluted. The large game of the preceding periods was disappearing by Plano times, and small bison, more like the bison living today, were the main game animal. Plano hunters began to kill game by driving herds of bison over cliffs or drop-offs, and this practice continued into historical times on the Plains. Human populations probably increased during the Plano period; at least the number of Plano sites increased markedly over the number of Clovis or Folsom sites known, and the Plano tradition is more evident in South Dakota.

One of the oldest archaeological sites known in South Dakota was discovered thirteen miles south of Hot Springs when it was exposed naturally by erosion along a small tributary to Horsehead Creek. The Ray Long Site, named in honor of the area landowner, and also often called the Angostura Site, was first excavated in 1948 by archaeologists of the Smithsonian Institution who wanted to salvage information from the site before it was destroyed by the formation of the present-day Angostura Resevoir. This site was originally the living surface for Plano hunters. Samples of the charcoal found were radioactively dated to about 7000 B.C. In addition to the small circular hearths which yielded the charcoal, stone artifacts like knives, scrapers, drills, grinding stones, and a crude Plainview point were also found. Most significantly, however, a distinctive type of Plano projectile point, the Angostura point, was first found here. Angostura points are two and a half to a little over three inches in length, slender, leaf-shaped and taper to a narrow base, which may be either straight or concave. The points are finely flaked in a diagonal pattern, and the examples found at the Long Site were made of Black Hills quartzite. Although the tools found indicate hunting activities, there were surprisingly few bones found at the site.

The Boulder Canyon Site was excavated in the Black Hills during the summer of 1977. Hearths, Angostura points, and other Plano artifacts had been found there in preliminary investigations in 1961, but the later, full excavation failed to find any more traces of a Plano occupation. What was possibly the base of an Angostura point was recovered, however.

Less than a half dozen of these early Plano sites are known from the Missouri River Valley. The best known is the Travis 2 site in Walworth County. That site has recently been eroding into the river and emergency excavations there have shown that Travis 2 had been occupied off and on for a period of time from 10,000 to 2,000 years ago. Nearly 70% of the points are Plano points, many of them resembling a variety of the Agate Basin point found in many areas of the Plains. Other varieties of tools like scrapers, perforators, and cutting tools indicate that the site was a place where

Aborigines are often compared to the Paleoindians of America, for example, because all of these share a nomadic, hunting existence, and information gathered about the Bushmen's or Aborigines' social organization or religion may also be applicable to the Paleoindians. In general, reconstruction of Paleoindian lifeways involved making many assumptions and "educated guesses." Such guesswork and archaeological evidence have been combined to yield a possible picture of the way of life of the first Americans.

Although big game seems to have been the main source of food for the Paleoindians, it is likely that small game, berries, and vegetable food were also used. The presence of grinding stones at the Ray Long Site suggests that vegetable matter was ground and used there. However, being dependent mainly on the wandering herds of large game, the early inhabitants of America, including South Dakota, were also dian sites are shallow and contain only meager remains because they were only occupied for a short time by people constantly on the move. No evidence of shelters has been because they were only occupied for a short time by people constantly on the move. No evidence of shelters has been overhangs may have been used at times, but an open camp overhangs may have been used at times, but an open camp with comfort provided only by fires and fur robes was probably the most common kind of camp site.

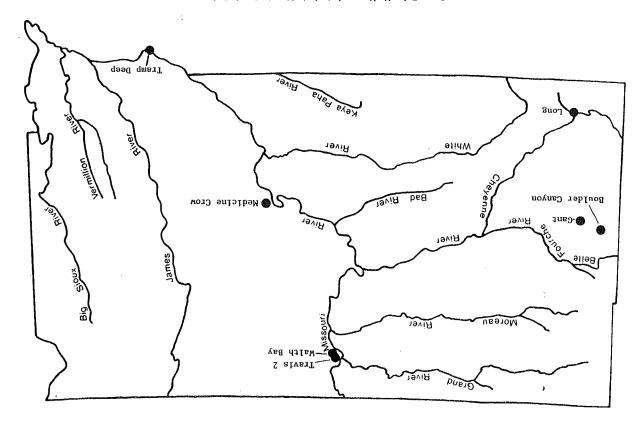
Nomadic hunting could not support large groups of people, so the basic unit of Paleoindian society, as with similar nomadic groups today, was the family band. Each band probably wandered within a roughly defined territory of its own. Bands may sometimes have united to form larger groups to hunt bison, catch waterfowl, or to carry out other

people lived, rather than just a temporary hunting or butchering site as many Paleoindian sites seem to be. Although Travis 2 may be the best known of the Missouri River Paleoindian sites, other sites like Walth Bay and Medicine Crow may also help archaeologists reconstruct a more complete picture of the early hunters' life.

Other evidences of the Plano hunting peoples in South Dakota consist of scattered projectile points. Angostura points are found scattered on the surface of the ground as far east as Clay County, and other Plano point types are also found. Further Plano finds in South Dakota include a Basin point in Shannon County, and an Alberta point in Shannon County, and an Alberta point in Turner County. There are many sites along the South Dakota shores of the Missouri River where bones, flint chips, and hearths (but no projectile points) are found at considerable depths. These may be remains of early hunting siderable depths. These may be remains of early hunting propales, but this scapt suidence is difficult, to interpret

peoples, but this scant evidence is difficult to interpret.

The life-style of the Llano, Folsom, and finally, Plano hunters is difficult to reconstruct because only a few sites from these early periods have been extensively excavated and because the early hunting peoples left comparatively of Paleoindian life are mainly based on ethnographic analogy, the archaeologist draws analogy. In ethnographic analogy, the archaeologist draws conclusions about a past people's culture, especially the nonconclusions about a past people's culture, especially the same sort of py examining present cultures that exist in the same sort of environment, or subsist in the same way as the past culture environment, or subsist in the same way as the past culture being considered. The African Bushmen and the Australian being considered. The African Bushmen and the Australian





The first South Dakotans probably wandered in small groups and made only temporary camps.

activities where more cooperation was needed. Paleoindian social organizaton seems to have become more complex from Llano, through Folsom, to Plano times. Small bands of Llano hunters killed a few game animals, but the larger kills of the Folsom hunters required larger groups of hunters and more social cooperation. Finally, in the Plano tradition, buffalo jumps led to the formation of even larger and more complex social groupings.

Actual organization, even of larger groups of people, was probably quite informal in Paleoindian times. "Leaders" were probably only men respected for their hunting success or wisdom who were occasionally consulted, but had no absolute power over the family bands which were each essentially independent. A simple religion may have revolved around the worship of nature and the natural spirits believed to inhabit all things. Possibly, Paleoindian society contained part-time religious practitioners or shamans who interpreted the spirit world for the rest of the people and who made predictions concerning hunting, the weather, and other aspects of nature. Other than the shamans there were probably no other "specialists" within Paleoindian society. Hunting tools and projectile points found are of good workmanship, but they were probably not produced by specialized craftsmen. Basically, all of Paleoindian culture, even religion, revolved around survival and the search for food. The nomadic subsistence methods required to obtain food from the big game herds did not favor the development of permanent settlements or formally organized social groups.

Several thousand years had now passed since man first entered the New World. Although little "progress" seemed to have occurred, man had survived major environmental changed by adapting by changing his means of subsistence and the rest of his culture. He was slowly becoming more

and more "at home" and using the environment to his advantage more and more efficiently as time went on. The culture of the Paleoindians was very close to the environment; every part of the culture was somehow useful for survival. The wandering hunters and gatherers who were the first South Dakotans left few evidences of their passing, but the lessons that can be learned from them are potentially important. By studying cultures that were "uncomplicated" and so much a part of the natural environment, it is easier to see cultures as they really are - as total systems designed to change or adapt. If people can learn to see other cultures in this way, perhaps it will be easier to objectively study one's own culture as well.

Even if no immediate benefits occur from reconstructing the cultures of the Paledoindian peoples, archaeologists have found a piece of South Dakota's past. Because of this, South Dakota now has a "depth." Present day South Dakotans can all feel a little something in common with those first South Dakotans who also inhabited this sometimes harsh and inhospitable land.

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