

Medicine Wheel; Archaeological Perspective

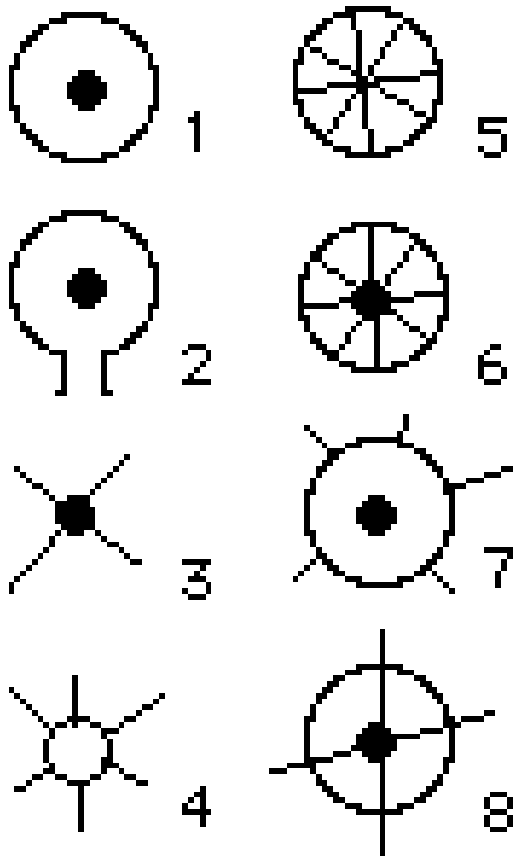
This article was adapted from the article, "Medicine Wheels: A Mystery in Stone", written by J. Rod Vickers that appeared in Alberta Past, Winter 1992-93.

Scattered across the plains of Alberta are tens of thousands of stone structures. Most of these are simple circles of cobble stones which once held down the edges of the famous tipi of the Plains Indians; these are known as "tipi rings." Others, however, were of a more esoteric nature. Extremely large stone circles - some greater than 12 metres across - may be the remains of special ceremonial dance structures. A few cobble arrangements form the outlines of human figures, most of them obviously male. Perhaps the most intriguing cobble constructions, however, are the ones known as medicine wheels.

The term "medicine wheel" was first applied to the Big Horn Medicine Wheel in Wyoming, the most southern one known. That site consists of a central cairn or rock pile surrounded by a circle of stone; lines of cobbles link the central cairn and the surrounding circle. The whole structure looks rather like a wagon wheel lain-out on the ground with the central cairn forming the hub, the radiating cobble lines the spokes, and the surrounding circle the rim. The "medicine" part of the name implies that it was of religious significance to Native peoples.

John Brumley, an archaeologist from Medicine Hat, has provided a very exacting definition of what constitutes a medicine wheel. He notes that a medicine wheel consists of at least two of the following three traits: (1) a central stone cairn, (2) one or more concentric stone circles, and/or (3) two or more stone lines radiating outward from a central point. Using this definition, there are a total of 46 medicine wheels in Alberta. This constitutes about 66% of all medicine wheels known. Alberta, it seems, is the core area for medicine wheels.

Type



Virtually each medicine wheel has a unique form. However, we can group them into eight categories or "Types" based on their general shape. The most common form consists of a central cairn surrounded by a stone circle; 18 of these Type 1 medicine wheels are known in Alberta. A variant, known as a Type 2 medicine wheel, contains a passageway leading out from the stone circle; four are known. Type 3 structures consist of a central cairn with radiating cobble lines or "spokes;" again, four are known. Type 4 medicine wheels consist of a stone circle from which spokes radiate outward. These are the second most common form and 14 have been recorded in Alberta. Type 5 structures contain a circle with spokes radiating inward, while the Type 6 is similar but has a central cairn; only one of each occurs in the province. Type 7 medicine wheels have a central cairn surrounded by a stone circle with spokes radiating outward; three are known. Type 8 structures are similar, but the spokes radiate from the central cairn and cross the circle.

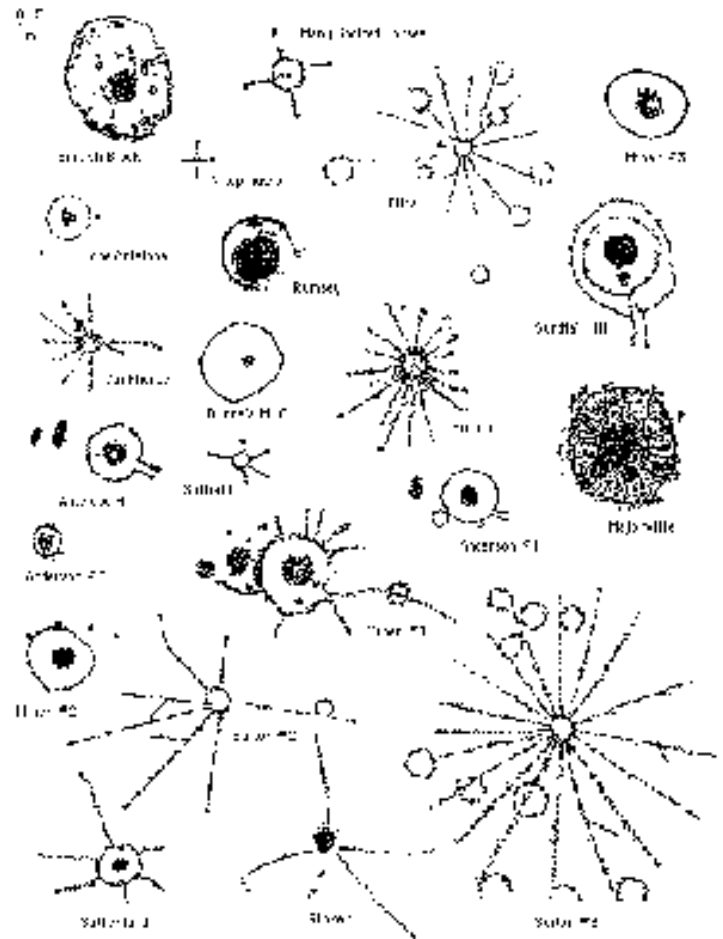
Three of the former and one of the latter have been discovered in the province.

The type groupings are, of course, only a convenience for analysis. As was noted earlier, each medicine wheel is unique. Here is a sample of maps of Alberta medicine wheels reduced to more-or-less a common scale. The reader may find some amusement trying to decide which type each is.

At least one of the categories, Type 4, appears to be a correct classification. This type consists of a central circle from which spokes radiate outward. The central circle appears to be a common domestic tipi ring. The radiating spokes appear to have no consistent pattern in terms of orientation or length. Amazingly, some Type 4 medicine wheels have been built in this century by the Blood Indians of southern Alberta; one, Many Spotted Horses Medicine Wheel, is illustrated here. These modern Blood Indian structures were built to commemorate the death place of, or the last tipi occupied by, a famous warrior. The spokes are said to have no specific meaning other than to indicate that a famous warrior had died. Of course, the community is well aware of who deserves such a memorial. It appears almost certain that the prehistoric examples served the same purpose.

The purpose of all of the other types of medicine wheel are not known by archaeologists. One, Majorville Medicine Wheel, was partly excavated in 1971. This wheel contains an enormous central cairn 9 metres in diameter, surrounded by a stone circle 27 metre across; about 28 spokes link the circle and central cairn. The excavation yielded artifacts which archaeologists can "date" by style; the style of spear points and arrowheads changed in a regular manner over time and archaeologists have figured out the sequence of these changes. It seems that the central cairn at the Majorville wheel was initially constructed some 4,500 years ago! Radiocarbon dating of bone from the bottom of the cairn confirmed this date. It seems that successive groups of people added new layers of rock, and some of their arrowheads, from that time until the coming of Europeans to Alberta. Curiously, the site does not seem to have been used between about 3,000 and 2,000 years ago; the distinctive barbed spear points of that time are not present in the cairn. Archaeologists do not know when the spokes and surrounding circle were constructed, or even if they were constructed at the same time.

The long period of use and construction of the central cairn at the Majorville Medicine Wheel suggests that such sites may have served different functions over the years. That is, the rituals and ceremonies conducted at the site may have changed over time. It is not unusual for human beings to regard particular places as sacred, even when religions change. For example, many modern Catholic churches in Mexico occupy locales which formerly contained Aztec Indian temples. Thus, while we can reasonably surmise that the Majorville wheel served as a ceremonial centre for several thousand years, it is unlikely that archaeologists will ever know the



details of the ceremonies or the religious philosophy which motivated the construction of the site. One suspects that hunting magic or buffalo fertility might have played a part in the rituals, but the deeper meaning of the site is lost in time.

Perhaps one of the most interesting theories to be advanced is that there are significant stellar alignments present at the medicine wheels. This theory was proposed by astronomer John Eddy. He suggested that a line drawn between the central cairn and an outlying cairn at the Bighorn Medicine Wheel pointed to within 1/3 of a degree of the rising point of the sun at the summer solstice. Other alignments, both to the summer solstice sunrise and to certain bright stars such as Aldebaran, Rigel or Sirius, have been proposed for a number of Alberta medicine wheels. The wheels would thus have functioned as a calendar to mark the longest day of the year. Presumably, such a calendar would be used for the timing of important rituals.

It is very difficult to confirm the astronomical hypothesis, and it is no longer as popular as it was a decade ago. A number of astronomers such as Steven Haak in Nebraska and David Vogt in Vancouver have critically evaluated the idea and have expressed severe reservations about the hypothesis. They note that simple familiarity with the night sky would likely produce an adequate estimate for timing ceremonies. Further, if great accuracy had been desired, it could have been attained better by using narrow poles as foresight and backsight than by using wider rock cairns.

Alberta's medicine wheels thus remain an enigma. Research has suggested a number of functions for the wheels, and has indicated their use over a very long period of time. Medicine wheels seem to be primarily an Alberta phenomenon; we have many more here than do the adjacent provinces and states. Investigation and preservation of these unique features has been an on-going concern of the Archaeological Survey, Royal Alberta Museum, and the Planning and Resource Management Branch, Historic Sites and Archives Service.