The Neutral and Senlac Hills

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Introduction

The Neutral and Senlac Hills are a visible topographical feature located in west-central Saskatchewan approximately 30 kilometres east from the town of Macklin and approximately 50 kilometres west from the town of Unity. The area is dominated by farming; however, oil and gas development has increased over the past number of years.

Geology

The Neutral and Senlac Hills are situated at the northern limit of the Moist Mixed Grassland Ecoregion, which is found across west-central Saskatchewan and extending south through Moose Jaw and Regina towards Estevan. This ecoregion is characterized by rolling hills and is used for cattle and crop production. Ecoregions can be further subdivided into distinct landscape areas of which the Neutral and Senlac Hills falls into one known as the “Senlac Hills Upland.”

The area surrounding the Neutral and Senlac Hills is underlain by the Bearpaw formation, which formed during the Late Cretaceous period, approximately 70 to 74.5 million years ago. The Bearpaw formation is mainly a marine sandstone and shale deposit; however, it also includes beds of iron nodules, bentonite and chert pebbles. This was the result of a prehistoric inland sea that covered part of the province. This bedrock source is soft and as such is easily eroded by glacial action. Deglaciation of the Western Canadian provinces began to occur around 18,000 years ago. By 12,000 years ago, the area around this region appears to be at the edge between the receding glacier and newly exposed land and water. The area was completely deglaciated around 11,500 years before present. The retreat of glacial ice caused the formation of the Senlac Hills Upland area. As the glacier retreated to the northeast, it removed materials (rocks and dirt) from the soft Bearpaw formation that makes up the bedrock geology of the area to the immediate south. As glacial ice continued to recede, it deposited the materials further to the north in the form of hilly uplands, known as the Neutral and Senlac Hills.

The Early, Middles and Late Precontact Periods

Much of the archaeology known in this region is due to oil and gas exploration. No large-scale research projects have been done here. What information does exist is found in Historical Resources Impact Assessment (HRIA) reports completed due to oil and gas developments, such as pipe lines. The culture history of the area likely extends back to the Early Precontact period (12,000 - 7500 years B.P.) in the form of isolated surface finds of Paleo-Indian projectile points such as Clovis, Eden as well as Cody knives found in areas to the north, west and east. Isolated finds from the Middle Precontact period (7500 to 2000 years B.P.) and the Late Precontact period (ca. 2000 to 200 years B.P.) also exist in this region. Each of these periods can be further subdivided into specific cultural complexes and phases. Many of the artefacts recorded in reports are made of a type of rock known as quartzite. These artefacts are items such as flakes, cores, and shatter.
Precontact archaeological sites in this area include the more commonly found site types found on the Northern Plains such as kill sites, camp sites including tipi rings, and stone cairns. However, also found within this region is a site of a more significant and uncharacteristic nature such as a possible human effigy. Not a lot of information is known about this effigy (rock formation) and it was only recorded as being found as of 1994. It is in the shape of a human and is approximately 5 metres in length by 2.5 metres in width. The archaeologists who recorded the site noted that it is made up of approximately 34 stone cobbles. A number of effigies as well as other boulder monuments such as medicine wheels and stone cairns can be found throughout the province of Saskatchewan. Effigies can either be found as anthropomorphic (human) or animal figures. In Saskatchewan, animal effigies tend to be more common than anthropomorphic patterns. Ian Brace also noted that sex is commonly depicted in anthropomorphic effigies with males being predominant.

Bison rubbing stones can also be found throughout the area. These large rocks are glacial remnants known as erratics. During glacial retreat these stones would have been deposited by the receding glacier throughout the province. Erratics can vary in size from small cobbles to house-sized boulders. The most famous of erratics is perhaps Big Rock near Okotoks, Alberta, a remnant of the Foothills Erratics Train deposited by the Cordilleran ice sheet approximately 12,000 to 18,000 years ago. The Senlac Hills erratic likely dates to the last Wisconsinan deglaciation, approximately 12,000 years ago and was carried by the Laurentide ice sheet from the Hudson Bay area.

Historically, many large erratics featured prominently in relation to First Nations history. In some cases, erratics can be seen as landmark features or even have spiritual associations. Many erratics are known to be covered in petroglyphs (rock engravings) and pictographs (rock paintings). However, the Neutral and Senlac Hills erratic was used for another purpose. Over the years, wild bison herds would use the rock to scratch themselves in order to dislodge hair and insects. Centuries of bison have worn a deep groove in the earth encircling the rock. In some places, parts of the erratic have been worn smooth from constant rubbing.

The Historic Period

Historical archaeological sites in the Neutral and Senlac Hills area include homesteads, cart tracks, and a surveying pit monument. Of particular interest is the presence of another brass survey monument, which reads “Dominion [King’s Crown] Land and Surveys. Imprisonment for Removal 7 Years” and is dated to 1928. In terms of Canadian Fur Trade history, the area was not well known even in to the early 1800s. It is probable that the first complete map of the area was by John Palliser during his 1857-1859 expeditions through western Canada. As well, historic homesteads dating to the late 19th and 20th centuries are recorded in the area. Typically, all that remains of these sites are large rock piles from field clearing, stone houses and barn foundations, as well as rusted metal parts.

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