

McAbee Fossil Beds Heritage Site Statement of Significance **Condensed and edited for BC and Canadian Heritage Registers**

The following statement of significance has been developed in consultation with stakeholders and identifies heritage values of the site to be protected through careful review of the proposed uses at the site and authorizing certain activities through permits. The site conservation management plan is under development and will provide guidance to decision-makers when addressing issues and considering uses at the site.

Palaeontological Values

Located at the shore and bed of an ancient lake, the McAbee Fossil Beds Heritage Site is one of the most significant places in British Columbia for the scientific study of Eocene fossils by both amateurs and academics. It has great scientific and educational value for its rich taxonomic diversity, fossil abundance, site accessibility, excellent preservation, and number of recognizable fossils. Ideal conditions of geology, geography, climate and biology make this one of the most important sites in British Columbia for the study of the Eocene epoch.

The site has great palaeontological value because it contains the greatest diversity and clearest record of insects such as ants, bees, and wasps. It is one of the most diverse fossil sites in the province for insect populations, and delicate flower and plant parts. It is valued as a significant and irreplaceable record of the biological history of this part of the earth dating to about 50 million years ago.

The McAbee Fossil Beds site is also valued as an educational resource for teaching people of all ages about the principles and practices of palaeontology. The fossil collections from this site are an important resource for scientific study; many new species have been discovered in the past decade.

Geological Values

The McAbee site is one of the top scientific and educational fossil deposits in British Columbia largely because of the fissility (ability to split along planes) and well-preserved condition of the fossil-bearing rock. The palaeo-topography of the site is also ideal, permitting good accessibility for study of the fossils *in-situ*. The geology of the McAbee Fossil Beds site is important for the study of ancient environments, geological change, and development of the area. The stratigraphic exposure of the rock is rare – the site also exposes a huge variety of volcanic landforms and geology such as castellated lava formations (hoodoos) – and provides insight into British Columbia's place in the scale of 'deep time'. As such, this site is an excellent resource for teaching about landscape and landforms. The site also has geological value for the presence here of petrified wood, common opal, and agate.

Archaeological Values

Although the full extent of the archaeology at the site is not known, there is evidence of First Nations habitation and use. The place is valued by local First Nations because it represents the connection of the people to the landscape and is important in oral history and sacred uses.

Cultural Values

As a cultural landscape, the McAbee Fossil Beds site is an irreplaceable resource for building awareness of the symbiosis between humans and their environment. It provides unparalleled opportunities to study natural history, earth sciences, ecology and the effects of climate change. Visiting and understanding the site can change the way in which people comprehend environmental issues and provide a unique opportunity to experience the concept of “deep time.” It is also symbolic of the importance of fossils to diverse groups of people and the passion that fossils can inspire. The surviving artifacts and infrastructure of industrial excavation speak to the changing uses and values of the McAbee site over time.

Social Values

Many groups feel a strong connection to this place, and share a desire to connect with and learn from nature and the landscape. It is highly valued for the opportunity it provides for “hands-on” learning. Each visitor has the potential to make a scientific “discovery” here, and through interaction with the landscape, to better understand the continuity of life and the place of humans in the chain of time. The site is also valued as an exceptionally beautiful and spiritual landscape with a diverse desert ecosystem. The rugged landscape, with its beautiful colours, spectacular views, and panoramas of the valley is cherished by locals and visitors alike.

Character-Defining Elements

- Location near Trans-Canada Highway, with high visibility and ease of access by road and hiking trail.
- Presence of a large number and diverse range of early Eocene fossils, including insects, birds, fish, delicate flowers and plant parts.
- Evidence of the former lake bed and former lake sediment exposures.
- Location of fossils in relation to the ancient lake bed structure, with fossil beds running horizontally and vertically.
- Unique geological formations including extremely ancient limestone located beside the fossil beds and volcanic rock located above and below them.
- Easily accessible paleo-topographic setting.
- Well-preserved condition of fossiliferous rock.
- Contact zone where McAbee exposure meets volcanic layer.
- Rock shelter with fossil logs in volcanic rock.
- Presence of semiprecious stones such as petrified wood, common opal and agate.
- Landform features such as incised valley, hoodoos and gullies.
- Presence of archaeological remains within the site boundaries.
- Diverse desert and cliff ecosystems, including prickly pear, sagebrush, black widow spider, rattlesnake and rattlesnake hibernaculum, deer, bear, coyote, and big horn sheep.
- Views across the valley, and views of site and surrounding features such as landforms, hoodoos, working railroad and Perry ranch working feedlot.