



Memorandum

Date 17 March 1992

To Rod McFadyen
Regional Parks Manager
Dauphin

From Helios Hernandez
Parks Branch
Winnipeg

Telephone

Subject DUCK MOUNTAIN MAP LEGEND

Here is a copy of the draft legend for the draft Duck Mountain study area map. Bill Watkins and I have quickly reviewed it and revised it somewhat. I pass it on now for your use. Please keep in mind that there may be some more refinement to the legend rating and text, based both on our further review and on additional input you may obtain from the IRMT, particularly for items listed as "B*".

Once you have reviewed this, please call me if you have any questions.

cc R. Schroeder

DRAFT

Special Areas Descriptive Text

1. River Corridors

The Shell and the Roaring Rivers and their tributaries offer two distinctively different types of drainage systems.

The valley occupied by the Shell River, Brush Creek and West Shell River is an ancient glacial spillway. This well-defined valley with a small floodplain, is occupied by two misfit streams. Brush Creek runs north from Sedgewick Lake, and the West Shell runs south into the Shell River. The Shell River itself is a mature river with meanders, oxbows and cutoffs. The valley provides excellent habitat for moose and for willow bog species.

The Roaring River and Teepee Creek are in their youthful stage of development. These streams have high gradients, actively eroding hillside banks, and gravel streambeds.

2. Mature/Old Growth Forest

This area was selectively cut in the early part of the twentieth century. Today with 70 to 90 years of growth, some trees have attained 4 ft in diameter and up to 125 ft in height. These forests are open to walk through, but some have closed crowns. Open glades occur where one or two of the older trees have blown down. These forests are excellent overwintering deer habitat. Some authorities consider them to be a distinctive old growth ecosystem. These forests today constitute less than 2 % of the cover of the Duck Mountains.

3. Marl Bog Complex

Marl bogs appear to be spring fed and represent a type of black spruce bog. These features are an unusual phenomenon. Underlying soils appear to be unfertile carbonate clays. As a result, there is little to no submergent or emergent growth in the ponds. About four such marl bog complexes exist in the Duck Mountains, but the more northern of the two in this map is by far the best example. Associated plants are round-leaved orchid, arctic cotton, sphagnum moss, tamarack and black spruce. Given the mineral nature of these bogs, the associated plants may demonstrate unique ecological adaptations worthy of detailed investigation.

4. Cow Elk Overwintering Sites

Cows and bull elk overwinter in different areas. A heterogeneous mix of small meadows, shrub upland and mature forest is necessary to allow elk to modify their feeding behaviour as winter progresses. While snow is relatively shallow, elk prefer to crater through the snow and graze on dried grasses and forbs. As the snow becomes too deep to crater, elk change their strategy and

become browsers dependent on shrub upland and mature forest for their nutrition. Mature forest also provides cover. In the spring, south-facing slopes are the first to melt and expose grasses, forbs and leaf litter. These areas may be highly significant to elk who are at their lowest nutritional status by late winter.

5. Bull Elk Overwintering Sites

Cow elk and bull elk segregate over winter, but their habitat requirements are similar. Bull elk enter winter already nutritionally stressed from the rigours of the fall rut. Repeated disturbance on their wintering areas may make survival even more difficult, especially in a severe winter.

6. Travertine Site

This is an entirely unique feature in Manitoba. A travertine-laden (mineral-rich) groundwater spring apparently comes to the surface at this site. Beaver built a dam here to pond the spring flow. The travertine then precipitated on the beaver dam and, over time, replaced the organic matter, leaving behind a remnant petrified travertine beaver dam. The site is much larger than the original beaver dam.

7. Soldier Settlement

After the first world war, soldiers came home and were offered settlement lands. Since the best land was already settled, some of the land offered to them was in the forest. Two of these now-abandoned settlement sites exist in the Duck Mountains.

8. Salt Lick

At least three major salt licks occur in the area. These are all spring fed and attract moose, deer and particularly elk. The best wildlife viewing is in spring, the time the animals use the salt lick most to ingest calcium needed for antler growth.

Local residents say the salt licks were much larger in the past and have now grown in substantially.

A large sandstone concretion occurs at the most southern of these sites.

9. Wildlife Viewing

Sedgewick Lake and the valley areas offer fine habitat and the opportunity to view wildlife. Sedgewick Lake is an isolated lake surrounded by sedge meadows, with nearby upland meadows in the southeast corner. Riparian habitats in the valley areas provide ideal food and cover for a variety of wildlife species, most notably elk and moose.

10. Bull Elk Spring Feeding/Antler Drop Site

South facing slopes adjacent to bull elk overwintering areas attract the bulls in late winter and early spring when melting begins to expose grasses and forbs. This is the time of year when antlers drop. As a result dozens of antlers have been found on these sites. As with cow elk, these areas may be highly significant at a time of year when animals are at their lowest nutritional status.

11. Burial Ground

It is known by local people that a native person(s) was buried here.

12. Indian Artifacts

Native-made stone points been collected in this area. There are two riverside sites, and points have also been collected along an old trail. It has been suggested that the trail was used by native people before the settlers arrived.

13. Round-Leaved Orchid

Orchis rotundifolia is an orchid species indicative of rich moist forests. Found here in association with marl bogs, it indicates the potential for other species and may warrant further detailed botanical inventory.

14. Extinct Bison Skull

An ancient bison skull with much longer horns than modern bison was found on this site. This, plus the mastodon shoulder blade, that was discovered makes one consider that the area may become more significant for such finds.

15. Pinnacle Hills

These hills provide very well developed examples of proglacial knob and kettle formations.

16. Tee Lakes

This is a grouping of about 7 lakes. They are at or near the height of drainage. They form a small flatland and provide fine riparian habitat with good wildlife viewing potential.

17. Bison Skulls

A local resident reported finding several modern bison skulls at this site.

18. Meadows/Prairies

Outstanding small prairies occur throughout the river valleys in a region otherwise covered by forests or wetlands. These meadows contain a variety of prairie plants. Some of these sites were inventoried as part of the International Biological Program in 1968-1972. Apparently native people burned these, as did settlers. Aspen is now encroaching on some of these sites, particularly the more remote ones such as Jumper Plains.

19. The Shell Valley Hiking Trail

A developed trail and a trail head sign exist here. The sign discusses the local resources of the area. The trail leads to an attractive overview.

20. Low Density of Features or Unexplored

This area has not been well explored or inventoried.

* Private land not to be included.