



Denman Island Land-Forms

by John Millen

Denman Island has an interesting variety of land-forms created by its underlying rock formations, the glaciation of the last ice-age and, by no means least, beavers. Residuals from the ice-age which ended about 10,000 years ago include the Quadra sands of Komas Bluff, numerous erratic boulders scattered everywhere and pockets of blue clay. But this article is about beavers and their contributions to our land forms.

The Beaver Pond on Pickles Road is a good example of the results of beaver activity. The Pond has three outlets when the water level is as high as it is now. Each outlet is controlled by a beaver dam. Without those dams the Pickles Road crossing is dry – one could drive across without the bridge, as indeed was the case (in the 1970s?) before the bridge was built. Without those beaver dams the Fire Department would not be happy.

Whereas streams, left to themselves over geological time erode a pattern of v shaped valleys, the activities of beavers create marshy plains without distinct drainage patterns. The Swale farm and the adjacent flats of the Lake Farm is a good example of such a beaver-made plain. This large area is so flat that the Pickles family farmers, who drained it, excavated a rectangular grid of drainage ditches.

But the oddity that has puzzled me for some time is the drainage of Eagle Marsh, in the headwaters of the Railway Grade Marsh (RGM). The layout of this area is sketched below.

It is the drainage of the upper wetland, Eagle Marsh to the lower wetland Railway Grade Marsh (RGM) that is odd. Instead of draining down the continuation of the RGM marked in the sketch as 'Dry Valley', the stream draining Eagle Marsh makes an excursion via a small gully eroded into the terrain almost at the divide with the Dane's Creek watershed to the North. Then it cascades down the hillside into RGM. At this time of year the cascade can be seen and heard from the RGM trail. When the Eagle Marsh is at its high winter water-level it also seeps out into the dry valley.

Various possibilities for this odd landscape occur to me: the land could have tilted in the last 10,000 years (since the last ice age); there could have been circumstances as the last of the ice melted that guided the creation of this unusual stream route; or beavers. My speculation is that it is the work of beavers.

Another oddity is the way Chickadee Lake, at high water levels, feeds the wetland to the North of it that drains towards the RGM. Without beaver defences this route to the sea, much shorter than Beadnell Creek, could have eroded down to become the sole drainage path from Chickadee Lake.

We are lucky to still have viable populations of beaver to maintain our valued wetlands, despite the problems they cause us when their activities conflict with our plans, notably where culverts draining the land pass under our highways.



