



Yamnuska

### **McCconnell Ridge — 1,996 m**

In the next section you will learn the source of the name of the small mountain on the south side of the highway just at the edge of the mountains – it is a part of the McConnell Fault system. It is also unofficially known as Barrier Mountain, and as Yates Mountain, after the Yates family, which ranched nearby. The ridge was used by the Stoney Nakoda as a lookout point called *Tokyapebi İpa*, meaning “lookout point for the enemy.” And it is still used as a lookout – but now for fire. The original lookout along the ridge was a relocated guard tower from Prisoner-of-War Camp 130 in the Kananaskis Valley. It was moved to the University of Calgary research station in the valley in 1984, and a modern structure now serves to protect the surrounding area from fire. These structures were built on prominent sites throughout the mountains starting in the 1920s.

New technologies have replaced many of the old fire lookouts, but a number are still staffed with lookout observers. Alberta currently has about 130 active fire lookouts. Lookout personnel usually spend about five or six months on location and are responsible for observing an area of about 5,000 square kilometres. They pass on reports of any “smoke incidents” for further investigation from the ground or by helicopter. About 40% of the fires detected annually are spotted by lookout observers.<sup>4</sup>

### **Mount John Laurie, Yamnuska, or The Yam — 2,240 m**

This mountain, lying to the north as you enter the mountains, is best known locally as Yamnuska, which comes from its Stoney Nakoda name *İyâ mna thka*, meaning “flat-faced mountain.” In 1961, the official name, Mount John Laurie, was assigned in recognition of John Laurie (1899-1959), a local educator and great supporter of the Indians in Southern Alberta. He was Secretary to the Indian Association of Alberta and was adopted in 1940 by Stoney Nakoda chief Enos Hunter and given the name White Cloud.

Yamnuska’s impressive 360 metre high cliff, which spans the two kilometres of the mountain’s face, makes this probably one of the most-climbed peaks in the Rockies. There are more than 100 climbing routes of varying difficulty along the face, and this is a popular location for climbing schools. Easily accessed, and in good shape early in the season when other locations are still shedding their ice and snow, the cliffs often ring with the shouts of climbers. First climbed in 1952 by Hans Gmoser, Isabelle Spreat and Leo Grillmair (and my father, John Manry – but he was on the second rope that was forced to retreat due to falling rock), the route that they took has become known as the Grillmair Chimney. In addition to the technical climbing routes, there is a great scrambling route that traverses the top of the cliff – mostly an easy hike, although with one slightly more challenging section of down-climbing in the middle. From the top, there is a terrific view out over the foothills to the east.

### **Geology Notes: Yamnuska**

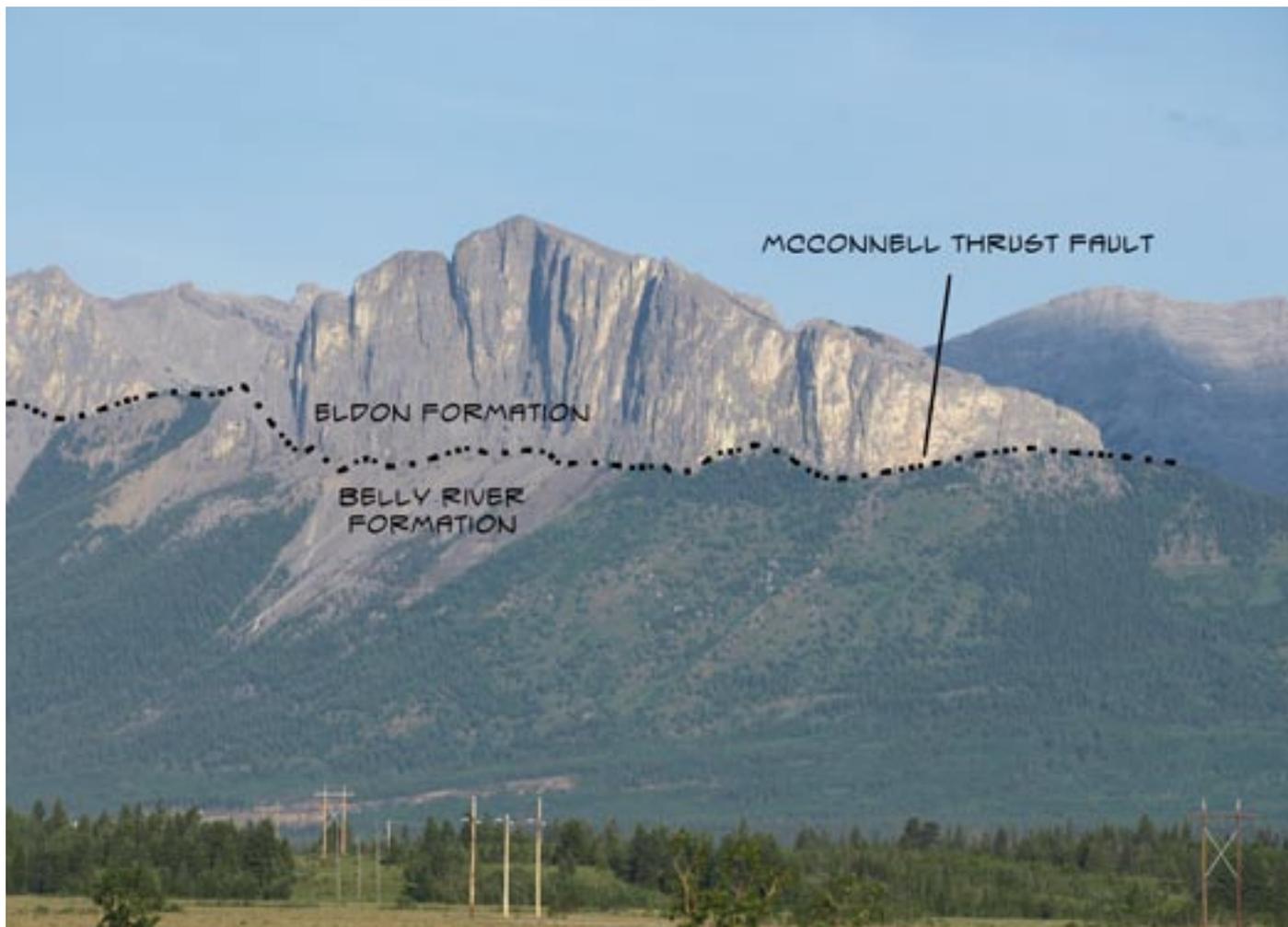
We meet our first significant thrust fault in the middle of a distinctive mountain to the north of where the highway enters The Gap: Mount Yamnuska. Or, to be more official about it, Mount John Laurie – *Yamnuska* is the Stoney name for the mountain (meaning sheer-faced cliff) and the peak is better known by this moniker. If you look at this mountain’s exposed southern face, you will see that there are two clear zones: the 350 vertical metres of the cliff region is clearly divided from the broken talus (loose broken rock, often

displaced through erosion) that lies below it. Dividing these two zones is the McConnell Thrust fault, named in 1887 for R. G. McConnell, who worked for the Geological Survey of Canada. Here, our thrust-fault organization is plainly displayed... and this is our decisive transition from the weathered-out ridges of the foothills to the Front Ranges.

The cliffs of Yamnuska, so popular with local climbers, are part of the Eldon Formation, which is Middle Cambrian. (See Illustration A in Chapter 8.) The talus below is part of the Belly River formation, which is Cretaceous shale and siltstone, and is younger than the Eldon by some 450 million years – yet lies underneath it!!! So this is an excellent example

of the dynamics of thrust faulting discussed in Chapter 8. The rocks that cover the top section of this fault have been moved some 30 kilometres into their present position! If you hike up to the base of the Eldon Formation cliffs (watch for rock knocked loose by climbers overhead), you can actually put your hand into the zone of transition of the fault itself – a pretty impressive moment of time travelling!

The Eldon is a carbonate rock (limestone / dolomite) that resists weathering and is typically a light grey. It will be encountered periodically as we move further west, so keep this first example in mind.



Yamnuska and the McConnell Fault