Evidence of an ice age

Glaciated features visible from Lamoille Canyon Road

Lamoille Canyon's glacial past is on display, best seen from the pull out containing the glacier explanation signs. Standing beside Lamoille Canyon Road, I get a glimpse into its icy past. True, seeing it requires a bit of a squint. The Lion's Camp below me is ringed with glacial debris, although trees and sagebrush hide much of the evidence.

Lamoille Canyon saw two glaciation events. During the earlier glaciation event, 150,000 years ago, the glacier flowing out of Right Fork Canyon (marked A on the above photo) merged with the glacier coming down the main canyon. Ice several hundred feet thick filled much of this canyon and flowed downhill to emerge from the canyon mouth.

The glaciers during the more recent glaciation event, a mere 15,000 years ago, did not flow as far. The main canyon's glacier stopped up canyon, less than a mile from this pull out. The glacier flowing out of Right Fork Canyon stopped in this area.

During the earlier ice age, ice ground all of Lamoille Canyon into that classic U-shape that we see in the upper canyon, but that was 150,000 years ago. Since then, Lamoille Creek has carved the lower canyon back into a V-shape. But the upper canyon and here in front of me was glacier-carved a second time 15,000 years ago and still retains its wide bottom.

A glacier's ice is constantly melting, especially at these lower elevations. Melt water flows across the top, then cascades down through cracks in the ice and continues along the ground beneath a glacier. Tunnels beneath the ice fill with boulders and leaves behind features called recessional moraines. These remain visible between here and the Lion's Camp (C on the photo) as small, boulder-covered mounds. The camp's athletic field is the scene of a small lake impounded by these recessional moraines.

Since only the Right Fork glacier continued past this spot, it left behind another visible glacial feature. Glaciers flowing down canyons melt along their sides. Rock debris embedded in the ice falls free to pile up on the canyon walls. These produce lateral moraines, left behind as unnaturally smooth canyon walls (B on the photo.)

The lateral moraine left by the Right Fork glacier dammed the main canyon and probably created a small lake or pond upstream from here. Since then, Lamoille Creek has broken through that dam, but continues to cascade down its steep face.

When the Lamoille Canyon Road was built, it angled up the canyon wall behind me, to gain enough elevation to cross over this ancient moraine and continue into upper Lamoille Canyon.

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