Firstly we would like to say thank you for your generous support that helped to fund our mapping projects. Mapping in Crowsnest Pass was both exhausting and thoroughly enjoyable, and I believe we all gained a lot from our experience.

We mapped between the 6th August and the 18th September, staying in a small cabin on the edge of our mapping area. The weather was stunning most of the time; temperatures reached 40°C on one day, which we chose to take as a rest day and visit a waterfall instead. A couple of weeks later, a dusting of snow appeared on top of the mountains in our area and temperatures were around 10°C.
Above: the west side of Hillcrest Mountain, 27/08/18

The area provided varied and challenging terrain: most of the exposure was on ridges which meant a lot of climbing, and the paths shown on our base maps were not consistent with most of the paths actually present in the area. Navigating through dense, young forest and across scree slopes provided an exciting challenge, though we ended up doing many long field days to make up for the time it took to get anywhere that was not accessible via a path.

Hillcrest Mountain is a large anticline that strikes north-south, with Carboniferous limestones found on its slopes and Cretaceous siliciclastics found on the adjacent ridges to the east and west. We found a fascinating number of fossils, both in the limestones and in the shales bordering several Cretaceous coal seams, which were exploited throughout the last century. A band of pyroclastic material filled with garnets and K-feldspars topped off our stratigraphy, and provided some fascinating thin sections.

Left: rugose corals in the Carnarvon unit on the east side of Hillcrest Mountain.
Right: Mary standing by the coal seam at the top of the Kootenay unit on Hearts Peak.

One of the most exciting things in going to a country none of us had been before was encountering the wildlife – and since we mapped in such a remote area, there was a lot of wildlife. We enjoyed an excellent number of wild blueberries, as did the local black bear, who was only spotted a couple of times – and only in the northern area – but left tracks and droppings across most of the valleys.
Above: a moose spotted in the valley east of Hillcrest Mountain.

Above: Hillcrest mountain and the adjoining hills, viewed from the south. The anticline is faintly visible on the furthest spur, while the scar near the top of the green ridge to its right indicates the location of a large excavated coal seam.
Above: geological map of the northern area made by Timo Wilken.

Thank you again for your funding, we really appreciated being able to visit this truly spectacular place.