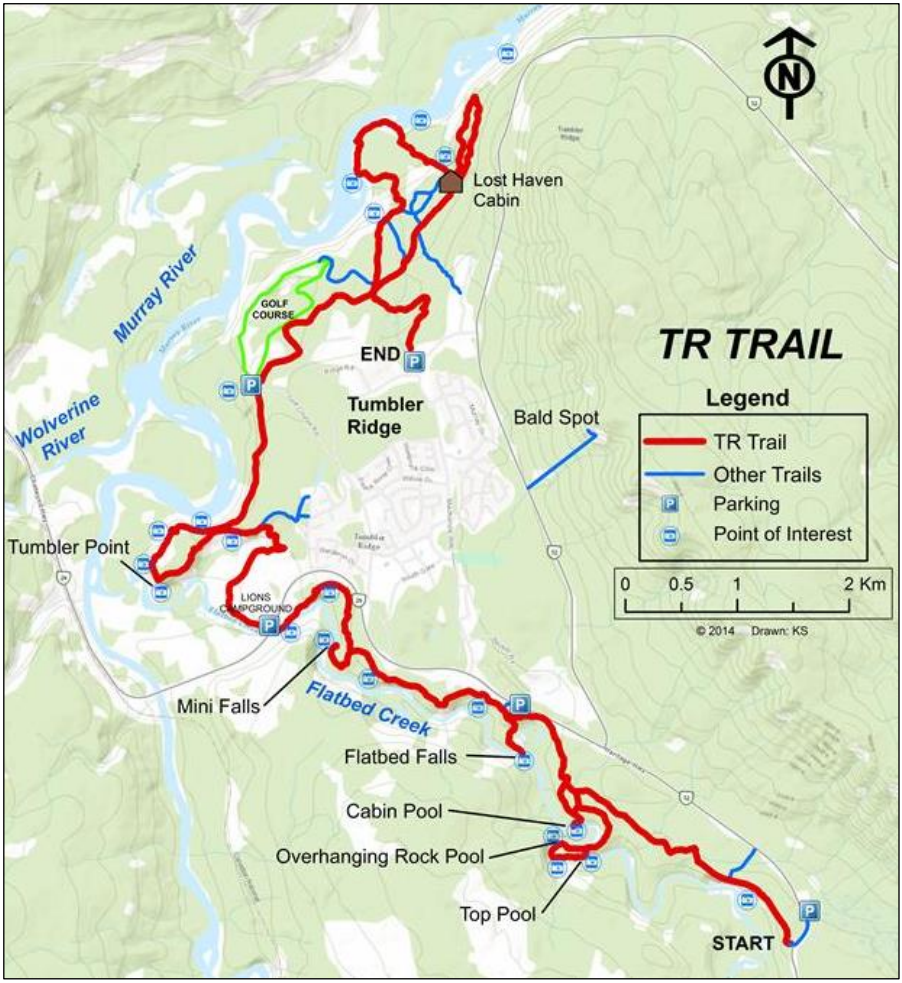
#3

The TR Trail

Rating: Moderate to Challenging

Time: Variable, up to 7 hours


TR TRAIL
Legend
TR Trail
Other Trails
Parking
Point of Interest
0 0.5 1 2 Km
© 2014 Drawn: KS
Lost Haven Cabin
Murray River
GOLF COURSE
END
Tumbler Ridge
Bald Spot
Wolverine River
Tumbler Point
LIONS CAMPGROUND
Mini Falls
Flatbed Creek
Flatbed Falls
Cabin Pool
Overhanging Rock Pool
Top Pool
START

TR Trail Map

The TR Trail

The 28 km TR Trail encircles three quarters of Tumbler Ridge without crossing a single paved road. Spur trails lead to waterfalls, rock formations, dinosaur tracks, picnic areas, river and creek-side portions, natural swimming pools, spectacular view-sites, and a backcountry cabin. The trail also passes the Lions Campground and the Golf Course restaurant. It therefore offers a tour of the special sites on Tumbler Ridge's doorstep that combine to make this such a unique community.

Time/Distance: 1 – 7 hours / up to 28 km
Rating: Moderate to Challenging 

Directions to the Trailhead

There are five signposted access points to the TR Trail: at the start beside Hwy 52 E near the Gun Club, the Flatbed Falls parking lot, Lions Campground parking lot, Golf Course parking lot, and at the back of the ball diamonds behind backstop #3. These conveniently break the total distance into four legs.

Trail Description

The TR Trail is a project of volunteers of the Wolverine Nordic and Mountain Society (WNMS) and the Tumbler Ridge UNESCO Global Geopark (TRUGG). It stitches together existing trails; some fall under WNMS, others under the District of Tumbler Ridge, others are user-maintained. Some are narrow improved game trails suitable for hiking and running, some are shared with ATVs and snowmobiles, and others with mountain bikers, cross country skiers and the Saddle Club.

The TR Trail was developed with generous funding for trail-head, trail-side and interpretive signage from Mountain Equipment Co-operative. Working with Northern BC Tourism, the brochures were funded through Destination BC's cooperative funding program, Community Tourism Opportunities and the District of Tumbler Ridge. The project was endorsed by Recreation Sites and Trails BC. The trail is signed in a clockwise direction. All signs are white-on-blue. Distance markers from 0 to 28 are placed every half kilometre, and

directional arrows are placed at all junctions and significant corners. There are small blue diamonds or flagging tape every hundred metres.

A few parts of the TR Trail are steep, and work is ongoing to improve these through steps and hand-lines. In a few places it passes above steep dropoffs – caution signs warn trail users of these hazards. Pine-beetle infestation has led to many dead pine trees, so avoid hiking in very windy conditions as the risk of falling trees is greatest at these times. In the longer term, it is planned to extend the trail to form a complete circuit around Tumbler Ridge, which will include the spur trail up to the Bald Spot.

Leg 1 - Start to Flatbed Falls parking lot (7 km)

To reach the beginning of the trail from the sign and parking area near the Gun Club, proceed along the ATV trail north beside Hwy 52 E for about 500 m, then cross the highway with caution to the sign marked “Kevin’s Trail” and the 0 km marker. The TR Trail initially follows Kevin’s Trail, then descends to the three Flatbed Pools. Top Pool and Overhanging Rock Pool which are good for swimming and have attractive rock formations, and Cabin Pool with its dinosaur tracks. It follows the Razorback onto the “Missing Link” before diverting to the Flatbed Falls parking lot.

The first 3 km follow Kevin’s Trail. This probably follows an old pack trail noted on maps from the 1930s. Art Skinner was a legendary trapper in the region, and nearby are the remains of his 1930 cabin. The first viewpoint (km 0.9) is from the top of steep bluffs of unconsolidated Pleistocene (the time period characterized by repeated “Ice Ages”) glacial sediment. Elsewhere near Tumbler Ridge, Pleistocene fossils have been exposed, such as the bison skull found near the Golf Course. On the southern horizon are Mt. Babcock and Mt. Roman. The rocks that form these mountains are over 100 million years old, from the Early Cretaceous Period. Below runs Flatbed Creek, which has cut a wide channel through the sediment and the underlying bedrock.

Top Pool (km 3.6) is the first of many pools in Flatbed Creek along the TR Trail. It is formed by waters cascading over a ledge of resistant sandstone, forming a pool below that is suitable for swimming in summer. These rocks are from the Kaskapau Formation and are approximately 95 million years old, from the Cretaceous Era. A small overhang is created downstream by this same rock layer. Across the creek, an exposed bedding plane of rock is filled with ripples, suggesting that these rocks were formed in shallow water.

Top Pool

The "beach" at the Oysterbeds (km 3.8) is formed from the eroded, friable remains of marine rocks. Clams and other marine fossils may be found in such rocks nearby. Oysterbeds and fossil crustaceans (lobster-like) have also been found in these sediments. Fossil inoceramid clams discovered here contributed to the global understanding of how these large bivalves attached themselves to the ocean floor. Across the creek there is an impressive section of gently dipping rock strata, with alternating sandstone and mudstone layers that tell a story of many deposition events over time.

Overhanging Rock Pool (km 4) is one of the many attractive features along the trail. Here the fast-moving waters of Flatbed Creek slow down as they flow under

Overhanging Rock

horizontal rock layers. The main overhanging rock is formed from the same thick sandstone bed that crossed the creek at Top Pool, and that are seen again at Flatbed Falls and the Mini Falls. Water depth varies from year to year. Some years it is safe to jump into the creek from one of the rocks upstream from the Overhanging Rock. Always check depth before jumping, and do not dive in.

Theropod Footprint at Cabin Pool

At Cabin Pool (km 5.2) an exposed rock layer has dozens of dinosaur tracks, made by theropod, ankylosaur and ornithopod dinosaurs. Deep dew-claw impressions made by the theropods are unusual. The presence of these tracks in silty sandstone with traces of plant roots indicates a coastal plain environment. Across the creek and downstream is the initial discovery site from 2000, where two local boys aged 8 and 11 correctly identified a dinosaur trackway. Right beside this trackway British Columbia's first dinosaur bone was found in 2001, which is now on exhibit in the Dinosaur Discovery Gallery in Tumbler Ridge. Subsequent floods have eroded these tracks and made this site less obvious.

The ruined wooden structure at km 6 is Nominister Abbey. Visible in the valley below from the Razorback (km 6.3) and the Missing Link (km 6.5) are iron-rich spring-fed ponds, modified by beaver activity, and a home for waterfowl and other wildlife.

The same thick-bedded layer of erosion-resistant sandstone that forms the Overhanging Rock upstream is responsible for the formation of Flatbed Falls (km 7.4). Beneath this layer are softer, thinner deposits that are more easily eroded – these were mostly laid down in a marine environment. The falls create a plunge pool that is suitable for jumping into after checking depth, but not for diving. Near the top of the Flatbed Falls spur trail there is a good view into the valley of Flatbed Creek as it enters Flatbed Canyon (km 8.5).

Leg 2 - Flatbed Falls parking lot to Lions Campground parking lot (5 km)

Flatbed Falls

The trail heads down to Flatbed Falls, then back up to follow the Linking Trail, with an enjoyable spur down to the Mini Falls on Flatbed Creek. There are good views of Flatbed Canyon, and eventually the trail descends down to creek level, and crosses below the Hwy 29 bridge just after passing the Bridge Pool (also good for swimming).

McManus bench (km 9.2) overlooks an attractive steep-sided section of Flatbed Canyon. Here the creek follows the centre of a gentle anticline (arch-shaped fold) along nearly horizontal layers of bedrock. If you look across the valley, try to imagine the course of an ancient creek channel. There is even a pond, now spring-fed, in this ghost valley.

The Mini Falls (km 10.2) forms another cascade and deep pool suitable for swimming and jumping (check pool depth first) below gently dipping ledges. Many fossil burrows made by worm and shrimp are found in the rocks on the far side of the creek. The Mini Falls are created by the same thick bedded sandstone layer seen at Top Pool, Overhanging Rock Pool, and Flatbed Falls. This allows us to work out in which layers to look for dinosaur tracks, and has led to the discovery of further dinosaur trackways here.

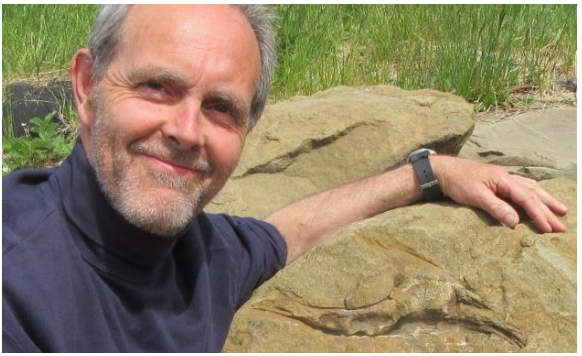
Mini Falls

The steep south-facing slopes (km 11.3) below catch lots of sun and dry out quickly. Therefore they tend not to support trees, but instead are grass and brush covered, and are home to a different set of plants and flowers, birds and butterflies compared to what is found in the nearby forest.

Bridge Pool (km 12.1) is just upstream from the Hwy 29 bridge over Flatbed Creek. A barrier of rocks is sometimes placed downstream in summer to deepen the pool. The cliffs on the far bank display an impressive section of rock strata. The bottom layers are thin, soft, and weakly consolidated, typical of deposition in a deeper marine environment where the sediment is fine-grained and muddy. The middle layers have lighter colouration, and are thicker and firmer, features that are more characteristic of deposition in shallower marine or terrestrial (non-marine) environments. These alternating layers reflect the environment here in the Cretaceous Era, 95 million years ago, when the area was alternately a shallow ocean (the Western Interior Seaway) and sandy, muddy or estuarine shoreline, fed by rivers flowing east from the precursors of the Rocky Mountains. By contrast, the uppermost layers have not been hardened into rock like the underlying layers. They are sandy and very thin-bedded, likely representing sediments deposited in a large glacial lake in the last Ice Ages.

Leg 3 - Lions Campground parking lot to Golf Course parking lot (5.5 km)

The TR Trail passes through deciduous forest, then climbs up to town level and follows the edge of the escarpment past Tumbler Point, with many good views of the valleys of the Murray and Wolverine rivers and the foothills. A sign near the campground commemorates the 2017 discovery of BC's first dinosaur skull material and a nearby tyrannosaurid track, which is on display.



Dr. Lambert with Partial Tyrannosaurid Skull

In 1914 Samuel Prescott Fay described the area known as The Big Flat (km 12.5) as “It is without doubt the finest flat I have ever seen in the foothills.” He was on his pioneering expedition of exploration from Jasper to Hudson’s Hope, travelling down the Murray Valley. En route he provided the first written description of Kinuseo Falls. Later authors wrote of a face carved into a tree in this area, and in time this remarkable carving was registered as a provincial archaeological site. This didn’t stop the tree from being mistakenly cut down during construction of the campground in the early 1980s. Thankfully the carving was salvaged, and spent time in Simon Fraser University and Fort St John before being repatriated to Tumbler Ridge in 2004. It is housed in a prominent location in the Tumbler Ridge Community Centre. While such tree carvings are known from British Columbia’s coastal regions, this is the only known inland example of historic First Nations tree carving.

Face carving

The trail climbs out of the flat area onto the level of Tumbler Ridge and proceeds along the Tumbler Point Trail toward Tumbler Point (km 14.9), with some fine views of the forest and Flatbed Creek below, above more open south facing slopes. The valley below was the arm of a mighty lake, Glacial Lake Peace, which formed as the great glaciers melted and were impounded against a wall of ice. The valley was filled with sands and gravels deposited by streams flowing from the glaciers into the lake, and the river has been cutting down through these since the glaciers retreated. In many places flat terraces occur some distance above the current river and creek level. These “lacustrine terraces” represent old lake levels. The relatively level surface of the trail you have been walking on is one of these terraces. Bank Swallows nest in the bluffs below and can usually be seen flying around Tumbler Point in summer. The foothills in the distance to the south are (from left to right) Quintette Mountain, Roman Mountain, Mt Babcock and Mt Kostuik. They are all in older sedimentary rocks, over 100 million years old, and contain the

extensive metallurgical coal deposits that are responsible for the existence of Tumbler Ridge. The coal seams were formed from the burial and heating of large thicknesses of swamp vegetation.

The trail proceeds beyond Tumbler Point above the final reaches of Flatbed Creek as it enters the Murray River (km 15.1). Note the old creek channel to the left, and the current creek course on the right. This was created abruptly during a flood in 2006.

Where the trail reaches another bench (km 15.6) there is a view to the western horizon of the flat-topped bulk of Mt Spieker, another coal bearing mountain. Below you the Murray River Valley is joined by the Wolverine River Valley. Note how closely the Wolverine River approaches the Murray. Yet it veers away and flows into the larger river more than two kilometres downstream. Maybe in the next flood it will break through at this point. Geological change is often a slow process, but in the case of such river courses, change can be extremely rapid.

North-facing slopes are usually moist and thickly vegetated, but this is not the case at the Murray River viewpoint (km 15.9). The Murray River is actively washing away at the thick sands and gravels that form the river bank, and slides and small rockfalls are common. This explains why the trail avoids the edge here, as it is unstable, especially in spring at times of repeated freeze

View from the Tumbler Point Trail

and thaw. Decades from now, as this process continues, it may no longer be possible to walk on a flat trail to Tumbler Point.

Before reaching the golf course parking lot, the trail leads along the edge of a terrace, with outstanding views of the Murray River below and the foothills in the distance. There is a bench from which to enjoy the view. This section of the TR Trail is known as Nathan's Trail.

View from the Hoult Bench on Nathan's Trail

The Tumbler Ridge Golf Course (km 18.1) was developed in the early 1980s with the work of volunteers and contributions of personnel and equipment from one of the mines. The scenic nine hole course is on a series of terraces. The scenery would have been even better if it had built on the valley rim, but this would have been disastrous, since slope movements are common as the Murray River erodes its banks, and the buildings and fairways were wisely built a distance away from the rim.

Leg 4– Golf Course parking lot to Ball Diamonds (10 km)

Tumbler Ridge Golf Course

The TR Trail follows some of the Wolverine Trail, built as cross country ski trails, before descending to the Murray River via Larry's Trail. There are spurs to two riverside sites with views of the Bergeron Cliffs, then it climbs up to the WNMS Lost Haven Cabin up Linda's Trail (the roughest and most challenging section of the TR Trail). After following Escher's Loop to a final viewpoint the trail leaves the ski trails and ends behind the ball diamonds.

The Wolverine Trails follow a series of north-south trending terraces perched above the river valley. On Larry's Trail (km 20.9), valley-bottom vegetation is dominated by huge Cottonwoods. These grow to a great height provided the Murray River does not change course and obliterate them. The Murray flows to the distant Arctic Ocean via the Peace, Slave and Mackenzie Rivers.

On the slopes of Mt. Bergeron to the north is the spectacular line of the 95 million-year-old Bergeron Cliffs, a thick layer of non-marine sandstone deposits formed from ancient river channels which have cut into finer grained sandstone that geologists interpret as a beach deposit. Dinosaurs inhabited the land, not the sea, so we can guess that dinosaur tracks and perhaps bones may occur near such rock layers. In this case, such an educated guess would be correct, as both tracks and bones occur in the equivalent rocks nearby in the valley of Quality Creek. At the first short spur trail to the Murray River (km 21.3) a large slide can be seen upstream. Closer by is a wetland which is flooded in spring and after heavy rains, but usually dries up by the end of summer. This is a good place to look for wildlife. For the next few hundred metres (km 21.5) the river bank is being actively eroded by the fast-

flowing river. The trail is relocated further inland every few years. It then passes over flood channels, where flagging tape indicates the way ahead.

The Murray River

The second spur trail leads left to the Murray River (km 22.3). Here, as the river curves left, it encounters a transition. For the past few kilometres it has passed through Pleistocene deposits from the last Ice Age, characterized by soft sediments and slumping. It now encounters bedrock, into which it carves cliffs, lined by multiple layers of thinly bedded marine strata of the Late Cretaceous Kaskapau Formation, 95 million years old.

The ascent up Linda's Trail (km 22.7) is the longest and roughest of the whole TR Trail, but provides interesting and different terrain. Here the land is hummocky, bumpy, and the trees are smaller. This is an old slope failure, now colonized by vegetation and stable enough to support trees. At one point the trail crosses a mildly active slide (km 23.1) where the trail has to be re-created each spring. Still higher up there is a sand dune (km 23.2), another legacy of the Pleistocene Glacial Lake Peace. Then the trail veers right and follows an established game trail to climb up to more level ground.

Lost Haven Cabin

Lost Haven Cabin (km 23.3) is an excellent cross country ski destination in winter, and is a hub for hikers, mountain bikers and horseback riders in

summer. It has a woodshed, indoor stove and outdoor barbeque area. Water is collected from rainfall only, so please be extremely careful with fires. Escher's Loop provides further views (km 23.5) of the Murray Valley and Mt. Bergeron, as it traverses more benches.

Final Viewpoint of the Murray River

The final viewpoint (km 24.6) at the end of a spur off Escher's Loop offers a bench that overlooks the valley as the Murray River courses northwards. It is two days by canoe to the next bridge, through pristine wilderness, a magnificent canyon, and waterfalls. A riverboat trip is an ideal way to enjoy these treasures. Bridging the valley here is the powerline from Capital Power's Quality Wind Project. Some of the turbines are visible on the skyline in the distance. This was the second wind farm constructed in British Columbia, with 79 wind turbines. It began operation in 2012, and generates 142.2 Megawatts of power per year, enough to meet the needs of 43,000 homes.

A short series of boardwalks leads across a wet spot and tiny creek (km 25.6), which disappears into the ground nearby. It emerges as a spring some distance below, at the bottom of the sand level near the Lost Haven Cabin.

The TR Trail continues to follow the ski trails. At km 26.4 there is a side trail uphill to the left which leads to the TR Saddle Club. Continue gently downhill on the main trail, where the soil is sandy. The trail veers to the left off the ski trails at km 27.0. Shortly after this, the trail passes through a shallow valley with poorly drained soil, where a black spruce bog flourishes (km 27.2).

Beside the trail here you will see Labrador tea, sphagnum moss, horse-tails and lingonberry. These are all important plants to First Nations people in the region, and have been for thousands of years.

Black Spruce Bog

The trail skirts around an area logged by the Tumbler Ridge Community Forest in 2016 (km 27.5). This logging was part of a plan to minimize the risk of forest fires to the town of Tumbler Ridge.

Finally, the last kilometre marker is seen (km 28.0), and the end of the trail is reached behind the ball diamonds.

Final Kilometre Marker

After completing the trail, please consider returning this brochure to the box at the trailhead for others to enjoy.

Please pack your garbage out.
Travel in groups and carry bear spray.

For more information, contact:

Wolverine Nordic and Mountain Society

Email: contact@wnms.ca

Website: www.wnms.ca

Tumbler Ridge Visitor Centre
(250) 242-3123

Tourism website: www.TumblerRidge.ca

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