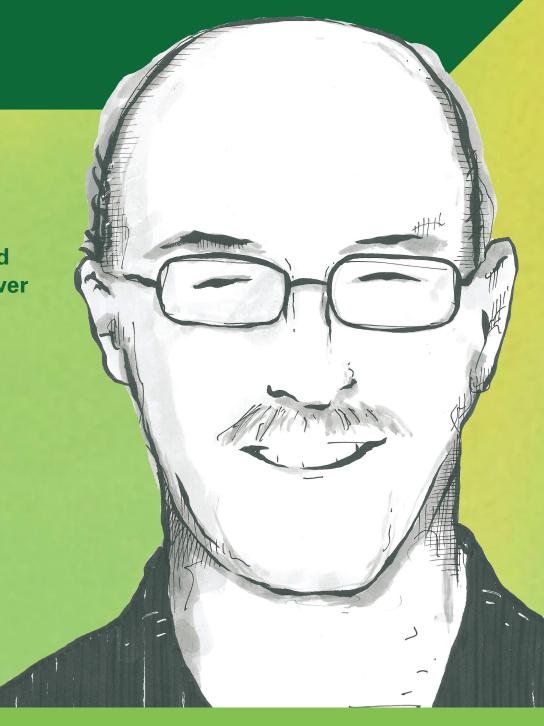
Welcome to the Slender Gentian Mini-Museum.

My name is Ken. I'm a botanist—the kind that identifies plants. My father was a botanist too, and I learned a lot about plant identification and plant ecology from him. I loved to go on field trips with him and learn about plants that I'd never seen before.

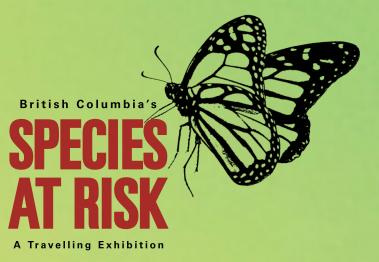
All plants are beautiful and all are important.

Plants use carbon dioxide, water and the energy from the sun to make sugar and produce oxygen. The sugar helps them grow, making roots, leaves and stems that are food and homes for all kinds of animals, fungi and even other plants. Plants can't move when an animal wants to take a nibble, so they protect themselves with thorns or by making unpleasant-tasting chemicals.

In this Mini-Museum you'll learn about a very rare plant that I have only seen once. It has only been found in two places in BC, and when I first found it, I didn't even realize that I had found one of the province's rarest plants!



DR. KEN MARR,
BOTANY CURATOR AT THE ROYAL BC MUSEUM



Presented by



Slender Gentian

A rare find

Fun with Form and Function

Slender Gentian grows in wet alpine meadows where there are no trees to break the force of the wind. That's why it's so short—less than 10 cm tall. It has to grow very quickly, too, starting as soon as the snow melts. It's an annual plant, meaning that at the end of the growing season the whole plant dies—but hopefully it left some seeds! Each Slender Gentian plant must sprout from a seed, make flowers and then make a fruit with seeds inside all within the few short weeks of the alpine summer.

Flowers are attractive—literally. They produce nectar, pollen or both as food for insects, and the insects help the plants by spreading pollen from one flower to the next. In Europe, scientists have noticed that bumblebees are attracted to the blue flowers of Slender Gentian. But no one knows which insects pollinate the plant in BC.

Intrepid traveller

Slender Gentian grows in North America, Europe, Asia and Africa. Very few plants have such a widespread distribution. How do you think it's travelled so far? There are oceans, forests, and dry valleys to cross—not the kind of places that Slender Gentian likes to spend time. Do you think that at some point the climate Slender Gentian likes was more widespread?

Widespread, but uncommon

Slender Gentian might be one of the rarest plants in BC—or it might not. So far, it has only been found in two locations, I saw it in the heart of the northern Rocky Mountains, about 150 km southwest of Fort Nelson. But it might actually be more common than we think, because so many parts of BC have never been visited by botanists. If you're ever high up in the mountains, keep a look out for a small plant with blue flowers. If you find one, gently open up a flower and see if it has two sets of fringes on the inside of each petal, like in the picture. If you find this plant, write down the location. When you get home, contact me at the Royal BC Museum and tell me where you found it. Send a picture if you can!

Photo of the inside of a Slender Gentian flower. This photo was taken using a microscope. See the fringes on the petals? They're an important feature that helps us recognize this species.

Slender Gentian looks a lot like some other, more common plants, including Northern Gentian, Four-Parted Gentian and Moss Gentian. The easiest ways to tell them apart are by their colour and by whether or not there are fringes on the inside of the petals. Northern Gentian has bluish-purple flowers with a single fringe on each petal. Slender Gentian and Moss Gentian both have bright blue flowers, but Moss Gentian doesn't have fringes. Four-Parted Gentian has purplish flowers and no fringes.

