Damsels and Emeralds in the Mountains: New Dragonflies for British Columbia *Top* Home

For the past eight summers, the CDC zoologists have gone out in the field for at least a short time every summer on a variety of surveys, looking for everything from sand dune invertebrates to Spotted Owls. But we've always been plagued with bad weather, and we were coming dangerously close to becoming eternal whiners. Last summer, however, our luck changed and the sun shone on our dragonfly survey of the upper Columbia Basin. (Actually—to whine one last time—June was wet and cold, but the second phase of the survey was incredibly warm and sunny.) Dragonflies need hot sunshine to fly, and they didn't disappoint us in July and August!



Funded by Parks Canada and the Columbia Basin Trust (through the Royal BC Museum's Living Landscapes project), and joined by our colleagues from the Museum and by enthusiastic volunteers, we splashed our way around the mountain National Parks and intervening valleys, swinging our nets and dipping our pH meters.

We had a number of goals in going to the mountains in search of dragonflies, but my personal dream was to find the Forcipate Emerald (Somatochlora forcipata) in British Columbia. This species had been collected about 3 km from the B.C.-Alberta border in Banff National Park back in the 1920s, and this ancient

collection species west in "small

courses" (as described by Edmund Walker, the Continental Divide as well!

After a couple of weeks of exploring the Glacier and Yoho National Parks, we found peatland only 300 m from Alberta and just Louise. We spent a great morning discovering

remained the only record of this of Manitoba. Surely it had to live spring runs" following "devious 1920s collector) west of the

wetlands of Mount Revelstoke, ourselves in a fascinating hillside around the corner from Lake the diverse fauna (including

several species of Emeralds) flying about this quaking fen (and falling through holes in the peat up to our waists when we became to focused on the sky above!). We were about to leave when we noticed small Emeralds patrolling tiny, shaded, spring-fed pools at the edge of the fen... Somatochlora forcipata!! Once we knew the habitat, we visited another likely spot the next day near Emerald Lake, also in Yoho

Park—and there they were again! The next week, Larry Halverson, the Chief Naturalist for Kootenay National Park, took our English volunteers to a similar site in the headwater drainage of the Vermilion River, just over the hill from the site where Edmund Walker had found them so many decades ago—and they were there, too. But even though we were successful beyond all our expectations, this dragonfly is still obviously a very sparsely distributed member of the Rocky Mountain dragonfly community and an inhabitant of an apparently rare habitat as well.

The other major find of the survey was the Sweetflag Spreadwing, Lestes forcipatus, a primarily eastern damselfly that had been found recently in Washington State. This is a good example of an uncommon species that had been



overlooked simply because it wasn't expected and because it looks very much like the widespread Common Spreadwing, L. disjunctus. Leah Ramsay's sharp eyes spotted this species at a wetland north of Donald, in the Rocky Mountain Trench.

At the end of the survey, we'd visited over 130 sites and looked at over 2000 dragonflies! The Kootenay dragonfly list had grown from 56 species to 61. Other interesting discoveries included one made by volunteer Dean Nicholson in Cranbrook—Dean discovered one of our red-listed dragonflies, the Pronghorn Clubtail (Gomphus graslinellus) at

Wasa Lake. This species was previously thought to be restricted to the sandy beaches of a few lakes in the Okanagan and Boundary regions.

In 1999, funding permitting, we hope to repeat the whole process in the Kootenays, but concentrate our efforts this time south of Invermere and in the Creston area. But wherever you are in British Columbia, if you would like to get involved with dragonfly surveys, we'd be happy to help you get started. If you have access to the Internet, you can begin by visiting the fabulous web pages put up by Dennis Paulson in Seattle; his URL is http://www.ups.edu/biology/museum/UPSdragonflies.html.

Happy dragonflying!

Syd Cannings, Zoologist Leah Ramsay, Assistant Zoologist