## 2013 Bioblitz scours Grand Lake natural protected area by Victoria Dekker

## Researchers come up with big finds

In the world of biology, the discovery of a new species is a little like Christmas.

And for the team of around 60 researchers who scoured the Grand Lake natural protected area in June, gifts were delivered a little early this year.

"I think when most people think of these kinds of discoveries, they think it may be necessary to travel to exotic climes to go to the tropics to find species that are undescribed," said Bioblitz lead researcher and biologist Don McAlpine, whose team uncovered at least two species uncommon to the region during the recent field study. "In fact, there is a great deal that we don't know about the biodiversity of this region."

The intensive two-week event, held annually by the New Brunswick Museum, tasks a team of researchers, students and artists to gather plant and animal data in a protected natural area of the province.

This year, the team focused its efforts on the zone just east of Fredericton, which is split into 21 parcels of marsh, meadow and forest. They took over a hostel, camped in tents and set up a makeshift laboratory in the basement of a church in neighbouring Gagetown.

The initiative is part of an ongoing effort to develop management plans for the province's natural areas, maintain species and protect biodiversity.

"You can't really do it if you don't know what's there," McAlpine said on the last day of the blitz in the last week of June. "Most people, when they think of the fungi, plants and animals in a region as long-settled as New Brunswick, they think we know everything that's here. In fact, we don't. For many of these areas, we have a very poor understanding of the species that are present."

Biological researchers and students were joined this year by a group of creative types who helped document the expedition, including four visual artists, a poet and student blogger. The art component of the program was added in 2010, and offers the project a valuable perspective, McAlpine said.

"By using art, the interest is in allowing people to interpret these areas in more than one way and see what interesting things happen when you put art and science together."

While researchers worked 12-hour days gathering and analyzing data, McAlpine says they really just scratched the surface of the site. They did, however, discover a beetle and fungi new to the region.

The team won't know the full scope of their findings for many months, McAlpine said, adding they're still assessing data gathered at the first blitz in Jacquet River in 2009. Once those findings are compiled, the New Brunswick Museum will host public exhibits to share the information.

About a third of the flora and fauna in New Brunswick is, in fact, not native to the region. Much was brought in by Europeans when the land was originally settled. Species can change over time, and it's important for researchers to track the changes to see how they affect environments. Once areas are understood, they can be protected from development, McAlpine says.

"The danger is that we'll lose the biological diversity that's present now overtime. We can lose it if we're not careful."



Howard Huynh shows some of the small mammals collected and prepared during the 2013 Bioblitz.