MCI talks invasive species and Coventry dump troubles

- Sherbrooke Record
- 24 Jul 2018



situation "worrisome".

"A lot of representatives of the press were there. Everyone was there and interested in the bad news," said Orjikh.

The bad news in question was the

discovery of zebra mussels, a highly invasive breed of freshwater mussels originally from Russia, near the Three Sisters Islands in the Memphrémagog.

"Our lead patrolman, Santiago Doyon, swept the waters with his crew and they indeed found zebra mussels," she explained. "As of now the problem is mostly localized around Magog, where there's a density of around 5 mussels per square metre."

Zebra mussels have been an issue in Canada since the late 1980s. The critter causes a variety of problems: blocking water intake pipes, damaging boats, latching on to and killing native mussel species (such as the freshwater pearl mussel) and carrying avian botulism, a disease caused by toxic bacteria that causes paralysis in waterfowl, sometimes wiping out entire populations.

Besides this, the zebra mussel is known as an "engineer species", meaning that it causes changes in the ecosystems it invades, killing off native species who can no longer adapt to their environment. A single zebra mussel filters a litre of water a day, looking for phytoplankton and zooplankton to eat. This depletes not only the food supply of other

creatures, but also increases the transparency of the water it inhabits, increasing aquatic plant growth, even at deep water levels.

According to research conducted by Isabelle Picard, a biologist working with the MCI, and Doyon, out of 14 stations inspected around the Memphrémagog Lake, only four were found without traces of the invading mussel. Though all the specimens found were euthanized in alcohol, Orjikh sadly commented that eradicating found zebra mussels will not solve the problem.

"Even if we remove them from the water, the expansion of the species is extremely hard to control. Each female zebra mussel lays around 40 000 to 1 million microscopic eggs a year. Even if we only miss one, the operation would a failure," she explained. "As of now the zebra mussels are having a minimal impact on our lake. There aren't that many of them, but they are colonizing our mussels. Our patrolmen found many zebra mussels attached to our native ones. Our fear is for the future: if they'll grow exponentially in number or spread to other bodies of water."

According to Orjikh, for the zebra mussels to propagate, there needs to be a high calcium content in the water they inhabit. Though the waters of the Memphrémagog don't have particularly high levels, the levels are enough to sustain the invasive species. As a result, the MCI is unsure of what will happen.

"We don't know how it will evolve, but we are pretty sure their numbers will increase, and these mussels can proliferate dramatically and quickly," she said. "Right now, we are worried about the Massawippi River. It's at a very high risk of invasion because its calcium levels are very high."

The MCI is as of now working on prevention when it comes to zebra mussels, said Orjikh. The main reason being that there aren't many solutions to the problem: chemicals are the only way to get rid of the invader. These are not viable options given that the Memphremagog is a source of water for so many people.

"We're asking people to stay alert, to let the MCI know if they spot any zebra mussels in areas besides the Magog lake. As far as we know, there might be zebra mussels that have spread as far as the States," she said. "We also ask that people wash their boats thoroughly both before and after using them. There are five free boat cleaning stations around the Memphrémagog. We're focussing on the preventative, there's not much else we can do."

Orjikh added that this preventative measure does not only apply to boats: all aquatic equipment should be carefully cleaned and dried before and after each use, to make sure any invasive creatures are eliminated. This includes fishing and diving gear, she pointed out.

"The next step is to meet with the ministry of fauna and the municipality, to ask for funding to deal with the issue. That's happening this week, so we'll see. The irony is that we were just financed with 8 million dollars to deal with invasive flora," commented Orjikh, underlining the fact that though she is concerned with zebra mussels, invasive plants like Japanese nutweed, hogweed, and spiked water-milfoil (to name a few) are definitely a big problem.

"In my opinion, invasive species, whether plant or animal, should be deal with together, not in separate departments. It would make much more sense if action plans were established for both, not just one. We have to act fast before they're everywhere."

As if zebra mussels were not trouble enough, the MCI also addressed the increasingly worrisome situation of the Coventry dump site, located in Vermont, near Newport and right by the Black River, which is a tributary of the Memphrémagog. The dump has been

called a "long-term threat" to the lake for years but is yet again asking to expand its capacity.

"Their landfill is almost full, so they want a public consultation on an expansion of 51 acres. They bury around 500 000 tons of garbage a year. The expansion will allow them to continue at that rate for another 22 years," explained Orjikh. "The concern is that 'garbage juice' will leak into the lake. We still don't know the effects of the Coventry dump. No tests have been done to see if it effects the Memphrémagog, and anyway, there are so many toxins found in garbage that we can't test for them all. The most efficient thing would be to do a toxicity test: you put trout in a sample of the water and if they die, well, it's time to get very concerned."

July 16 Brome-missisquoi Member of Parliament Denis Paradis requested that the public consultation be withheld until studies had been conducted. As Orjikh put it: "there are too many unknowns" to safely go ahead with the expansion request.

"We are very worried. The dump is so badly situated. It's the only one in Vermont, and of course it had to be there," she observed with some irony. "The worst part is that if the Memphrémagog was a water reserve for the people of Vermont, this would never pass. But because it's on our side of the border, because it's Canadians drinking the water, well, it's not a big deal. All we want is for them to apply the same laws as they would for their own people."

"It's the principle of precaution. If the dump happens to poison the fish, then it's in our food and it poisons us. And of course, it's a water source for so many people," Orjikh concluded. "All we can do now is place a request for moratorium and do a study."