

How a team of conservationists poisoned a pond full of black-market fish to save a threatened salamander population

The rarity of the Jefferson salamander places it on the federal and provincial threatened species lists. And it was dying out



Wikimedia Commons

Chris Firth-Eagland, head of the Hamilton Conservation Authority, was alone on a midnight walk near an inauspicious pond in a protected oasis when he stumbled upon a group of men with spotlights, fishing nets and enormous plastic bags, caught in the act of harvesting carp from the water.

[Sign In/Register](#)

NATIONAL POST

NEWS • FULL COMMENT • [SPORTS](#) • [CULTURE](#) • [LIFE](#) • [MORE](#) • [DRIVING](#) • [CLASSIFIEDS](#) • [JOBS](#) • [SUBSCRIBE](#) • [FINANCIAL POST](#)

salamander – had become so infested with invasive carp that the

April 14, 2013
3:36 PM EDT

Filed under
[News](#) > [Canada](#)

 Comment

 Facebook

 Twitter

 Email

 More

pond as a black market breeding pool in a commercial fishing operation, with the koi carp likely being sold either as ornamental fish stock or as food to restaurants.

Outraged, he confronted the men, chasing them off into the night with his walking stick.

Discovering the source of the conservation disaster was the easy part. Trying to bring the Jefferson salamanders back to two of its few remaining homes required more ingenuity. It led the conservation authority to break its own rules; it poisoned both ponds.

“We had to poison the fish to protect the ecological integrity of the pond, if we hadn’t already lost it,” said Mr. Firth-Eagland, the chief administrative officer of the conservation authority.

What was dubbed locally as the “goldfish genocide” took place in the fall of 2009 and this week, the National Post accompanied conservation activists on a late-night trek to see if the drastic, cruel-to-be-kind measure was a success, and, as the ice retreated, to find out if the Jefferson salamanders were coming home to mate.



Glenn Lowson photo for National Post

Jeffersons are called mole salamanders because they tunnel underground. They burrow below the frost line to hibernate though winter and each spring they emerge and scurry to a pond to mate.

After the eggs hatch, the baby Jeffersons spend the summer in the water, breathing through gills and, if you don’t examine closely enough to see four legs at their side, look like brown fish until they leave the water to become the next generation of forest dwellers.

Jeffersons live in large Carolinian forest tracts which, unfortunately for them, occur in the most densely populated area of Canada,

Pope Francis Visits Bogota, Colombia
1:01

LATEST NEWS

PM balances welcoming message to newcomers with emphasis on immigration rules

Prosecutor blasts court over ownership of oldest synagogue

Manitoba investigators clear Mountie of wrongdoing over woman's broken arm

Few fire ban infractions as Alberta wildfire conditions remain extreme: official

Two ponds, a few kilometres apart in the Dundas Valley Conservation Area at the western end of Hamilton, are the busiest in Canada for the Jeffersons.

But something was going wrong. In 2005, Mr. Firth-Eagland had noticed a small school of shimmering gold, red and white fish in the larger of the two ponds. At first it seemed a pretty anomaly. Perhaps someone had dumped a pair of unwanted pets in the pond, he thought.

“A year later the population had ballooned. The pond was thick with them – tens of thousands of fish – and the water had gone from clear and pristine to the colour of coffee with milk,” he said.

The voracious, teeming carp ate everything: salamander eggs, salamander babies, salamander food and aquatic vegetation. “The devastation was unbelievable. They took the ponds to the very brink.”

Conservation staff placed baited traps in the water, catching precisely zero carp. They tried dragnet fishing, faring little better. They twice tried electrofishing – delivering high voltage to the water to stun the fish. That delivered hundreds of carp, but it was just a small fraction of the population.

It was when Mr. Firth-Eagland encountered three midnight visitors to the pond that the cause became as clear as the water once was. The men carried high-wattage spotlights, lamps on their head gear, large fishing nets on collapsible poles and each had one or two large, squirming garbage bags filled with a little water and a lot of carp. In the trunk of their cars they had water-filled tanks and coolers.

“They were harvesting the koi. They are likely the same people who put them in there to grow, seeding the pond with the fish. I was a little nervous, to be honest.

We had to poison the fish to protect the ecological integrity of the pond, if we hadn't already lost it

Scaring them off, however, didn't solve the problem.

In desperation, the conservation authority turned to rotenone, a piscicide (poisonous to fish) that has been used by indigenous peoples in South America for centuries; the roots of certain plants would be beaten in the water, forcing the fish to the surface to catch them.

TORONTO WEATHER

16°C

Partly cloudy

Feels like 15 °C



Friday	17 °C
Saturday	18 °C
Sunday	20 °C
Monday	22 °C

[Complete Forecast →](#)

breach its strict no-pesticide policy. It was not without controversy.

Timing was everything. The rotenone could not be used until autumn, when most gilled amphibians left the pond. Collateral damage to common green frogs was deemed acceptable.

Arrangements were made to retrieve and bury the estimated 40,000 carp in the water. Strangely, while the fish died, the bodies did not float, disappearing into the sediment of the pond floor.

Staff then waited to see the long-term impact of their intervention.



Tawnia Martel

The ice on the two ponds started melting away from their edges this past week; the temperature rose high enough to reach any sleeping Jeffersons in their burrows and there had been plenty of rain to make the fallen leaves and soil slick and muddy.

This was salamander weather.

Jim Howlett, vice-chair of the conservation authority, Tys Theysmeyer, head of natural lands with the nearby Royal Botanical Gardens, Lydia Cartlidge, a member of the authority's advisory board, and conservation activist Carol Brittan gathered in a coffee shop late Sunday evening, with flashlights and walking sticks, ready for a night hike to see if the Jeffersons were coming back.

At the smaller pond, they stood at the water's edge, peering in with flashlights.

"This has been a very popular place for them," said Mr. Theysmeyer as he looked. "In fact, the most popular one I've seen. When you

The bright spots along their side made them easier to spot in the dark.

Mr. Theysmeyer pulled one out. It was surprisingly heavy.

Then came a shout from the other side of the pond: "I got one here," said Mr. Howlett, pointing with his flashlight at a small, brown Jefferson beside a submerged log. "Two, I think."

Then Mr. Theysmeyer's eyes lit up: "There's a whole bunch over here," he called back.

After spotting about 20 Jeffersons, a cheer went up.

Then a sudden pop.

From his backpack, Mr. Howlett had pulled a bottle of champagne and Ms. Cartlidge produced a set of crystal flute glasses. It was cause for celebration.

"It's nice to see the pond return to be a pond that can support salamanders again," said Mr. Theysmeyer. The group drank a toast to the Jefferson's return.

The group's monitoring, however, brought another unexpected nighttime encounter.

Arriving at the second pond for an inspection, they saw someone already there; a man with a flashlight and a bulging backpack, at the water's edge.

As they watched, he occasionally bent down and picked something up from the water. When they approached him, he was unfriendly, rattled. He hid his face and promptly headed for his black pick-up truck nearby.

"He started hiding his face. He looked like a mobster coming out of court when the press is there, keeping his face under his hoodie. He did a pirouette in front of me to turn his face away when I got up close," said Mr. Howlett.

In the back of his truck, the man, in his 20s, had an aluminum box and a change of clothes. On his passenger seat he had a large, plastic sample jar.

It's nice to see the pond return to be a pond that can support salamanders again

"It looks like he's collecting amphibian samples, possibly for the commercial trade," said Mr. Howlett, who called police as he climbed

under investigation.

“Conservation officers will be speaking with the individual to ensure that no illegal harvesting has been taking place,” said Jolanta Kowalski, spokeswoman for the ministry.

“We want people to be watching, to be aware and know to call police,” said Mr. Howlett. “We’ve been trying to prevent this sort of thing for years. I think we will have to step things up.”

The ponds have returned to viability and it is not only the salamanders that know it. The black market carp farmers seem to have abandoned them. But apparently poachers have taken their place.

National Post



CANADA



Bernier won't push Tories on supply management anymore, he says



It's taking the RCMP longer than anticipated to digitize Canada's national database of criminal records



Former candidate Peter Julian endorses Jagmeet Singh's NDP leadership bid



Bids for Canada's \$62-billion warship program expected by November



Calgary Muslim website defends female circumcision and critiques 'Jewish media'

B.C. MLA proposes building a Canadian Mount Rushmore – only way bigger