

## THE CONTAMINATED RABBIT: A RESEARCH PROJECT STEMMING FROM THE CONCERNS OF 4 ANISHNAABEG COMMUNITIES

### INTERVIEW WITH HUGO ASSELIN ON AUGUST 27, 2018

Hugo Asselin is professor at UQAT since 2007. He held the Canada Research Chair in Aboriginal Forestry from 2008 to 2018. He is Director of the School of Indigenous Studies since 2016 and holds the Desjardins Chair in Development of Small Communities. Over the years, Hugo Asselin has supervised the research projects of more than 45 students, several of which having been initiated at the request of Indigenous communities. Here is the story of a few examples of current collaborations in research training...

*Several of the projects I work on stem from the communities. It does not mean that I never submit ideas, but if what I suggest does not raise interest, it stops there. (Hugo Asselin)*

### THE STARTING POINT

A few years ago, four Anishnaabeg (Algonquin) communities met together to submit a grant application within the framework of a program administered by Health Canada to conduct research on the presence of environmental contaminants in game hunted on the Nitakinan (traditional territory), at the heart of which the Horne smelter is established. To be eligible for this grant, the application had to be submitted by Indigenous communities. After a few refusals, the communities came to the conclusion that not having a collaboration with a recognized researcher from the scientific field was detrimental. They thus approached Hugo Asselin to ask for his support in the process. Professor Asselin agreed to help with the project

which he considered very relevant and scientifically sound. His contribution was to make sure the text was worded to meet the expectations of the evaluation committee, using a vocabulary with which they were familiar.

*According to the steps in the process, following initial evaluation of the project, an interview was required with an ethics committee in Ottawa. The communities asked me to play this role. After bombarding me with questions, the committee expressed some hesitations in funding the project because they were concerned that an eventual discovery of high levels of contaminants in game would create a climate of fear within the communities. I replied that the fear already existed, that it was precisely this fear that motivated the community to do research. There is nothing more fearful than not knowing. (Hugo Asselin)*

Without precise information about the presence or absence of contaminants in the meat they ate, hunters and trappers were faced with a dilemma: continue hunting with a potential risk to their health or cease to eat game and therefore cut off a significant link to the land, which has its advantages from a cultural as well as a nutritional perspective.

*Concretely, the need was articulated by Anishnaabeg hunters and trappers who were worried: Is the game we eat contaminated and, if so, are the quantities we consume harmful? These questions came, in part, from wide dissemination of recommendations from the Public Health Department, who advised against eating moose offal because of the cadmium levels it may contain. (Hugo Asselin)*

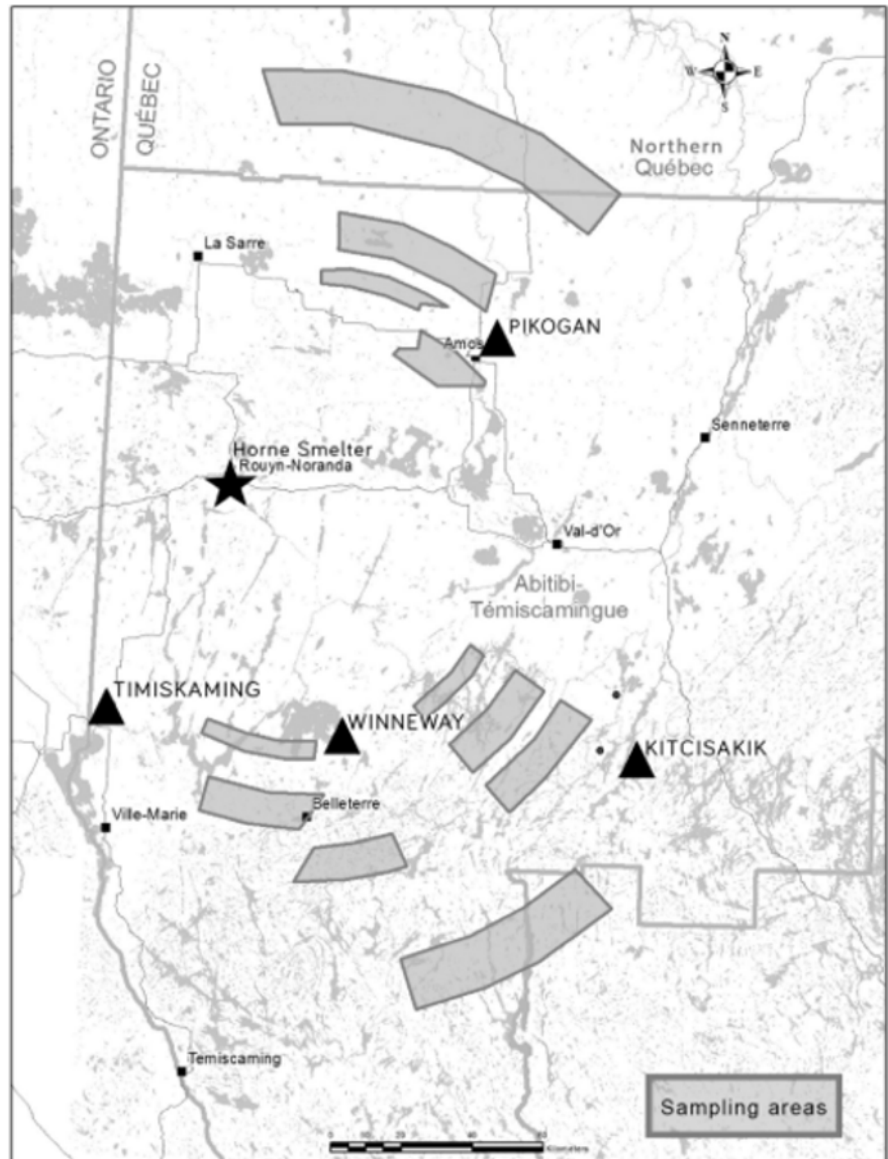
Having convinced the ethics review board of the relevance of the project to the communities, the application was finally funded. To see the project through to completion, they hired Serge

Bordeleau who was well known within the Anishnaabeg communities as a research professional. During preparatory conversations, Hugo suggested Serge could kill two birds with one stone by completing the research as a master's student in Biology. With two Bachelor's degrees (one in Biology and the other in Cinema), the proposal made a great deal of sense; the communities would benefit from more robust results because of the University's support and more qualified staff, and Serge himself would have one more diploma to his credit in the end.

## RESEARCH PROCESS: LESS INTRUSION, MORE COMMUNICATION

The grant was managed by Timiskaming First Nation on behalf of the four communities. After having weighed the possible options, the research team decided to work with rabbit (snowshoe hare) rather than moose, since the latter option involved more challenges for sample collection.

*We hired trappers in the four communities and asked them to trap rabbit for us. The idea was to collect rabbits at different distances from the Horne smelter and at different angles with respect to dominant winds. According to the protocol, the trappers were to take samples of flesh and liver and send them to us for contaminant analysis.*



Source: Bordeleau, S., Asselin, H., Mazerolle, M.J. & L. Imbeau. 2016. "Is it still safe to eat traditional food?" Addressing traditional food safety concerns in aboriginal communities. *Science of the Total Environment*. Vol 565: 531.

Having decided to proceed in the least intrusive way possible, interviews were conducted by Serge with the help of Amandine Jean, to estimate the quantities of rabbits consumed in the communities. For example, to the question: "How often do you eat rabbit?", possible answers included "every day, every week, once a month..." and the participants provided an answer for themselves and for each member of the household. Using photographs, the participants were also asked to estimate the

quantities consumed (ex., leg, offal, saddle, or whole rabbit). Other questions about tobacco use were also asked, since tobacco interacts with certain contaminants such as arsenic.



Source: Image from the video produced by Serge Bordeleau. *Le lièvre contaminé*. <https://www.youtube.com/watch?v=-5VXgF2i508>. A more extended version entitled *Le chasseur contaminé* is also available at the following address: <https://vimeo.com/128494808>

During the interviews, someone from the community always accompanied Serge and Amandine because some respondents spoke only Anishnaabemowin, and also to gain participants' trust and reassure them on the community's support for the project. During all these stages, Professor Asselin's role was to ensure the data were rigorous, so it could be used by the communities. In the event that the conclusion would have been that the rabbits were indeed contaminated, the results had to be sufficiently robust for the communities to rely on them to work with the government, so that actions could be taken.

During the project, Serge found that the presence of a researcher in the four communities to measure contamination raised some questions.

*Serge decided to put on his filmmaker's hat and he produced an animated short film to explain to people what contamination is, how it works, and how it is measured. The video was circulated within the communities so the topic could be better understood and it was very well received, especially with the youth. The short film even won an award at the Université du Québec student video contest! (Hugo Asselin)*



Source: Image from the video produced by Serge Bordeleau. *Le lièvre contaminé*. <https://www.youtube.com/watch?v=-5VXgF2i508>

When data collection was finalized, Serge did the calculations to determine the levels of contaminants in the rabbits from each collection area and estimated the potential levels of contaminants in Anishnaabeg people themselves, based on eating habits consigned qualitatively. The goal was to determine if the estimated levels exceeded the thresholds deemed acceptable by Health Canada and other health agencies.

“The best we can tell Indigenous people is to eat some, “but not too much”. At the same time, we know that for the last 50 years, Indigenous people's health has deteriorated. There is an unprecedented diabetes and obesity epidemic for the exact reason that they abandoned traditional food. This good, lean meat, full of minerals, was replaced by sweet and salty processed food from the convenience store or the closest fast food outlet. “ Translated excerpt from the video *Le lièvre contaminé contaminé*

## RESULTS, ON SEVERAL SCALES

In the end, Serge demonstrated that the quantity of rabbits consumed was not harmful to the health of the Anishnaabeg. But over and above the beneficial character of the production of reassuring results, that fact that the Indigenous communities found answers to questions they themselves were asking, and that they were in control of the research process from beginning to end, provided them with a very rewarding experience.

*The trappers hired by the communities, as well as the translators, the people Serge and Amandine met with, the representatives of the band councils who made decisions, all found satisfaction in the process. And we too, as scientific collaborators, learned from this experience, especially regarding the issue of communication. Other researchers might have been deterred because of what they would perceive as a "loss of scientific autonomy" or a risk that the project could be stopped without them having a word to say. But then, if a community decides to put an end to a research project, it must be because something was amiss in the way the work was being done. In such a case, it is the responsibility of researchers to self-evaluate their practices. (Hugo Asselin)*

As for Serge, he presented his results at multiple conferences in Abitibi-Témiscamingue and elsewhere. One of his take-home messages was that the recommendations of the Public Health Department for the consumption of game should be nuanced to account for the realities in the field, the cultural context and in particular, the impact of such recommendations on the health of Indigenous communities, often very different from that of recreational hunters. For now, it is impossible to know if these findings were taken into account by the official agencies. However, the interest of many communities seems to have been sparked. As Professor Asselin mentions, increasing research involving environmental contamination in Québec First Nations is ongoing or upcoming whereas only a few years ago, such work existed only within Inuit communities. Let us hope that this future research will also conclude that the benefits of eating traditional food overcome the health risks for Indigenous people in Québec...

## UPCOMING RESEARCH!

A new Cree student at UQAT, Éliane Grant, recently began a master's project in Eeyou Istchee (Cree territory) integrating traditional ecological knowledge (TEK) on moose health to analyses of cortisol levels (the "stress hormone") in moose hair. This research is cosupervised by Nicole Fenton and Hugo Asselin and is part of a larger project aiming to evaluate the impacts of mining development on biodiversity in Cree territory.

To find out more about Éliane and her research project, consult Sophie-Anne Miller's news story at: <https://ici.radio-canada.ca/espaces-autochtones/1105870/eliane-grant-biologiste-nation-cree-pont-entre-communaut-es-autochtones-compagnies-minieres-waswanipi-nemaska-lithium>