



## Wapistan Project on Waswanipi Territory

Wildlife is at the heart of the traditional way of life and land use of the Cree. In a context where habitats are fragmented both by natural and increasing anthropogenic disturbances linked to resource exploitation industries, it is necessary for communities to be able to have tools to manage their territory. In 2016, the Wapistan project was born to answer this need, with the community's desire to increase its capacity to respond to future developments occurring on its territory. The first objective of the project was to develop a program with the Cree vision and that could be realized self-sufficiently by the community.

*Wapistan* means marten in Cree. The American marten was chosen as the species of interest for this program for two reasons. The first reason was because Waswanipi trappers found that there was a decline in the species' trapping success. Self-reporting data from the Cree Trappers Association corroborated this impression. The second reason was because of the marten's habitat preferences and the marten's sensitivity to its habitat fragmentation. The marten is considered as a bioindicator of the boreal forest fragmentation.

The objective of the program was to provide a land management tool to ensure that the planning of development activities consider traditional activities and the resources required to allow them. To be more precise, Wapistan project aimed at reaching the following objectives:

- Develop a meaningful database on marten to be able to provide recommendations during consultations with the government, development project promoters, industries, etc.
- Provide a scientific database in support of Cree knowledge.
- Promote Waswanipi's autonomy and independence in terms of managing economic development and land protection.

The monitoring was done by camera-trap installed on various traplines in the Waswanipi territory (*Eeyou istchee, Baie-James*) in sites which show a good quality habitat for the species. The Wapistan project stands out from conventional monitoring programs. From the outset, it was developed according to the Cree vision. It integrated the Cree knowledge of community members with the one of trappers and elders in the development of protocols and the implementation of field monitoring. Young Cree from Waswanipi have been trained where the tallymen and elders shared their knowledge as well as scientific researchers. The field work is now carried out by the trained youth of Waswanipi.

Throughout the years, some aspects were added to the project. As the marten depends on snow to complete its life cycle, it was natural to integrate the issue of climate change into the project. To this end, a weather station was purchased to collect local data on temperature, relative humidity, atmospheric pressure and precipitation. A device for characterizing the snowpack was also installed, consisting of snow rulers. In 2023, major forest fires have burnt a significant part of the Waswanipi territory. It was agreed to keep cameras at locations impacted by the fires to see if the presence of marten would be affected, as well as other mammal species.

The project is running since 2018, but it is necessary to increase and improve the database to have solid data to support a sound management of the territory.

**The aim for the future of the research project would be to:**

- monitor the presence of marten in sites that have good quality habitat for this species. With cameras, it is going to be possible to see if the presence decreases with years.
- see if in areas where there were fire forests, the marten stayed or left, and if it will recolonize eventually.
- integrate climate change in the analyses with the data from the various instruments put in place (the snow rulers, the temperature loggers, and the weather station) and existing available data. Create a data base with weather parameters.