

SUMMARY OF 2023 FOR THE NDAKINA OFFICE AND ENVIRONMENTAL OFFICES

Scientific Projects

More than 15 projects were carried out in 2023 by the Odanak and Wôlinak environmental offices, with support from the W8banaki's Ndakina Office.



2023 Harfang des neiges Award

The environmental offices received a medal from Minister Charette for the MELCCFP Harfang des neiges Award (in the "Regional Innovations" category). This award recognizes the contribution of individuals or organizations who have distinguished themselves through initiatives related to wildlife conservation, management and enhancement, and is one of the highest honors in the field in Quebec.



2023 Shoulder Lake

Our first edition of shoulder lake was held at Waban-Aki outfitter. Our teams prioritized 5 themes for future projects: land privatization and accessibility, the destruction of wetlands on the territory, black ash, environmental degradation due to industrial development and the lack of succession (hunting, fishing and gathering) to ensure food sovereignty.



Community activities

In 2023, the Odanak and Wôlinak environment offices and the Ndakina office were involved in over twenty educational, cultural, scientific and food-related activities.



Research Team

- Recruitment of Sigwanis, Kimmy, and Charlotte as research assistants to help us document the knowledge and sites that need protection in the Ndakina
- Success of the *Wlipogwat project: it's tasty!* (Podcast and book coming in the next few months)
- Five-year renewal of the hay-scented fern planting project
- The hunting and fishing committee and citizen meetings are becoming increasingly popular
- 10th anniversary of the Office and the creation of a wampum that solidifies the importance of our mission.

Archeology

- Completion of archaeological interventions and potential studies to document the archaeological heritage of the Nation in several regions of the Ndakina: Centre-du-Québec, Chaudière-Appalaches, and Estrie
- Engagement in activities with the youth of the Nation on the territory to introduce them to archaeological sites and the pottery of their ancestors
- Monitoring of erosion near archaeological sites on Alsig8ntegw (Saint-François River) and W8linaktegw (Bécancour River)
- Documentation of the ancestors' diet for the Wlipogwat project. Participation in the excavation school at the University of Montreal in Lennoxville.

General/positive benefits for the W8banaki Nation

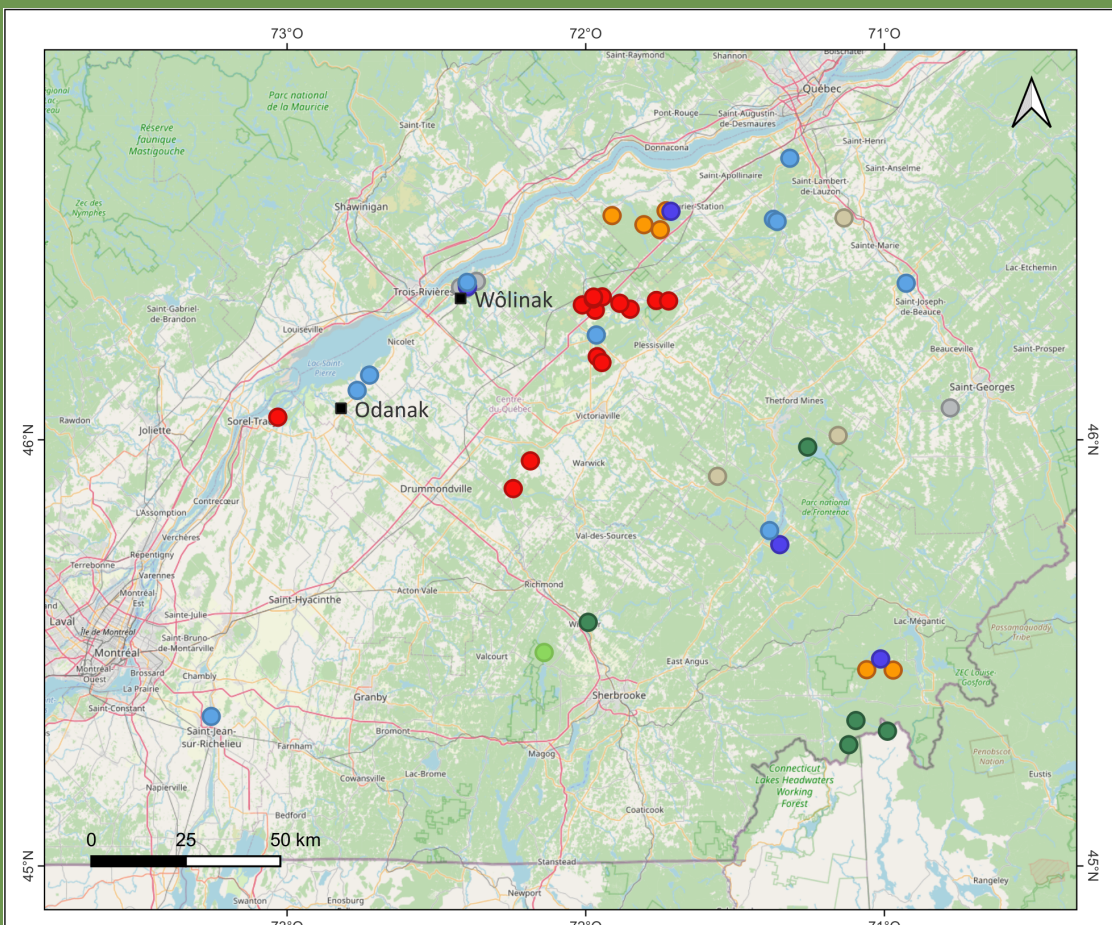
- Obtaining funding from Environment Canada to establish Abenaki conservation areas
- Establishment of long-term relationships with conservation organizations such as SNAP and Nature Conservancy of Canada (NCC) (Several projects are currently underway!)
- Securing grants for wind farms, UNDRIP, and Duty to Consult and Accommodate. Implementation of the Benefits and Opportunities Agreement (BOA) protocol
- Development and establishment of the community fisheries program

Territory Guardian team

- Hiring of 2 new guardians in June 2023: Jean-Guy Junior Landry, team leader of the guardians, and Maxime Gill-Desrochers
- Reuniting with former Abenaki guides at Mauricie National Park
- Three-year project for awareness on wildlife/flora/invasive species
- Participation in archaeological excavations
- Participation in scientific fishing with the Environmental Officers to collect fish for Wlipogwat
- Conducting fauna and flora assessments jointly with the Environmental Officers at SPIPB
- Scouting for moose at Zec Louise-Gosford for community hunting
- Participation in the revitalization Wigodi Project at Mont-Ham (workshops and other activities)
- Visiting and monitoring Abenaki archaeological sites
- Participation in harvesting black ash trees for basketry
- Involving the younger generation in traditional activities with knowledge bearers
- Managing and ensuring the proper functioning of territories used by members for hunting, fishing, and trapping
- Participation in agreements with Zecs, forestry companies, and the ministry for hunting, fishing, and trapping on the territory
- Establishing repatriation processes for burials, artifacts, and petroglyphs in archaeology
- Organizing initiation sessions for fishing/hunting/trapping/gathering/archaeology/canoeing, and other activities for the younger generation and members in connection with the territory.

CONSULTATIONS

In 2023, the team was contacted for over 200 consultations. A total of 389 hectares of wetlands were affected, mainly by industrial and cranberry projects.



Les consultations de l'année 2023

Légende

- Acériculture
- Cannebergière
- Conservation
- Réseau électrique / éoliens
- Industrie
- Infrastructure
- Carrière / sablière
- Récréotourisme

Projection: Pseudo-Mercator
Système de référence géodésique: WGS84

Sources:
Consultations, Bureau du Ndakina, 2024
Fond de carte, OpenStreetMap, 2024

Production: Bureau du Ndakina
Mise à jour: 2024-03-21



Bureau du
Ndakina

W8banaki

- **Bats:** The team has worked on several projects aimed at monitoring and protecting bats, the majority of which are threatened throughout the Ndakina (**only** the big brown bat is not currently endangered among the 8 species). The team conducted inventories using listening routes, fixed stations in forests, and participated in a study on the impact of wind farms on populations. The Environmental Bureau monitored bat **maternity** colonies during the summer period and searched for **hibernacula** throughout the territory to ensure monitoring and identify critical habitats for these species. A leaflet on hibernacula and a guide on cohabitation with bats are available at our office if you would like more information on the subject. The team also collected bat guano (bat feces) from a maternity colony for analysis, and **several pesticides** were detected! This study was conducted in partnership with the MELCCFP.
- **W8banaki monitoring of environmental mercury levels on the Ndakina:** This project aimed to determine the amount of mercury present in fish consumed by members of the Nation and to produce data that will be used by community stakeholders for comparison with consumption guidelines established for mercury. Through the participation of several members, including the fishing tournament, scientific fishing activities, and teams from the BEW, BETO, and Ndakina, numerous fish tissue samples were collected. Thank you to all who participated! Analysis of the samples is currently underway. Additionally, several other metals and beneficial nutrients will be analyzed (let's also focus on the positive!). Students from Kiuna will have the opportunity to visit ecotoxicology laboratories at the University of Montreal. The next tournament will take place in W8linak in June 2024, more details to come!
- **Fishing:** The BEW has published a fisherman's logbook in both paper and digital formats (in collaboration with the University of Laval). The data collected by the BEW (which will remain confidential) will provide us with a **better understanding of the state of aquatic communities** in the waters of Ndakina and enable us to target the most important areas for this traditional activity. The logbook also allows members to track their catches throughout the season. For those who have not yet installed it on their cell phones:

Android: [Fisherman's logbook – Google Play](#)

Apple: [Abenaki fishing log on the App Store \(apple.com\)](#)



- **Community Gardens:** A seedling planting activity was carried out in April. Residents of W8linak had the opportunity to garden last summer in community bins. The season kicked off with an Agro-Passion workshop focusing on the star of our gardens: the tomato! The team is also collaborating with a student researcher from the University of Vermont to analyze the soil microbiome in the presence of the three sisters.
- **Residual Materials Management (RMM):** Through popularization and awareness-raising activities, the BEW promotes the implementation of sustainable habits and measures within the community. We have established a sustainable development committee with the Council aimed at improving waste management in the community. To better tailor the measures, we have characterized waste in three community establishments. The composter and hazardous domestic waste management site are still operational, with over **2** tons of organic matter composted in 2023! Improved signage and new sorting stations have been added, and members have been invited to a conference on food waste.
- **Striped bass:** The BETO and BEW teams spent a day in the field this winter attempting to conduct telemetry tracking and locate the wintering areas of striped bass in Nebesek (Lake Saint-Pierre). This is a continuation of our efforts to identify the essential habitats of this reintroduced population, particularly in the archipelago sector of the Sorel Islands.
- **Duck banding:** Luc G. Nolett (BETO) and Shany Rousseau (BEW) were trained by Mr. Paul Messier of the Société d'Aménagement de la Baie Lavallière - Maison du Marais with the aim of operating a waterfowl banding station as part of the Canadian Wildlife Service's monitoring program. This program aims to better understand the distribution, movements, and abundances of these birds in order to design management and conservation strategies for this resource. In 2024, our newly trained banders will be able to manage a brand new banding station in Baie-du-Febvre operated entirely by the W8banaki Nation!
- **Others:** Evelyne (BETO) led us in a medicinal plant gathering activity and the making of natural products. The team expanded in 2023 with the arrival of Laurie Pelletier (project manager), Laury Saint-Jean (technician), and Georges-Étienne Charette (project manager).

American Eel:

- The BETO conducted a detailed characterization of **19** dams and weirs in the Centre-du-Québec region on the main rivers (Bécancour, Saint-François, Nicolet, Gentilly) to better understand their impact on the migration of the American eel. The American eel is a fish that spends its life in freshwater and returns to the sea to reproduce. Typically, eels will migrate upstream as far as possible where they will spend several years developing. Due to various factors, including habitat fragmentation by dams, the American eel is declining throughout its range. **28** environmental DNA samplings (water sampling to analyze the presence of eel DNA) were conducted at **14** sites to better understand the distribution of eels. Their presence was noted at **5** locations. A better understanding of eel fishing techniques was acquired in this first year of the project by training in various methods of capturing this species. The information gathered in this project will contribute to the conservation and recovery of the American eel in the Centre-du-Québec region.

Bank swallow:

- Since 2021, the BETO and the BEW have been conducting inventories of bank swallow colonies along the rivers of Ndakina. The bank swallow is a small insectivorous bird in peril that congregates in large colonies along vertical sand walls, where pairs dig small tunnels to nest. Our work has led to the discovery and characterization of over **100** colonies, the vast majority of which were unknown to federal authorities managing the species. These efforts have also established a new pan-Canadian scientific partnership with Environment and Climate Change Canada, where the BETO assists in studying the local and migratory movements of the species using telemetry tracking on birds fitted with transmitters. In addition to direct benefits for this endangered species, this project has allowed our team to rediscover and navigate several rivers of Ndakina by canoe, thus gaining knowledge of access points and risks associated with them.

Habitat development for small game:

- Gradually, the dense resinous vegetation is reclaiming the first developed sector, and now traces of hares are visible. The valuable wood has been extracted and taken to the eco-center. The remainder is left in place and will serve as occasional food refuge for several species.

Yellow perch - Marsh #2:

- In order to increase the habitat area for yellow perch, we implemented a water level management system in Odanak's Marsh #2. 2023 marked the first year of operation for this structure. It has improved the inundation of the marsh, thereby increasing the habitat area available for fish residing in this environment. Monitoring the migration of yellow perch in the coming years will allow us to validate the benefits of installing this structure.

Black Ash:

- In collaboration with the Ndakina Bureau and the BEW, the teams have been exploring wooded swamps in Ndakina for the third year with the aim of cataloging stands of black ash. A total of **72** stands within 19 visited zones have been identified. In 2022 and 2023, ash borer traps were set up in stands to check for the presence of the emerald ash borer, which was confirmed in almost all stands. The project will continue in 2024 to further document the inventoried stands, attempt methods to counter the emerald ash borer, conduct experimental plantings, and harvest ash in large quantities.

Double-crested cormorants:

- The objective of the project was to encourage these migratory birds to migrate more quickly, thus limiting the time spent feeding at Lake Saint-Pierre. The anti-cormorant development on the 11 islands was **successful in 2023**. The number of cormorants present at Lake Saint-Pierre was kept **below 1000 individuals** for the entire autumn migration period, compared to daily peaks of 5000 individuals before the developments. Comparing with the data from 2022, this represents **approximately 62 tons** of fish that were subtracted from their diet for the entire targeted period.

Community-environmental:

- Installation of **6** dual charging stations for electric vehicles in the community
- Assessment of the state of diseased ash trees in the community, mainly in residential areas, and development of a turnkey approach, participatory and adapted to the condition of each ash tree and the wishes of the owners
- Partial delineation of anthropic parcels of black ash trees in the community subject to a potential study for future projects
- Experimental project for covering invasive exotic species (IES) at the eco-center on nearly 3000 m².

RMM:

- In 2023, **2395** visits were recorded, resulting in the disposal of **195** tonnes of CRD (Construction, Renovation, and Demolition) waste, wood, and cardboard, **20** tonnes of metal, **2.2** tonnes of hazardous household waste, **278** mattresses and sofas, **5** tonnes of electronic devices, and numerous refrigerants and tires to a specialized recycler. Additionally, 400 m³ of vegetation were brought in by visitors
- Self-financed initiative for the reuse of materials (soil, sand, recycled gravel) from community projects, for members/residents, and for community projects

New project: Adapting to climate change:

- The Abenaki Council of Odanak has adopted a climate change adaptation and energy transition program.

Others:

- Cathy Duguay joined the team in April 2023 as a project manager, primarily supporting consultations and acting as a liaison officer during Stéphanie Harnois's maternity leave.

THE OFFICES IN ACTION



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