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Human Nature Projects Ontario Newsletter

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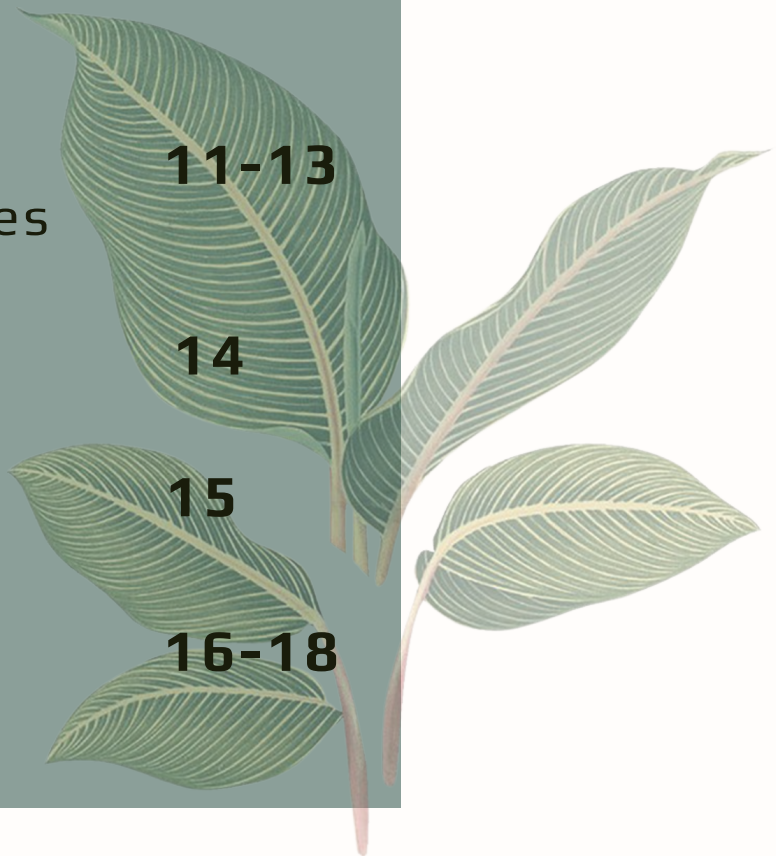
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THE LACK OF CLEAN, SAFE DRINKING WATER IN CANADIAN INDIGENOUS COMMUNITIES



Figure 1. Neskantaga First Nation resident holding sign after evacuated over tainted water (The Canadian Press, 2020).

INTRODUCTION

Recognized by the United Nations, water and sanitation are fundamental human rights. Despite Canada having the third-largest freshwater reserves in the world, many Indigenous communities lack access to clean, safe drinking water which is an issue that has persisted for centuries (The Indigenous Foundation, n.d.). Drinking water advisories are issued in Canada to inform people of unsafe, contaminated drinking water. These are sent out when the water treatment system isn't working properly or when viruses, bacteria, parasites, and chemical contaminants in the water are causing health issues. Numerous Indigenous peoples still lack access to safe drinking water today, violating the internationally recognized human right to water (Canadian Union of Public Employees, 2022).

HOW ARE THEY CAUSED

The Indian Act was first introduced by the federal government in 1876. According to the Act, the government is in charge of constructing and maintaining infrastructure on First Nation reservations, including water treatment facilities and pipes that transport water to dwellings and other structures. Since then, First Nation reserves, including their need for water infrastructure, have been chronically underfunded by the federal government (Canadian Union of Public Employees, 2022). Indigenous peoples' access to clean water has been impacted by governments in many different ways. Indigenous peoples were forcibly relocated to reserves, which were occasionally extremely far from their traditional homelands. Due to the unavailability of clean water locally, communities had to travel considerable distances to obtain it especially with the lack of necessary tools or transportation to assure the safety of water systems. Water sources have also been impacted by the lack of action by the government concerning pollution and industrial incidents brought on by corporations. Additionally, Indigenous peoples are frequently disregarded when it comes to decision-making or when they encounter issues inside their own communities. They are frequently encountered with broken promises when they voice their concerns about the lack of access to clean water (The Indigenous Foundation, n.d.).

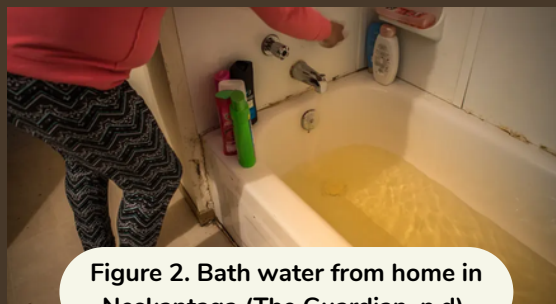


Figure 2. Bath water from home in Neskantaga (The Guardian, n.d).

THE LACK OF CLEAN, SAFE DRINKING WATER IN CANADIAN INDIGENOUS COMMUNITIES



Figure 3. Residents filling up water buckets (BBC News, n.d).

WHAT COMMUNITIES ARE AFFECTED

It is difficult to determine which or how many communities are affected by a lack of access to safe drinking water, but during the past several centuries, the majority of Indigenous communities have experienced troubles with their access to safe drinking water (Canadian Union of Public Employees, 2022). The Indigenous communities to whom the federal government is legally and financially obligated to provide clean drinking water are limited. Many Indigenous communities are excluded from these particular efforts. The majority of Métis, Inuit, all communities north of the 60th parallel, the seven members of the Saskatoon Tribal Council, First Nation communities under short-term water advisories, First Nation communities using wells and private water systems and First Nation reserves in British Columbia are all not included in federal tracking statistics, which means that they do not accurately reflect the situation (Canadian Union of Public Employees, 2022).

THE EFFECTS ON INDIGENOUS HUMAN HEALTH AND THE ENVIRONMENT

Clean water is important due to the sorts of toxins present in drinking water that are frequently linked to cancer, gastrointestinal problems, skin infections like psoriasis and eczema, and other medical conditions. Since it is difficult to live under a water advisory for years, some individuals drink the water without boiling it or purifying it in other ways, putting themselves at danger of exposure to toxins (The Indigenous Foundation, n.d.). Additionally, it can be quite expensive to develop or repair the systems. Indigenous communities are negatively impacted by contaminated water, but the surrounding environment is also negatively impacted. The general quality of life is consequently reduced. Indigenous people's access to traditional food systems and cultural rights is restricted by the lack of clean water, affecting the spiritual significance and value of water. When water is contaminated, it affects rituals, traditional fishing, hunting methods, as well as methods of teaching children and disseminating traditional knowledge (The Indigenous Foundation, n.d.).



YOUTH ENVIRONMENTAL ADVOCACY FELLOWSHIP

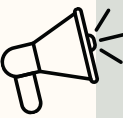


What is it?

The **Youth Environmental Advocacy Fellowship** is a **transformative program developed by Human Nature Projects Ontario to equip students with the knowledge and skills to make a tangible impact in the lives of Indigenous Canadian people and communities.**

Participants will:

- learn about the disparities in the health of Indigenous Canadian communities
- learn about how environmental issues can exacerbate these discrepancies due to inadequate governmental action
- develop innovative and sustainable policy ideas becoming powerful advocates for positive change for indigenous health and the environment



Why is it Important?

- helping students develop valuable research and presentation skills
- **uplift Indigenous voices that are often muffled in environmental discussions**
- aiming to help acknowledge and solve issues faced by Indigenous communities
- one of a kind, being the **only youth initiative in the GTA advancing education and advocacy regarding health, environmental issues, and sustainable policy development**
- create a generation of youth leaders who actively contribute to positive change for Indigenous communities and the environment.



YOUTH ENVIRONMENTAL ADVOCACY FELLOWSHIP



The Fellowship Entails:

- **Six days of IN-PERSON programming (Monday, August 21st - Saturday, August 26th) for youth aged 14-22 at Maria A. Shchuka Library (Meeting Room A) located at 1745 Eglinton Ave W, York, ON M6E 2H4.**
- **The times for each day are from 9:00 am to 2:00 pm (August 21st-25th) and 9:00 am to 4:00 pm (August 26th).**
- **Important Dates: July 7th to August 1st - Apply for fellowship by filling out the written application linked on page 6, August 1st at 11:59 pm EST - Application deadline, August 5th & 6th - virtual interview, August 7th - tentative cohort for the 2023 fellowship will be announced via email and asked to pay the \$30 admission fee.**
- **Research + learn about the health and environmental issues of Indigenous communities, propose + pitch novel and sustainable solution to an ongoing environmental issue within a Canadian Indigenous community to a panel of judges in an elevator pitch competition.**

Eligibility Criteria:

- Be a high school or post-secondary student living in the Greater Toronto Area.
- Be able to commute to and from Maria A. Shchuka Library for the duration of the fellowship.
- Successfully make it through both stages of recruitment (Written Application and Virtual Interview) and pay a \$30 admission fee once selected.





YOUTH ENVIRONMENTAL ADVOCACY FELLOWSHIP

Fellowship Itinerary

Day 1

- Introduction to HNP
- Team formations
- Fellowship briefing
- Project deliverables



Day 2

- Workshop: How to Critique Papers
- Discussion: Reading Articles & Choosing a Topic
- Workshop: Writing an Introduction & Background
- Team formal report writing!

Day 3

- Workshop: Referencing and Citing Articles
- Workshop: How to do an elevator pitch
- Discussion: Propose an idea or policy that can combat environmental issues

Day 4

- Continuation: Drafting a new policy/idea
- Workshop: Public Speaking & Presentation Skills
- Team Report Work Period



Day 5

- Team Presentations Work Period
- Practice Presentations



Day 6

- Wrap-up presentations
- Practice final pitch
- Final Pitch Competition (Judged by external panelists)
- Final Wrap-Up Ceremony



Discussion Topics Include:

- Lack of clean drinking water in Indigenous communities
- Decreased air quality in Indigenous communities
- Increased food insecurity in Indigenous communities
- Increased permafrost degradation in Indigenous communities
- Increased prevalence and impact of natural hazards
- Inadequate sewage and waste management in Indigenous communities



APPLY NOW!

THE SIOUX LOOKOUT AND AAMJIWNAANG REGIONS: THE BATTLE WITH AIR QUALITY



Figure 1. Sioux Lookout declare a state of emergency (NetNewsLedger, 2019).

INTRODUCTION

As forest fires continue to blaze across Canada, it is the Indigenous populations of Canada that are most affected with air pollution. With many Indigenous communities already under advisories for water pollution and contamination, forest fires affect the air quality within Indigenous communities by creating smog and intoxicating the air with harmful chemicals. Forest fires affect Indigenous communities the most because Indigenous people live mostly around areas with high amounts of forestry and wildlife. The indigenous communities that are affected by poor air quality through forest fires, chemical toxins, tobacco and population density include the Sioux Lookout Region and the Aamjiwnaang Indigenous communities.

THE SIOUX LOOKOUT REGION

Sioux Lookout is a small town in Northwestern Ontario, famously known for their forestry, healthcare, tourism, aviation and the Canadian National Railway (Sioux Lookout, n.d.). Due to industrialization and the recent forest fires, the region suffers from intense air pollution. A recent study done by Health Canada concluded that 56% of Sioux Lookout households were exposed to more than 1000 ppm of CO₂ (carbon dioxide), exceeding the advised levels. About 20% out of the 56%, scored CO₂ levels between 1500-2500 ppm (Kovesi et al., 2022). The Government of Canada deduces the deteriorating air quality to factors of high occupancy, inadequate ventilation and commercial tobacco use (Government of Canada, 2022). Although these factors may contribute to poor indoor air quality, forest fires are the primary cause of current poor outdoor air quality in Canada. Wildfires near Lake Winnipeg may pass Southward into Sioux Falls, contributing to the excess CO₂ levels. The excess CO₂ levels are affecting the Sioux Lookout youth, with respiratory problems such as asthma, bronchitis and pneumonia continuing to increase in rates (Government of Canada, 2022). Poor indoor and outdoor air quality is heavily linked to these respiratory issues.

THE SIOUX LOOKOUT AND AAMJIWNAANG REGIONS: THE BATTLE WITH AIR QUALITY

THE REGION OF AAMJIWNAANG

The Ammijiwnaang Indigenous community stands on the St. Clair River of Sarnia, Ontario, with a population of about 2500 Chippewa Indigenous peoples (Aamjiwnaang First Nation, 2023). While also susceptible to forest fires, the Aamjiwnaang First Nation stands near “Chemical Valley,” an area consisting of 40% of the total petrochemical industry in Canada (Vice Staff, 2013). Residential areas built around chemical plants are highly susceptible to chemical leaks that infiltrate air, water and soil quality. The Aamijiwnaang Indigenous community are continuing to experience the effects of poor air quality, with skyrocketing respiratory problems and hospitalizations in children (Kovesi et al., 2022). Chemical pollutants are also responsible for birth defects, miscarriages, respiratory infections and neurological problems (Calvert, 2007). Generally, poor air quality and chemical toxins are heavily linked to infertility, childbirth complications, and stillbirths (European Fund for the Balkans, 2022).

PREVENTIONS AND PROTESTS

The Government of Canada ensures to provide Indigenous communities with relief and assistance. For the Sioux Lookout community, the Government of Canada has focused on improving air quality by providing resources to residents such as installing and maintaining ventilators for mold prevention. For outdoor air quality, the required tools are still unknown, as Indigenous communities continue to suffer with excess smog and pollutants. For the Aamijiwnaang community, protests and government defiance have reaped environmental results in the past. An energy company named Suncor planned to build Canada’s largest ethanol plant near the Aamjiwnaang Indigenous community in 2002. The plan was abolished after Sarnia residents and Aamjiwnaang community members organized petitions, protests and blockades (CBC, 2021). Suncor ended up relocating their efforts however the impact of the Aamjiwnaang Indigenous community serves as a testament to the effects of environmental protests and regulations.



Figure 2. Protesters against Suncor (Spirit of the Sun, 2023).

EXECUTIVE OF THE MONTH

CONGRATS

Danya Shafi

Hello! I am Danya Shafi, a grade 11 student at John Fraser Secondary School and I am also one of the Events Co-Director at HNP. I like to spend most of my free time in or around nature and I love gardening. I joined HNP to learn about how I can incorporate sustainable practices into my life and also create tangible change in my community. I love being a part of the work that HNP does and I hope they continue to leave a positive impact on the environment!

FOOD INSECURITY IN CANADIAN INDIGENOUS COMMUNITIES



FOOD INSECURITY

Food, a basic necessity in every organisms daily lives for survival but sadly is not accessed equally by all individuals on this planet. Many countries across the world are reported to have citizens who are not provided adequate nutrition needed to survive (United Nation, n.d). Amongst seven of the world's advanced economies also known as G7, Canada is one of them. Although Canada is a country with high economic status, indigenous communities are continuing to struggle with food insecurity more severely compared to non-indigenous communities (Philipp, 2021).

Food insecurity, is defined as "Household food insecurity is the inadequate or insecure access to food due to financial constraints" (University of Toronto, n.d). Additional hurdles causing food insecurity include economic disadvantages, high transportation costs, limited infrastructure, historical injustices due to colonialism and environmental concerns (Alabi and Robin, 2022). Canadian Indigenous communities affected by food insecurity include Inuit, Métis, First Nations living on- and off-reserve, Attawapiskat First Nation, Six Nations First Nations, and Neskantaga First Nation.

ATTAWAPISKAT FIRST NATION, FOOD INSECURITY AND HEALTH CONCERNS

The Attawapiskat First Nation is an isolated First Nation located in Kenora District in northern Ontario, Canada, by the Attawapiskat River, 5 kilometers from the James Bay coastline (National Ministries International, 2022). Attawapiskat First Nation has over 2800 members, with only 1549 living on-reserve. A local author named Franks shared his experience in Attawapiskat First Nation in 2016 related to food insecurity. Franks stated the skyrocketing price of food in this Northern region. For instance, a case of water bottles which cost \$2.99 in Muskota, costs \$42.00 in Attawapiskat (Truax, 2018). The reason behind this excessive price for food is because Attawapiskat is a remote village usually reached by a plane or icy roads during the colder months which limits transportation options. Community's traditional food supply is heavily based on fishing but due to climate change, the changes in ice patterns and water temperatures has decreased the fish population which in turn lead to food insecurity. The overly priced nutritious food has led the people of Attawapiskat to depend on less costly but highly processed foods detrimental to human health including diabetes and obesity. The rate of diabetes is five times higher than the national average (Truax, 2018).



Figure 1. The entire vegetable section for 1500 to 2000 people in Attawapiskat (Truax, 2018).

FOOD INSECURITY IN CANADIAN INDIGENOUS COMMUNITIES



SIX NATIONS FIRST NATIONS, FOOD INSECURITY AND HEALTH CONCERNS

Six Nations of the Grand River (SNGR), located 20 kilometers southwest of Hamilton, Southern Ontario, with an area of 50,000 acres, is Canada's largest First Nations reserve (Six Nations of the Grand River, 2023). The reserve consists of six tribes: Mohawk, Oneida, Cayuga, Seneca, Onondaga and Tuscarora. Currently SNGR land includes about less than 5% of the land promised in the 1700's by the Treaty of Haldimand leading to more land loss as a result of colonization and environmental issues, including agricultural lands, ultimately causing food insecurity. Losing land to colonization has greatly impacted this community's ways of obtaining their traditional food sources such as through hunting, and fishing. Lands lost through environmental issues such as pollution, deforestation and contaminated water lead to decreased access to wholesome food sources. In this nation, there's an increased prevalence of chronic illnesses including diabetes, heart disease, and obesity due to the more affordable, yet, highly processed foods available (Six Nations of the Grand River, 2023).

NESKANTAGA FIRST NATION, FOOD INSECURITY AND HEALTH CONCERNS

Neskantaga First Nation is an Ojibwe community located 436 kilometers northeast of Thunder Bay and 180 kilometers northeast of Pickle Lake in Ontario, Canada (Neskantaga First Nation, 2023). Neskantaga First Nation has over 400 members with 300 people living on-reserve. Neskantaga is located in a remote area, consisting of limited infrastructure and high transportation costs, which are all leading causes of food insecurity. This community relies heavily on transported food which is usually expensive but also irregular. Chief Wayne Moonias mentioned the unreasonable prices of food such as \$40 to \$70 for a 10-kilogram bag of flour and \$30 for sugar (Law, 2023). Traditional foods are now a luxury to Neskantaga First Nations. Sturgeon remains a critical part of the diet for people living in the Neskantaga First Nation as food from grocery stores are beyond budget. David Paul Achneepineskum, a chief executive officer of Matawa First Nations Management spoke on the disruption of Indigenous diets due to the reliance on processed food. Although inexpensive and easily accessible, many people in this region are also facing health issues such as cancer and heart disease due to the lack of nutritious foods.



Figure 2. A tin of coffee sells for \$32.79 in Neskantaga First Nation (Law, 2023).

FOOD INSECURITY IN CANADIAN INDIGENOUS COMMUNITIES

FOOD INSECURITY AND INDIGENOUS MENTAL HEALTH

Several studies have linked household food insecurity to psychological distress in many Indigenous communities. A study published by Cambridge University Press measured the association between household food insecurity and psychological distress in adolescents of Inuit communities in Northern Quebec, concurrently and over time from childhood to adolescence (Laplante et al., 2020). This study used behaviors such as anxiety, withdrawn attitude, somatic complaints and depression as indicators of psychological distress in adolescents. As well, a longitudinal assessment of household food insecurity from childhood to adolescents. Concurrent severe household insecurity in adolescents resulted in higher measures of psychological distress such as depression and withdrawn attitude. Persistent household food insecurity (childhood to adolescents) is associated with higher levels of adolescent depression and anxiety (Laplante et al., 2020).

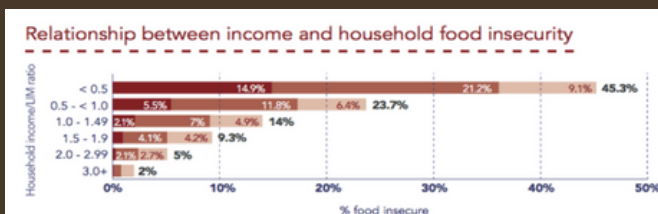


Figure 3. Relationship between income and household food insecurity (Statistics Canada, 2012).

POSSIBLE ACTIONS FOR BETTER ACCESS TO FOOD

Improving Hunting Capacities

- Increase subsidies to ensure more equipment is available to be used for hunting
- Train younger generations in traditional hunting skills through programs

Improving Processing and Distribution Capacity

- Investing in community infrastructure
- Extend funding in Indigenous regions
- Create stronger connections between local processors and hunters

Improving Awareness About Traditional Foods

- Promote the market of local foods
- Invest in programs that provide Indigenous food exposure at a younger age (Philipp, 2021)



Figure 4. Traditional foods hunted/foraged in Canadian Indigenous Communities (Food For Thought, 2023).



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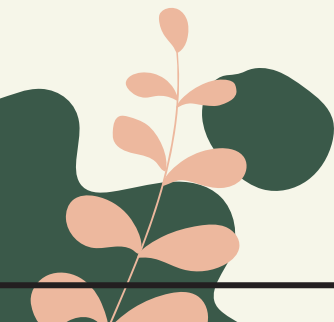
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