



FOOD: Insects for dinner?

By Lynn Moreau

Does the idea of eating insects turn you off? Eating insects has a negative stigma in North America, but the reality is that insects are consumed in many parts of the world by over two billion people (Aspire, 2022). Insects are the wave of the future when it comes to food.

Insect farming has a low carbon footprint, and represents a new business opportunity in North America. Insects can be ground into a powder and added into protein drinks, can be used to feed other animals such as fish and chickens, and can be used in the pet food industry. There are a wide array of insects that can be farmed for a wide variety of purposes.

Insects do present a sustainable business opportunity for farmers and one example of this can be found in London, Ontario, where Aspire Food Group launched the world's largest cricket farm in October 2020. The facility hopes to produce 13 million kilograms of cricket protein annually, selling mostly to the pet food market. The federal government has invested 8.5 million in the facility and started production in July.

The most popular insects that are kept by insect farmers include crickets, Cochlineal beetles, cockroaches, silkworms (used in silk production), waxworms, mealworms and buffalo-worms, lac insects, crickets and black soldier-fly larvae.

Cochlineal beetles are used to produce red dye, which is used in many food products. Cockroaches are eaten in some countries. Silkworms are used to produce silk. Lac insects produce a resin used in wood stains, nail polish and other products. Crickets, worms and black soldier-fly are used in chicken feed, fish feed and pet foods, and can also be ground into a powder.

Raising insects has a number of benefits over other

types of farms. While raising livestock displaces wildlife and can destroy natural ecosystems while done improperly, raising insects require less land and resources. They also produce less waste than raising mammals and birds.

Calorically, insects are high in protein and have a high amount of unsaturated fatty acids. They are also high in dietary fibre.

Insects have a very low feed ratio. It takes 2 kg of feed to produce 1 kg of edible insects, whereas chickens require about two times as much and cows require about 12 times as much feed. Insects grow faster, and farming them can help to alleviate pressures caused by climate change. It is very low cost to start up an insect farm, and such a farm requires very little space. Insect farming also does not cause any major impacts to water quality, unlike traditional farms which can contribute to phosphorous loading of lakes and rivers and cause pesticide contamination and soil degradation.

Raising insects does have some pitfalls, however. Insects can bio-accumulate chemicals and because they can consume plants that are toxic to humans, humans can receive toxic doses of chemicals if the insects are fed an improper diet. Insects are more prone to spoilage but can be heat-treated and dried prior to consumption.

Evan Fraser, Director of the The Arrell Food Institute at the University of Guelph endorses insect farming and states that while there are a billion and a half cows on the planet, this number is going to have to come down to meet sustainability goals. Protein and livestock agriculture is a big contributor to greenhouse gas production. Insect farming is going to find its way into the mainstream in the future.

For more information visit <https://www.cbc.ca/news/canada/london/cricket-farm-london-ontario-1.6506606>



Odawa Island Farms (Sheshegwaning First Nation)



RESOURCES: Agriculture Programs



ONTARIO AGRI-CAREERS SUPPORT INITIATIVE

Eligible food businesses with more than 50 employees can apply, This may include projects such as:

- addressing labour challenges based on employee needs for those specific business(es) at a community level;
- providing critical data that may be specific to the food processing industry; and
- encouraging innovative solutions to the labour shortage

For more information visit: <https://adaptcouncil.org/program/oacsi>



FIRST NATIONS STARTUP BUSINESS AND EXPANSION PROGRAM

IAPO is pleased to offer the First Nations Business Start Up and Expansion Program financing for First Nation entrepreneurs, businesses & economic development corporations.

Areas of financing include:

- Seed Capital
- Start-up and Early Stage Loans
- Expansion Capital
- Business Acquisition

Qualified businesses are eligible for funding of up to \$100,000 and grants of up to \$10,000. To qualify applicants must demonstrate economic viability, as well as, the need for FNBSEP funding. IAPO will be accepting FNBSEP applications until December 31, 2022.

For more information visit: <http://indianag.on.ca/>

BEGINNING FARMER'S PROGRAM

IAPO is pleased to announce the 2022 Beginning Farmers Program. The program provides support in two key areas:

- Start up Financing
- Workshops and Training

Eligible participants will be able to access up to \$50,000 in financing and 30% in grants for their new farm business. Applications will be accepted until September 30, 2022.

<http://indianag.on.ca/>

Mississaugi #8 First Nation installs Green Iglu

Mississaugi #8 First Nation has recently installed a Green Iglu in the community. The greenhouse will provide fresh food for the community year-round! The Green Iglu will produce approximately 40,000 servings of produce a year. A portion of this will be donated to food security and the balance sold to food vendors regionally. Strengthening Food Sovereignty in Remote and Indigenous Communities

Imagine yourself in Canada's cold, harsh winter, where fresh food is scarce during many months of the year. Now imagine yourself walking out of the cold into a lush Growing Dome oasis where the air is warm and the fresh food is flourishing. It almost seems impossible, right? Well, it's not! The not-for-profit Green Iglu, formerly known as Growing North, is making the impossible possible by bringing fresh food sources to communities across Canada. To find out more about the Green Iglu, see the link: <https://growingspaces.com/green-iglu/>



FOOD SOVEREIGNTY: The future of food

The Arrell Food Institute is located at the University of Guelph and has a mission of improving global food systems. The Institute brings people together for training and education, and researches the impact of our food system on the environment. At the Institute, new ways of meeting the needs of earth's growing population are examined and research is conducted to reduce the impact of

the food system on our environment, while enhancing food security and sovereignty. Some topics being looked at by the Institute include sustainable packaging, food accessibility and food's role in culture as a source of unity and conflict.

We are currently in the midst of a digital agricultural revolution and the Institute examines the impact of new food innovations and technology on

jobs and communities.

The Arrell Food Institute holds a yearly summit and in June of 2022 more than 300 delegates participated in the summit. This year's topics included discussions on food sovereignty, the future of protein, and the current food system transformation that is taking place; a shift from industrial farming to more modern, technology based farming solutions.



APPLY AUGUST 3-17

MORE INFO AT [OSCIA.org](https://www.oscia.org)

CAPTURE CARBON

NEW cost-sharing funding available to establish rotational grazing systems.

Agriculture and Agri-Food Canada / Agriculture et Agroalimentaire Canada

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EVENTS

ANISHINABEK NATION MINING ROUND TABLES

Sept 13: Lake Huron Region
Sept 22: Southeast/Southwest
Sept 27: Northern Superior

EQUIPMENT AND SUPPLIES FOR SALE

Used 2-Frame Honey Extractor for Sale Call Mike Webster
705-380-4661

JOB OPPORTUNITIES

CARGILL: Currently recruiting for an open position, Aquaculture Sales Consultant. Visit: <https://careers.cargill.com/search-jobs/212993/23251/1>



KIIN MIINWAA ENDADIZIWINAN: LANDS & RESOURCES

OVERVIEW

The Lands and Resources Department was established within the Anishinabek Nation in the spring of 2007. Currently, there are four program areas with staffing capabilities. These include: Water Resources, Minerals and Mining, Trapping, and Canada Ontario Resource Development Agreement.

MISSION

The Lands and Resources mission is to foster a better quality of life by ensuring access to natural resources by supporting the goals, values and aspirations of the Anishinabek Nation.

GUIDING PRINCIPLES/CAPACITY BUILDING

By creating opportunities our communities are empowered to increase the natural, technical and financial capacity derived and generated from our lands and natural resources."

Jurisdiction and Treaty Rights - "by building and preserving Anishinabek laws within our territories, communities can continue to assert and exercise jurisdiction, implementing ownership of lands, water and resources."

Access to Lands and Resources - "our communities are strengthened by continuous advocacy efforts to increase access to lands and resources."

<https://www.anishinabek.ca/departments/land-and-resources/>

MDAAMIIN GIIZIS (CORN MOON) – AUGUST

The ninth moon of Creation is the Corn Moon, during which time we learn about the cycle of life. Each cob of corn has thirteen rows of multicoloured seeds which represent all the spirits waiting to begin their Earth Walk. These will be the future generations for whom we must prepare.



LYNN MOREAU is a Lands and Resources Program Coordinator with the Anishinabek Nation where she is responsible for the Agriculture Portfolio. Originally from Callander, Ontario, Lynn now lives in Bonfield where she is co-owner of Green Legacy Farm with her husband Dean. Lynn holds an Environmental Science degree from Trent University and a Fish and Wildlife Technician Diploma from Sault College. Lynn can assist with funding application processes and has agricultural experience in vegetable and perennial growing, chicken farming, maple syrup production and aquaculture.

CALLOUT FOR YOUTH

Seeking Anishinabek
Nation youth from each
community to get involved
in helping to plan the
Youth Forum taking place
in January.

The Agriculture Program is
seeking interested youth
from each community
to participate in a Youth
planning session for the
Youth Forum scheduled for
January 2023.



Follow us!



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