



FOOD SECURITY: Raising Rabbits

By Lynn Moreau

Rabbits can be cute pets, but they can also be excellent animals to enhance your local food security through the production of meat. They may seem small, but because they reproduce so quickly, one rabbit can give anywhere from 125-250 pounds of meat per year (depending on how frequently the doe is bred and how many kits per litter.) A rabbit's gestation period is only 30 days and an average of six kits are born per litter. This means approximately 72 rabbits can be produced per pair, per year if the doe is bred on a continual basis.

The ideal butchering age for rabbits is around 8 weeks of age. Beyond this age, the meat becomes tougher. Some rabbit breeds are much larger than others and make for better meat production. These breeds include the New Zealand, American, Californian, Californian, Palomino, and American Chinchilla.

Rabbits can be raised very easily and inexpensively. They require a hutch or shelter, a cool, shady location, regular feeding and watering, and weekly cleaning of the hutch. Feed for rabbits can include rabbit pellets, hay, vegetables and vegetable trimmings, garden leftovers and fresh grass. They require a piece of wood or something to knaw on to keep their teeth filed down. Rabbits can be raised in a small wooden structure called a tractor and moved on a daily basis to provide the animals with fresh grass. Rabbit manure is an excellent garden fertilizer.

Breeding takes place quickly in rabbits and males and females must be kept separately to prevent them from breeding during unwanted times.

It will normally take a young rabbit one to two pregnancies to figure out how to keep her babies alive. Prior to delivery, the female rabbit will pull out the fur on her underside to prepare a nest for the kits.

The rabbit has many useful by-products as well. Rabbit fur can be used as clothing, bedding, stuffing and felt. Blankets and sheets can be made from spun fur. The brains of rabbit can be used for tanning the hide. Rabbit ears can be used for pet treats.

The offal and guts left over from the butchering of a rabbit can be fed to dogs, cats, pigs or put in the compost pile. Rabbit feet can be used to make decorative items or crafts.

Because rabbits have such a multitude of uses, and require such little land to raise, they can be considered a very ecologically friendly farm animal.



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RESOURCES: Agriculture Programs



THE CANADIAN COUNCIL FOR ABORIGINAL BUSINESS has just launched the Indigenous Business Grant 2022.

Indigenous-owned businesses across Canada are invited to apply to one of two grant levels.

- Level 1: \$2,500 grant + CCAB membership 50 grants are awarded in a live draw.
- Level 2: \$10,000 grant (\$5,000 per year for two years) + CCAB membership a commitment to actively participate on an advisory panel for the duration of the grant. Completed applications are reviewed by a jury and 25 grants are awarded. The application process closes on June 24th at 4:00PM EST.

For more information, visit: <u>https://www.ccab.com/indigenous-business-grant-2022/?fbclid=lwAR1Pf1kj8KEhmgZb0jG</u> mAQ0zJxS4oFO5fg8NBT0uHbABuiveXxGnQa3ZGJA#1617056100693-d181e207-cb45

AGRICULTURAL CLIMATE SOLUTIONS

AGRICULTURAL CLIMATE SOLUTIONS – Living Labs Phase 1 (Grant Funding) has launched as of May 24. Applications for grant funding will be accepted until June 30.

The goal of the Agricultural Climate Solutions Program (ACS) – Living Labs is to accelerate codevelopment, testing, adoption, dissemination and monitoring of technologies and practices, including beneficial management practices (BMPs),that sequester carbon and/or mitigate

greenhouse gas (GHG) emissions.

Grant Funding is available to support organizations in building capacity, developing networks of participants, and drafting comprehensive project proposals that will be submitted for Phase 2 contribution funding and collaborative research and development support. Phase 1 is optional, and applicants may apply for an Agriculture and Agri-Food Canada (AAFC) grant of up to \$100,000.

https://agriculture.canada.ca/en/agricultural-programs-and-services/agricultural-climate-solutions-program-livinglabs-step-1-what-program-offers

Local Food Infrastructure Fund (LFIF)

The LFIF supports community led projects that strengthen food systems and help to facilitate access to safe and nutritious food for at risk Canadians. It was created as part of the Government of Canada's Food Policy for a healthier and more sustainable food system in Canada. This phase is aimed at the establishment and/or expansion and/ or completion of local food systems within rural communities, small cities or with Indigenous groups. It has been designed to create or foster connections within food systems by enabling organizations to partner with other communities and other organizations to collectively strengthen local food systems

and address food insecurity in a sustainable manner. Eligible applicants must be capable

of entering into a legally-binding agreement and are:

- Indigenous groups in either urban centres or rural areas (e.g. Indigenous communities, Indigenous organizations); or,
- Located in rural communities (population under 1,000) or small cities/municipalities (population between 1,000 to 29,999).

These organizations must have a mission to reduce food insecurity by establishing and/or expanding and/or completing their local food system. Eligible Projects must:

 Create, expand or implement two or more new food system components. Projects must be infrastructure specific and be community-driven projects dedicated to improving food access;

- Include funding requests for grants between \$100,000 and \$500,000;
- Please visit the LFIF website to review the Applicant Guide and learn about the requirements of this new intake.
- Please review Annexes A and B to understand what needs to be included in your Application Form.
- Please note that the <u>application</u> <u>intake period will start June 1, 2022</u> <u>and will end July 15, 2022.</u> The application form will be available at that time.

Application link:

https://agriculture.canada.ca/en/ agricultural-programs-and-services/ local-food-infrastructure-fund/ applicant-guide

CELLULAR AGRICULTURE: The New Revolution in Food Production

By Lynn Moreau

By the year 2050, the world population is expected to reach approximately 9.6 billion. It is expected that 70% more food will be required to feed the world population. More sustainable methods of food production need to be a focus for the future. Cellular agriculture is one field that is advancing to meet these demands.

Cellular agriculture uses individual cells from plants and animals or organisms single-cell to make agricultural products. These include meats, seafood, dairy and other protein-rich foods without the need to "cultivate" entire animals or plants. This is done using a combination of biotechnology, tissue engineering, molecular biology, and synthetic biology to create and design new methods of producing proteins, fats, and tissues that would otherwise come from traditional agriculture.

To produce cell-based meat and seafood, natural or genetically modified stem cells are taken from a live animal and grown in nutrient-rich conditions in a bioreactor, utilizing nature's own growth and repair mechanisms. The cells differentiate into types – either muscle or fat cells – then are grown on a scaffold or further processed as ground meat.

A similar method is used to produce cell-based milk. In this case, mammal milk gland cells are immobilized in a hollow fibre bioreactor. As a result, the cells secrete whole milk which has the same macronutrient profile as cow or human breast milk, depending on the cell source.

Cellular agriculture has the potential to provide the nutrition and other non-food products our



growing population requires, without encroaching on additional lands or further stretching our natural resources. Because the production processes occur within a controlled environment and are largely based on established technologies, the benefits are wide-reaching. Cellular agriculture foods deliver similar or identical nutrition profiles, provide independence from seasonal and climactic changes, and can be done without the use of antibiotics. It also allows for the selection of cell lines from animals with the best traits, or from hard to culture species or those facing extinction.

Conventional methods for growing animal tissue in culture involves the use of fetal bovine serum (FBS). FBS is a blood product extracted from fetal calves. This product supplies cells with nutrients and stimulating growth factors, but is unsustainable and resource-heavy to produce, with large batch-to-batch variation. Cultured meat companies have been putting significant resources into alternative growth media. Efforts to remove serum from the growth media are key to the advancement of cellular agriculture, as fetal bovine serum has been the target of most criticisms of cellular agriculture and cultured meat production.

The applications of cultured meat have led to ethical, health, environmental, cultural, and economic discussions. In 2020, the world's first regulatory approval for a cultivated meat product (chicken) was awarded by the Government of Singapore. The chicken meat was grown in a bioreactor in a fluid of amino acids, sugar, and salt. The use of cellular agriculture is also being looked at for the production of commercial fish feed, fragrances, silk, leather and pet food.

EVENTS

2022 ONTARIO AOUACULTURE TOUR: June 21 - 24, 2022 Financial support toward indigenous participation may be available. The tour will include sites on Manitoulin Island and Southern Ontario.

For more information, please contact: Nicholas Huber at nhuber@waubetek.com, 705-285-4275

NATIONAL TREE SEED CENTRE: Harvesting Berry Crops Webinar

The #2BillionTrees mandate includes planting shrubs because in certain situations, shrubs add more environmental co-benefits and floral diversity. Growing shrubs from seeds often requires far more seed than growing tree species. This webinar session, titled Harvesting Berry Crops, will instruct how and when to collect berries to maximize viability. Panelists will also advise on how to best clean berries for planting or storage. English Session - June 7th at 2:00 PM ATL

https://us06web.zoom.us/webinar/register/WN_ DHMJsdZTQ36PddymPAtmQw

If you have any questions or difficulty registering for the webinar, please email us at ntsc-cnsf@nrcan-rncan.gc.ca.

Clear Seas Indigenous Internship 2022

Now Accepting Applications

An initiative to conduct inclusive maritime-related research that considers Traditional Knowledge and builds research capacity within Indigenous and coastal communities.

Now accepting applications for postsecondary students and Indigenous learners at all levels welcome. The opportunity is for 4-6 months paid internships; Indigenous-led research (community priorities and concerns); Mentorship and academic support.

LEARN MORE & AP

https://clearseas.org/en/programs/indigenous-internship-program/

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If you have any comments or suggestions contact Lynn at email: lynn.moreau@anishinabek.ca.

🥥 Clear Seas



I vnn Moreau Program Coordinator, Agriculture and Food Lands and Resources Department Anishinabek Nation 1 Migizii Miikan Nipissing First Nation P.O. Box 711, 1 Migizii Miikan

JOB OPPORTUNITIES

FOODSHARE TORONTO https://foodshare.net/about/careers/

GOOD WORK

Programs Trainee, Farm Park Trainee, Market Garden Trainee, Market Garden Assistant

 Application deadline: 9:00am on Monday May 30, 2022 Flemingdon Park Ministry, Toronto

Various Positions

https://www.goodwork.ca/jobs/work-outdoors-and-growfood-64345

https://www.goodwork.ca/jobs/urban-farm-learningprograms-specialist-seasonal-iobs-64346



KIIN MIINWAA ENDADIZIWINAN: LANDS & RESOURCES

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.

ODE'MIIN GIIZIS

(STRAWBERRY MOON) - JUNE The sixth moon of Creation is Strawberry Moon. The medicine of the strawberry is reconciliation. It was during this moon cycle that communities usually held their annual feasts, welcoming everyone home, regardless of their differences over the past year, letting go of judgment and/or self righteousness. The strawberry is the first berry to ripen it is thought to be a good medicine for the heart and the teeth.



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.

> North Bay, Ontario PIB 8J8 Tel: (705) 497-9127 ext. 2334 Toll Free: 1-877-702-5200 Website: www.anishinabek.ca

