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FOOD SECURITY & LOCAL AGRICULTURAL SYSTEMS





...the care of the earth is our most ancient and most worthy and, after all, our most pleasing responsibility. To cherish what remains of it, and to foster its renewal, is our only legitimate hope.

For the true measure of agriculture is not the sophistication of its equipment the size of its income or even the statistics of its productivity but the good health of the land.

-Wendell Berry



7.0 INTRODUCTION AND CONTEXT

North Cowichan has a very long tradition of farming, both pre-contact and post-contact, due to its fertile soils and mild climate. In addition, the land and shoreline provides for First Nations food and medicine gathering throughout the seasons. Careful stewardship of our agricultural lands and a thriving local food system are vital for North Cowichan's social well-being, culture, economy, and environment. Agricultural lands and productive soils are defining features of North Cowichan, and its associated industries form an important sector of our local economy.

North Cowichan's character and identity are defined in part by the agricultural landscape and reputation for producing good quality food and other agricultural products. Supporting agriculture has been and continues to be a strategic priority for the Municipality. Food production is not necessarily limited to the rural areas. Urban agriculture is also an important component of North Cowichan's food systems.

The policies of this section support local agriculture and the protection of agricultural land. However, local government's limited jurisdiction over food and farming means that it cannot achieve these goals and objectives alone. It will be necessary for the Municipality to work with farmers, food processors, other government agencies, businesses, non-profit organizations, and the community.

Urban agriculture, urban farming, or urban gardening is the practice of cultivating, processing, and distributing food and natural materials in or around urban areas. This includes the use of land, buildings, structures, roof-top and balcony gardening, vertical farming, community gardening in vacant lots and parks. This use excludes the keeping of farm animals and poultry, but may include aquaculture, "urban beekeeping" and insect production with conditions.



Figure 7.1: Farmland in North Cowichan.

7.1 FOOD SECURITY

North Cowichan is a signatory to the 2009 [Food Charter](#) which defines food security as the state when all members of the community have access to nutritious, safe, ecologically sustainable and culturally appropriate food at all times. Food security is a growing concern globally. Our supply of food depends increasingly on international systems of production and distribution at a time when strains in these systems are becoming more evident, and the environmental and health consequences of such systems are becoming better understood.

Facilitating increased local production and access could help address concerns about the security of our food supply, its quality, and the environmental and human costs of a global food distribution system. By encouraging local agricultural production, addressing issues related to hunger in our community and to the relationship between low-cost housing and food access, North Cowichan has a role to play locally in promoting greater food self-sufficiency and ensuring food security.



Ensuring access to food for all residents meets the principles of social justice and equity.

7.1.1 Defining Success | Objectives

Objectives: Enhance access to healthy, affordable, locally grown, high quality, nutritionally dense food, especially for vulnerable populations. Sustain and increase local agricultural activity, especially of food systems that can improve the food security for the local population.

Progress can be measured by:

- An estimate of how much of the community's food needs are produced locally.
- The number of people who rely on food bank/food donations to meet their needs.
- Economic analyses of local farming sector.

7.1.3 The Municipality will ask developers and landowners to:

- a. Provide (within the Urban Containment Boundary (UCB)), space and supportive infrastructure (e.g. irrigation, storage) so that residents who do not have access to their own land have capacity to grow some of their own food in the urban context (community gardens, common garden areas in multi-family buildings, etc.).

7.1.2 The Municipality will strive to:

- a. Support local food initiatives and strive to reduce regulatory barriers to increase local agricultural activity and food production, as part of its commitment to food security.
- b. Consider creating a community garden strategy to guide the development and management of community gardens in a variety of appropriate locations throughout the municipality.
- c. Allow urban agriculture as a principal permitted use in all designations and zones.
- d. Allow for the use of fresh food trucks (selling veggies, poultry meat, eggs, cheese etc.) to park within neighbourhoods to provide access to residents for fresh local produce.

7.1.4 The Municipality will work with others to:

- a. Provide support for an expanded Farmer's Market, including street closures, parking and loading/unloading areas for vendors (City of Duncan).
- b. Encourage and support the initiatives of food businesses and organizations that provide access to healthy, high quality, nutritionally dense food, especially for vulnerable populations.
- c. Collaborate with the Cowichan Food Security Coalition and Cowichan Green Communities to implement and/or update the [Cowichan Food Security Plan 2010 Edition](#).
- d. Support food equity and food security initiatives by Non-Governmental Organizations, community members and other levels of government.
- e. Support initiatives to reduce the amount of food waste.

7.2 LOCAL AGRICULTURAL SYSTEMS

Food and agricultural systems encompass the interlinked value-adding activities of production, aggregation, processing, distribution and disposal of products that originate from agriculture, forestry and fisheries. They are part of the broader economic, societal and natural environments in which they are embedded.¹

Agriculture is a core sector of North Cowichan's economy.

This OCP establishes clear priorities and high-level policies to strengthen local food and agriculture systems beyond farmland protection to include the full spectrum of agricultural activities. Key documents that support these initiatives include the [Strategic Agricultural Plan](#) (2001), [Cowichan Food Charter](#) (2009) and the [Agricultural Advisory Committee Work & Implementation Plan](#) (2013).

¹ Sustainable food systems. Concept and framework. (2018). Retrieved from: <http://www.fao.org/3/ca2079en/CA2079EN.pdf> Accessed Nov 2020.

OPPORTUNITIES AND CHALLENGES

North Cowichan envisions an agricultural sector that is economically, socially, and environmentally healthy and sustainable. Key challenges to agriculture include the low rate of return on investment (driven partly by being forced to compete in a globalized food production system), the high price of land (driven in part by land speculation and demand for housing), lack of access to water, and inadequate agricultural drainage on potentially productive valley bottom soils.

Sustainable food means food produced without degrading soil quality or depleting water sources. It also means little-to-no use of fertilizers, herbicides, and pesticides. It is possible to maintain land for agricultural production while also preserving adjoining natural assets and ecosystems. Agricultural land itself can also provide valuable habitat. For example, if native plants and flowers are allowed to grow in field edges, hedgerows and around crops, pollinators, birds, bats, and other creatures, can also thrive.

Agriculture can be viewed from a climate change perspective as both a part of the complex climate change problem as well as a potential part of the solution. Agriculture and food processing generate greenhouse gas emissions through disturbance of the soil, methane from livestock, use of fuels and chemicals in crop production and the energy used in processing and transporting food. The CAEP Economic and Emissions Modelling Overview (February 9, 2021) assumes GHG emissions from agriculture will remain relatively stable until 2050. However, innovative farming techniques may create opportunities for the soil itself to be a significant carbon sink.^{2 3} Conventional farming techniques tend to unlock and release carbon from the soil.



Regenerative agriculture practices meet the climate action principle.

Recent developments in regenerative farming techniques that strive to minimize soil disturbance can restore soil health and its ability to lock in carbon. Opportunities for employing these practices in North Cowichan could be explored with partners in the agricultural community.

6 Core Principles of REGENERATIVE AGRICULTURE



Figure 7.2: Principles of Regenerative Agriculture, retrieved from <https://www.generalmills.com/en/Responsibility/Sustainability/Regenerative-agriculture>

³ Read more about carbon release from soil here: <https://soilhealthinstitute.org/>

⁴ Read more about soil health and its ability to lock in carbon here: <https://soilhealthinstitute.org/>

7.2.1 Defining Success | Objectives

Encouraging local food production reduces our carbon footprint from food transportation and also enhances local community resilience due to reduced risk of supply chain disruption. Farmers will need to adapt to new climate norms to be able to grow food in new climate conditions.

Urban agriculture practices such as growing food in backyards or on balconies, in community gardens, in common areas in apartments and in parks can be an important contribution to local food production. Backyard chickens and beekeeping have become increasingly common in urban areas. Policies that support these initiatives such as allowing urban agriculture in a variety of land use designations will help strengthen North Cowichan's food system.

The Municipality recognizes the great value that its farmers and agricultural lands bring to North Cowichan's economy, community, and environment. The Municipality recognizes its role in reducing barriers to farming through maintaining consistency with provincial ministry guidelines for supporting agriculture. It also recognizes it has limited ability to support and regulate farming on private lands, therefore we must collaborate with farmers, food producers, land-owners and non-governmental associations, and other levels of government to achieve these objectives. Residents play an important role in supporting a thriving local food system. As food consumers, their daily choices can help support viable local farms, markets and food processors as well as support greater food security for the whole community.

Because of these trends and challenges, the Municipality must stay flexible in order to support agriculture as a future economic engine for the region, and to ensure the agricultural land base is maintained.

Objectives:

- a. Protect the agricultural and farmland base.
- b. Strengthen the economic vitality of farming by encouraging farming and food processing as a viable business enterprise, employment opportunity and way of life.
- c. Diversify and expand the local sustainable food system.
- d. Reduce greenhouse gas emissions from the food system and increase carbon storage in soils.
- e. Enhance biodiversity by preserving, connecting and enhancing habitat on agricultural lands.
- f. Work towards a "circular" - low waste - food system.
- g. Support educative, commercial and cultural initiatives pertaining to food production and processing (e.g. safe canning workshops or establishment of local food hubs).
- h. Support initiatives that promote "urban farming", including small and micro-scale production activities.

Progress will be measured by:

- Increase in the percentage of properties that are producing food.
- Reduction in annual GHG emissions from agriculture.
- Qualitative assessment on farms using organic and/or regenerative farming techniques.
- Total farm sales.

7.2.2 The Municipality will strive to:

Protect farming and the agricultural land base

- a. Protect land within the Agricultural Land Reserve (ALR) and other agriculturally-productive lands from inappropriate development.
- b. Not support exclusion of agricultural lands from the ALR and subdivision of ALR lands (including homesite severances) unless there is no net loss of ALR lands, and a net benefit to agriculture can be clearly demonstrated.
- c. Require all ALC applications for exclusions, subdivision, soil and fill operations, and non-farm use to provide documentation prepared by a qualified registered professional (e.g., soil suitability analysis results, environmental farm management plan) to demonstrate why the application is necessary and appropriate.
- d. Where non-farm use, subdivision, or exclusion from the ALR can be supported and results in materially increased development potential accruing to the landowner, the Municipality may require the landowner to contribute to the Municipal Agriculture Reserve Fund.
- e. Update the Strategic Agricultural Plan, and develop a policy or strategy for use of the Municipal Agriculture Reserve Fund and potential use of Municipally-owned property for farming activity.
- f. Minimize the footprint of housing and farm buildings on agricultural lands.
- g. Consider up to three dwelling units per parcel, within no more than two separate buildings on farmland where:
 - It supports the agricultural use of the property.
 - It will preserve and/or protect an environmental feature.
 - Driveway access, parking areas and utilities are generally shared.
 - The positioning and design complement the rural character of the immediate area.
 - The ALC has granted approval, or the housing is permitted by ALC policy and regulation.

- h. Where proposed development abuts the ALR along the Urban Containment Boundary (UCB), agricultural activity must be protected from negative urban influences through the use of buffers, restrictive covenants, and development permits.
- i. Consider supporting proposals for bio-gas systems.
- j. Review options to engage with the agricultural community on decisions and policy development regarding agricultural issues.
- k. Prevent new development, both within and outside the ALR, from impacting downstream agricultural land in watersheds, increasing run-off, compromising farmland drainage, or otherwise disrupting hydrology.

Strengthen the economic vitality of farming

- l. Update and maintain the 2001 Strategic Agricultural Plan.
- m. With the approval of the ALC, and where appropriate, agricultural soils removed as part of municipal operations and capital programs and screened for contamination and invasive species will be offered to operating farms in North Cowichan.
- n. Consider assisting organizations or initiatives that connect potential farmers to agricultural land, including farmable land owned by the Municipality.
- o. Support urban farm operations within non-agricultural commercial, industrial and residential zones.
- p. Advocate to provincial and federal governments to promote economic viability of localized food production systems.
- q. Support the establishment and expansion of farmer's markets.

Diversify and expand local sustainable food system

- r. Encourage sustainable aquaculture systems such as land-based aquaponic systems.
- s. Encourage the development of local food processing and distribution facilities that support Vancouver Island producers.
- t. Support the development of farmers' markets, community supported fisheries, cooperatives, produce box programs, and similar innovations that promote access to local food.
- u. Encourage the development of a regional food hub, including an aggregation and distribution facility to ship products to consumers in the region.
- v. Support the development of an Agricultural Development Centre that includes training and research into regenerative techniques applicable to North Cowichan's soils and climate.
- w. Support innovations in agriculture to maintain and enhance the viability of the agricultural sector.
- x. Support limited non-agricultural activities (which may or may not require ALC non-farm use application) that do not have a substantive impact on farm operations and help to supplement and maintain the viability of the farm operations as the continued primary purpose.
- y. Encourage and promote agri-tourism.
- z. Consider purchasing or leasing farmland for the purposes of a regenerative agriculture demonstration project.
- aa. Promote biological diversity and ecosystem health on farmland.
- ab. Consider cosmetic pesticide restrictions, along with restrictions on other potentially harmful substances.
- ac. Promote water conservation by restricting the use of domestic lawn watering in order to preserve the water supply and aquifers for agricultural use and ecosystems.

Work towards a "circular" (low waste) food system

- ad. Support initiatives and organizations that reduce food waste and food packaging. Single use containers, packaging, and utensils will be phased out of municipal operations wherever practical.
- ae. Consider implementation of initiatives such as plastic bag or styrofoam food container bans and install water bottle fillings stations at municipal parks and facilities.

7.2.3 Where appropriate the Municipality will ask developers and landowners to:

- a. Where conversion of agricultural land to non-agricultural uses occurs, require contribution to an Agricultural Reserve Fund.
- b. Look for ways to support local food security and farming initiatives.
- c. Provide opportunities for residents to have food producing gardens in urban areas.
- d. Provide appropriate buffers where residential land abuts agricultural lands.

7.2.4 The Municipality will work with others to:

Farmers and Agricultural Landowners

Significantly lower greenhouse gas emissions and greater carbon storage

- a. Use and promote farming methods and techniques that reduce GHG emissions, and sequester carbon in the soil.
- b. Limit the amount of water used.
- c. Minimize the use of fossil-fuel based energy and chemicals (pesticides and fertilizers).
- d. Work towards a "circular economy" and reduce food related wastes.
- e. Focus on improving the resilience and equity of the local food system.
- f. Gear production towards local markets to increase local food self-reliance.

Enhance biodiversity by preserving, connecting and enhancing habitat on and between agricultural lands

- g. Set aside and steward marginal or unused farmland for ecological purposes.
- h. Adopt and promote sustainable, regenerative farming techniques that enhance soil health, landscape complexity and farm biodiversity.
- i. Protect, preserve, and enhance biodiversity by enhancing and introducing hedgerows, copses, wetlands and irrigation ponds into the farm system.

Community Members

- j. Support local farmers, especially those using organic, regenerative techniques.
- k. Support food producers/harvesters, food processors and markets by buying locally produced and processed foods.
- l. Support farm neighbours by recognizing and understanding that farming sometimes requires the use of techniques that may impact residential quality of life.
- m. Support food equity and food security initiatives.

Other Jurisdictions

- n. Work with the Agricultural Land Commission (ALC) and the Ministry of Agriculture and Food on agricultural planning, policy, and enforcement issues and on reviewing applications for land use change within the ALR to ensure consistency with agricultural policy.
- o. Collaborate with local First Nations to strengthen indigenous food systems; and as appropriate, support sustainable wild harvesting of traditional food and medicine from municipal forest lands.
- p. Protect shorelines for food harvesting.
- q. Take a regional approach to protecting, enhancing, and supporting agriculture, working with other jurisdictions to resolve common issues that interfere with the economic vitality of farming. Such issues include drainage problems, water supply for crops, marketing and promotion, and community education. Advocate for appropriate federal and provincial resourcing of supply-managed and regulatory systems, including:
 - Licensing and inspection of facilities such as abattoirs and meat processing operations.
 - Education and enforcement relating to hunting and fishing.
 - Equitable administration of fishery quotas and ability to sell dockside to individuals and local markets.
- r. Work with Department of Fisheries and Oceans (DFO) and Island Health to improve monitoring of shellfish contamination with a view to open more areas to shellfish harvesting.
- s. Advocate to Agriculture and Agri-Food Canada to further restrict the use of pesticides and herbicides that are harmful to insect, animal, and human populations.
- t. Advocate to all levels of government to provide support for approaches to agriculture that contribute to healthy ecosystems and people.