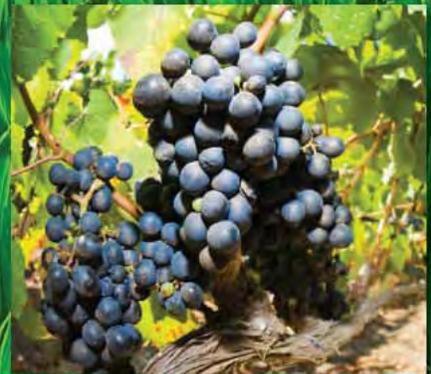


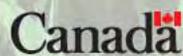
THINK FARM



Guide for Beginning Farmers in Nova Scotia Second Edition



www.gov.ns.ca/thinkfarm



Growing Forward 



Disclaimer: The Guide for Beginning Farmers in Nova Scotia is intended to serve as a starting point for those interested in pursuing agricultural enterprises in Nova Scotia. It is not intended to be used as a stand alone guide. Beginning farmers should consult with the references and resource people listed in the guide before making any financial or production decisions. The Province of Nova Scotia will not be held responsible for any decisions made on the basis of the information contained in this guide.

Preface

This Guide for Beginning Farmers in Nova Scotia was written in response to requests for information from beginning farmers. It is primarily intended for those who have little or no background in agriculture but are interested in starting a farm. It will also be useful to those who have farming experience but are unfamiliar with Nova Scotia's current market for agricultural products and regulatory requirements.

The guide will walk you through the steps you need to take to start your own farm. It also lists the minimum requirements for each of the major farm commodities in Nova Scotia so that you can assess your own potential to produce those commodities. After reading this guide, you should have a better idea of what questions to ask and who to ask them to.

Many people were consulted in preparing this guide to make it as accurate and comprehensive as possible. They include Nova Scotia Department of Agriculture staff, Perennia specialists, Nova Scotia Agricultural College professors, and staff of farm commodity organizations. Their contribution to this guide is gratefully acknowledged.

The THINKFARM Working Group Initiative of the Nova Scotia Department of Agriculture hopes this guide will be useful to you and wishes you success in your farming endeavours. Please send us your comments on the guide so that we can incorporate your suggestions into future editions. You can direct your feedback or any questions that you have about the information in this guide to: thinkfarm@gov.ns.ca

A note on the second edition:

The second edition of the Guide for Beginning Farmers in Nova Scotia is essentially unchanged. However, we've given it a more professional formatting, updated contact information, moved a bit of information around, and added commodity profiles for Forages, Christmas Trees, and Horses. We've also removed some information that is now explained more extensively in the Resource Kit for Nova Scotia Farmers, our online factsheet collection on everything related to the business of farming:

www.gov.ns.ca/thinkfarm/resourcekit.shtml

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Prepared by Rebecca Sooksom, THINKFARM Resource Coordinator, Nova Scotia Department of Agriculture

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So you want to be a farmer....

Farming is an ancient and noble profession, and one of Nova Scotia's backbone industries. Agriculture and its related industries, like food processing, make a vital contribution to the province's economy, society, and culture.

The Government of Nova Scotia values Nova Scotia's farmers and is attracting new people into the agriculture industry for growth and sustainability, as well as to further harness the province's natural bounty. The Department of Agriculture has put together this Guide for Beginning Farmers in Nova Scotia to help you access the services and information you need to make your farm enterprise successful.

In order to be a successful farmer, you need to think through your plans very carefully. It is important to write things down so that you can more easily re-evaluate your plans and measure your progress. There are a number of planning steps that you should follow before getting started in farming. This Guide will take you through those steps and point you to sources of additional information for topics too complex to be covered here.



Step 1: Define your goals.

Why do you want to farm? Once you know that, you can best determine what you want to produce and how you want to farm. People want to be farmers for many different reasons, including:

- cultural ties to the land and/or the farming way of life;
- a desire to increase household food security and self-reliance;
- a way of earning a living;
- a way to supplement income from another job;
- or a combination of any of these reasons or other reasons.

Are you really sure that farming is for you?

THINKFARM has produced an inspiring video series in which successful Nova Scotian farmers share some of their experiences.

Watch them online:

<http://www.gov.ns.ca/agri/thinkfarm/video/>

The book *You Can Farm: The Entrepreneur's Guide to Start and Succeed in a Farming Enterprise* by Joel Salatin is an excellent book for giving an overview of what you can expect from a farm lifestyle. Ask your ARC about borrowing a copy of this book or look for it in your local library. If you have no farming experience, you should give serious consideration to spending at least a year working on a farm before investing your time, energy, and capital in a farm enterprise. This can help you decide what kind of farming suits your goals and interests. You may also decide that farming is not for you.



Most people have more than one reason for wanting to farm. Once you have defined your goals, you can define the kind of farming enterprise you will develop. For example, those who want to earn their main income from their farm will develop a different kind of enterprise than those who only want to supplement other sources of income, and beginning farmers with small children will have different goals than those who are retirees. Talk with someone with agricultural or business expertise about what you want from farming or read some of the following resources before taking the next step. The Agricultural Resource Coordinators (ARCs) or other staff in the Department of Agriculture Regional Office nearest you can assist you in defining your goals. (See the appendix for contact details.)

Step 2: Assess your resources.

Resources include land, capital, infrastructure, equipment, and information. Make a list of what you already have and another list of what you think you still need to get started. If you have trouble with this step, your local ARC or other Regional Office staff can provide you with assistance.

If you already have...

...land:

- How much land do you want to farm?
- Are there any zoning or municipal bylaw restrictions that would restrict the type of farm enterprise you can develop? (Check with your local municipal development officer - see appendix for contact details.)
- Are there any environmental considerations that would restrict the type of farm enterprise you can develop (e.g. proximity to neighbours, proximity to wetlands, etc.)?
- What kinds of crops and livestock are suited to the land you have? (This will depend on soil type and productivity, drainage, slope, climate, and location, i.e. market access.)

...capital:

- How much can you or are you willing to invest in your farm enterprise?
- What return on investment do you expect and how quickly do you expect to see it?

....infrastructure:

- What sort of infrastructure already exists on your farm (e.g. wells, irrigation ponds, barns, sheds, fencing, etc.)?

- Is the existing infrastructure in a safe and useable state? If not, can it be repaired?

....equipment:

- What sort of equipment do you already have (e.g. tractors, other farm machinery, chainsaw, machine and carpentry tools, computer, etc.)?
- Is the existing equipment in a safe and useable state? If not, can it be repaired?

....information:

- What do you know about farming?
- What do you know about marketing farm products?
- What do you know about farm legislation in Nova Scotia?
- Do you know where to get additional information about the various aspects of farming in Nova Scotia?

If you need help in defining your goals and assessing your resources, consider signing up for the course “Exploring the Small Farm Dream,” offered by the Centre for Continuing & Distance Education, Nova Scotia Agricultural College. This non-credit course consists of four sessions of three hours each and is designed to help aspiring farmers learn what it would take to start and manage their own commercial agricultural business. For more information on this course, call 902-893-6666 or visit:

<http://www.nsac.ca/cde/courses/Contract/explorer.asp>

Step 3: Decide what you want to farm and how you want to go about doing it.

There are a wide variety of farms in Nova Scotia. These include supply managed livestock, non-supply managed livestock, crop farms and farms producing specialty products. Supply management means that the relevant commodity marketing board matches supply to demand by allocating production quotas to producers and sets the prices for the commodity. This ensures farmers a stable and adequate income and provides consumers with a high-quality and stable supply of these commodities. However, the supply-managed commodities are heavily regulated and are the most difficult commodities for new farmers to get started in.



The major commodities produced in Nova Scotia can be categorized as follows:

- supply managed livestock
 - dairy cows
 - poultry - meat chickens (broilers), egg-laying chickens (layers), turkey
- non-supply managed livestock
 - beef

- swine
- sheep
- fur animals - mink, foxes, chinchillas, rabbits
- goats
- horses
- crop farms
 - tree fruit - apples, pears, peaches, cherries, and other tree fruits
 - small fruit - strawberries, blueberries, cranberries, raspberries
 - mixed vegetables
 - grain crops
 - forages
 - ornamental crops - cut flowers, landscape annuals and perennials
 - wine grapes
- specialty products
 - beekeepers
 - maple syrup
 - Christmas trees

Many farms fall into more than one category. In addition, within each category there are farms of different scale. A vegetable farm might be 100 acres and sell all its produce to a wholesaler. It might be 2 acres and sell all its produce at a farmers' market.

Within each category, there are also a variety of production and marketing methods. You can raise beef cattle exclusively on pasture or feed them grain and silage in a feedlot. You can have an apple orchard and sell all the apples to a pie processor or sell them primarily through a u-pick.

One category of production methods is organic farming, which prohibits the use of synthetic chemicals. Any of the above farm categories can be certified organic (except fur, for which national standards are currently being developed). For more information on organic certification, contact the Atlantic Canada Organic Regional Network (ACORN) at: 1-866-32-ACORN (22676) or admin@acornorganic.org or visit: www.acornorganic.org

Another good source of information on organic farming is Av Singh, a specialist with Perennia. He can be reached at 902-896-0277 or asingh@perennia.ca

Furthermore, the Organic Agriculture Centre of Canada (OACC) is located at the Nova Scotia Agricultural College in Bible Hill. You can contact OACC at 902-893-7256 or find information on their website: www.organiccentre.ca

What you decide to grow, at what scale, and the production methods you choose to use depends on your goals, the amount of capital you have to invest, and how you plan to market your farm products. A summary of each of the types of farms listed above and the resources and capital required to establish these farms can be found in Appendix 2.



Step 4: Think about adding value.

One way that farmers can increase their profits is by adding value to their farm produce through processing. You can turn milk into cheese, pork into sausages, wool into sweaters, or small fruits into jam. There are many small-scale processors of farm products throughout the province. This type of processing, especially of food products, may be subject to food safety regulations and food processing licences.

While there is a strong market for tried and true products like jams and sausages, there is plenty of room for innovation in the market as well. If you have an idea for a new product and need some technical assistance in commercializing it, contact the Perennia Innovation Centre, located at the Perennia Innovation Park in Bible Hill:

http://www.perennia.ca/Innovation_Centre.php

For more information about value-adding, read [Fact Sheet #25 – Value-Adding to Your Farm’s Products](#) or contact staff at the Department of Agriculture’s Product and Quality Development Division at greatfoodideas@gov.ns.ca or 902-424-4560.



Step 5: Make a business plan.

Unless your farming goal is to have a completely self-sufficient, homesteading lifestyle, a business plan is a good idea. It will help you think through all the aspects of your farm enterprise and help you account for any contingencies that may arise. For more information about business planning, and for links to business plan templates, see [fact sheet #14 – Business Plans](#).

The Department of Agriculture’s Business Development Specialists can guide you through the business planning process. To make an

appointment with a Business Development Specialist, phone 902-893-6585.

In addition, you can access funding support to help pay for private business advisory services and business training offered in Atlantic Canada (subject to meeting eligibility requirements and the availability of funds). For more information about Business Development funding, contact your local Agricultural Resource Coordinator.



Step 6: Take advantage of the services the government of Nova Scotia provides to farmers.

The Government of Nova Scotia wishes to promote a strong agriculture industry and, as a result, provides a number of services to farmers in the province. For more information on these services, see the brochure “Key NSDA Services for Beginning Farmers”, the Resource Kit for Nova Scotia Farmers, or visit:

<http://www.gov.ns.ca/thinkfarm>

You can also find relevant programs and services using AgPal, a comprehensive user-friendly database of federal and provincial programs and services for the agricultural industry:

www.agpal.ca

In order to access many of these services, you need to obtain a farm registration number.

Farm registration is a voluntary, annual program. Farms eligible to file a farm tax return with the Canada Revenue Agency may register. Farm registration provides for:

- managed access to government programs by farm businesses
- collection of farm information to develop farm policy
- stable funding for the Nova Scotia Federation of Agriculture

Registration fees range from \$75 - \$975, depending on gross farm income. This fee provides funding for the Nova Scotia Federation of Agriculture (NSFA). Your farm registration automatically makes you a member of the Nova

Scotia Federation of Agriculture. For more information on farm registration, see [Fact Sheet #11 – “Farm Registration”](#) in the Resource Kit for Nova Scotia Farmers.

Registered farms are eligible to receive a number of government services. For example, if you are a registered farm:

- you can apply for farm licence plates, which are cheaper than regular licence plates if you have a truck that is used exclusively for farm purposes, like hauling trailers or bringing produce to market;
- you can purchase untaxed fuel for farm tractors;
- you will receive a discount on Department of Agriculture laboratory services, such as soil and water tests; and
- you can apply for a number of government development programs. (For more information, see [Fact Sheet #34 – “Programs for Farmers”](#) in the Resource Kit for Nova Scotia Farmers.)

Along with a farm registration number, you may also wish to have a business number with the Canada Revenue Agency. Virtually all farms in Nova Scotia are also registered businesses. A business number is a numbering system that simplifies and streamlines business’ dealings with the federal government. You will require a business number if you intend to export any products and hire employees.

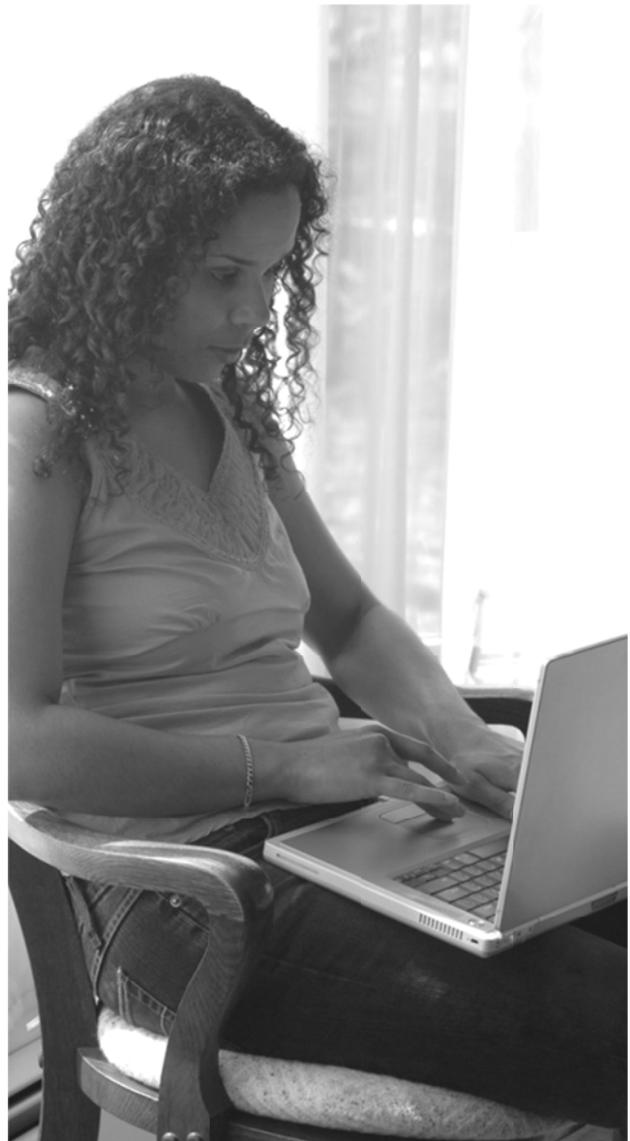
Before proceeding to register for a business number, there are some important decisions that you need to make about the business you plan to operate.

- What is the name of the business?
- Where is the location of the business?
- What is the legal structure of the business (sole proprietorship, partnership or corporation)?
- What is the fiscal year-end for your business?
- What are the estimated sales for your business?

If you are considering registering a business, you should give careful consideration to a few issues. Registering for GST/HST depends on the nature of your business and its sales. You need to consider the advantage of registering, such as the ability to claim GST/HST back on business start up expenses. Opening an import/export tax account should be done in planning the import/export part of your business in order to avoid delays at the point of entry. It is important to ensure that the payroll deduction accounts are opened before you are required to file employee deductions.

For more information on business registration, call the Canada Revenue Agency at 1-800-959-5525 (toll-free) or visit:

<http://www.cra-arc.gc.ca/tx/bsnss/tpcs/bn-ne/menu-eng.html>



Step 7: Getting ready to farm: Finding the things you still need.

Capital

Farmers often require extra capital to buy land, build infrastructure, and purchase equipment when they start a farm. For more information, see [Fact Sheet #13 – Financing Your Farm Operation](#)

Land

The Farm Loan Board has a list of some farms for sale in the province. Otherwise, you should contact realtors in your area to find farms for sale. Contact your local Municipal Development Officer before purchasing land, especially undeveloped land, to ensure there are no zoning or municipal bylaw issues that will restrict your use of the land for agricultural purposes.

Besides outright buying, you may find farmland to rent or lease. Ask around in the area you hope to farm. Your local ARC or RDA may know of farms for sale or land for rent in your area. Nova Scotian farmland owners and farm seekers are now also able to access an Ontario-based site called FarmLINK: www.farmlink.net

If you have limited capital, another innovative way to access small tracts of land to farm is through a landshare. The Halifax Landshare project connects Halifax Regional Municipality residents who have land they're not using (e.g. front or back yard, or an empty lot) with people who want to farm in the city. This program is currently coordinated by the Ecology Action Centre. For more information, contact the Food Action Committee: 902-442-1077/foodaction@ecologyaction.ca

Infrastructure

For an assessment of the infrastructure needs of both crop and livestock farms, see [Fact Sheet #3 – Farm Infrastructure Considerations](#).

The Department of Agriculture maintains a list of agricultural engineers who can help with a variety of infrastructure-related issues, such as developing a farm water supply or designing a barn. The list is available at:

www.gov.ns.ca/agri/prm/programs/econsultants.shtml

You can also find farm infrastructure-related information on the Canada Plan Service website: <http://www.cps.gov.on.ca/english/frameindex.htm>

Equipment

There are a number of agricultural equipment retailers operating in Nova Scotia. Used equipment is occasionally auctioned off at Atlantic Stockyards, Ltd., located in Murray Siding (near Truro). A great deal of used farm machinery is also sold through online classified sites, such as www.kijiji.ca, www.ironsearch.com and www.agriculturesearch.com, as well as in the classifieds of farm periodicals (see **Information** for a listing of local farm periodicals).

There are farm stores spread throughout the province that sell animal feed as well as a wide variety of agricultural equipment, such as fencing equipment and animal feeders. Check your local Yellow Pages for listings under Farm Equipment, Farm Supplies, and Feed Dealers.

Labour

Finding skilled and unskilled farm workers can be a big problem for farmers. One way to recruit skilled workers is through the Career Services Office at the Nova Scotia Agricultural College. For more information, contact Roseanne Chapman, the Office Coordinator: 902-893-7895; rchapman@nsac.ca or visit the website: <http://www.nsac.ca/csa/>

Information

THINKFARM publishes a [quarterly newsletter](#) and regularly posts news and events on its [Facebook page](#). THINKFARM also shares news and events via an email listserv. To join the listserv, send a blank email to join-bfs@lists.gov.ns.ca

The Department of Agriculture has a Farm Business Management Online Library from which farmers can borrow books related to agricultural business planning and other topics. This library is physically located in the Harlow Institute on the campus of the Nova Scotia Agricultural College in Bible Hill. If you cannot pick up and drop off a book you wish to borrow, you can arrange to have the book sent to your Regional Office. You can view the library catalogue online: <http://www.gov.ns.ca/agri/bde/lib/>

Another important service is provided to farmers through Perennia. Perennia is a crown corporation contracted by the government of Nova Scotia to provide extension services to our farmers free of charge. Perennia specialists are experts in their fields and can answer questions about the production, processing, and marketing of farm products that can be produced in Nova Scotia. Perennia has a great deal of useful information posted on its website: www.perennia.ca You can also contact Perennia toll-free at 1-866-606-4636.

The NSAC has been educating farmers, researchers, extension workers, and other agricultural support personnel for more than one hundred years. NSAC researchers are currently conducting cutting-edge research on developing new food products, testing new crops for Atlantic Canada, and minimizing the environmental impact of farming. If you want to know more about NSAC research and agriculture industry trends, contact David Fullerton, the Industry Liaison Officer at 902-896-2419 or find information at: <http://nsac.ca/research/industry/>

The NSAC MacRae Library has an extensive collection of books, periodicals, and reference texts available for loan to the general public. You can access these books at NSAC or through the Novanet Catalogue, a service that allows library card holders at member universities to access the library collections of all Novanet members. Novanet member institutions include a number of Halifax universities (Dalhousie, Mount Saint Vincent, King's, NSCAD), Cape Breton University in Sydney, and St. Francis Xavier University in Antigonish.

There are also several farm-related publications that you may be interested in:

- *Atlantic Farm Focus* is a monthly farm newspaper that reports on issues of relevance to farmers in the four Atlantic provinces. Contact: 1-800-717-4442 x 2525, www.atlanticfarmfocus.ca
- *Rural Delivery* is a farm and country journal for those who love farming, gardening, nature, preserving food, cooking great meals and who simply enjoy country life. It is published 10 times a year. The same publisher also produces *Atlantic Beef*, *Atlantic Forest*, and *Atlantic Farm and Pony*. Contact: 902-354-5411, www.countrymagazines.com
- *Small Farm Canada* is a magazine that promotes small-scale farming as a legitimate and viable endeavour. It is published 6 times a year. Contact: 1-866-260-7985, www.smallfarmcanada.ca
- The Atlantic Farmer website collects links to news articles and websites that may be of interest to Atlantic Canadian farmers: www.atlanticfarmer.com
- Many of the different provincial and national commodity associations produce newsletters or magazines that they send to their members. Some of these publications are free of charge to everyone, some are free to paid members, and some require a paid subscription. Contact the individual commodity associations for more information (see appendix for contact details).
- The *Farm Book: Agriculture's Buyer's Guide for Atlantic Canada* is a comprehensive directory of agricultural associations, government offices, equipment dealers, consultants, etc. published

biannually by DvL Publishing. You can view it for free online at:

<http://www.countrymagazines.com/farmbook.html> or phone 902-354-5411 to ask how to obtain a copy.

Training

For longer term courses, the Nova Scotia Agricultural College offers a number of programs, including a Diploma in Enterprise Management and a Bachelor of Technology, in addition to its four-year Bachelor of Science in Agriculture program. For more information, see www.nsac.ca or call 902-893-6722, 1-888-700-6722 (toll-free).

The Kingstec campus of the Nova Scotia Community College offers a 2-year Diploma in Horticulture and Landscape Technology, as well as a 4-month evening course on Grape Growing in Nova Scotia. For more information, see www.nsc.ca or call 902-491-4911, 1-866-679-6722 (toll-free).

The NSAC Centre for Continuing & Distance Education offers a variety of courses through its Learn2Farm program. This program is designed to meet the needs of new farmers in the sectors experiencing the greatest growth and/or the largest skills gaps. The program will also help position the region's farm industry for environmentally and economically sustainable growth into the future. Each of these courses or modules is offered separately, with no prerequisites or multi-course commitments. Some courses will be offered in an online format, others will be based in classroom or on-farm to allow

maximum flexibility and accessibility while still delivering course content in the most effective manner possible.

For more information, contact the Centre for Continuing & Distance Education at 902-893-6666 or view their website: www.nsac.ca/cde/learn2farm

The Harrison Lewis Centre in Port Joli has short training courses that may be of interest to farmers, such as Chainsaw Operation and GPS for Farm, Woodlot, and Habitat Monitoring. For more information, call 902-683-2984 or visit: www.harrisonlewiscentre.org

For a more hands-on training experience, you may be interested in a SOIL apprenticeship, where you spend time on-farm being mentored by an experienced farmer. For more information, visit

www.soilapprenticeships.org or call ACORN, which coordinates the program in the Maritimes: 1-866-322-2676.

If you are interested in organic farming, the Falls Brook Centre in Knowlesville, New Brunswick, offers short courses. For more information, visit www.fallsbrookcentre.ca or call 506-375-4310.

Farm Management Canada has a mentorship program in farm business management called STEP UP. To learn more about the program, see: www.farmcentre.com/Features/TheNewFarmer/Resources/StepUp/ or call 1-888-232-3262.

For a comprehensive directory of agricultural training opportunities across Canada, visit: www.agritalent.ca or call the Canadian Agricultural Human Resource Council at 1-866-430-7457.



Step 8: Getting ready to farm: Licences, permits, and memberships.

Licences

The following licences and permits can be obtained from the Department of Agriculture:

- Beekeeper and Apiary Registration
- Honey Bees Import Permit
- Deer Farming Licence
- Deer Processor Licence
- Fur Farming Licence
- Game Farm Licence
- Meat Slaughtering and Processing Licence
- Dairy Processor Licence
- Milk Producer Licence
- Milk Transporter Licence
- Food Establishment Permit
- Food Handler Certification

For more information on how to obtain these licences, visit:

<http://www.gov.ns.ca/agri/licensing/>

Other licences can be obtained from relevant producers' organization.

Regulations

In addition to the various licences, there are a number of other provincial and municipal regulations that apply to Nova Scotia farmers. These include regulations related to:

- food safety
- the potential environmental impacts of farming (pesticide use, manure management, nutrient management, soil erosion)
- farm animal welfare
- stray livestock
- land zoning
- building permits



You can find more information on these topics in the [Resource Kit for Nova Scotia Farmers](#). The Nova Scotia Federation of Agriculture website has a [Frequently Asked Questions page](#) related to laws and regulations that impact farmers. Related services that the department provides include Nutrient Management Planning support, [Environmental Farm Plan](#) consultation, and [Safe Food Handling](#) training.

Memberships

You become a member of the NSFA when you obtain your farm registration number.

The NSFA is the recognized voice of agriculture in Nova Scotia and plays a strong role in public policy. It reviews new legislation and regulations to ensure there are no negative implications for agriculture.

Newsletters are sent out ten times per year and e-newsletters are sent out every Friday. Background or position papers are prepared when issues arise that concern Federation members. The NSFA also has a health insurance program for members and their families, and makes special promotions and discounts available to members.

There are other farmer groups in the province and region that you may choose to become a member of. Membership in one or more farmer groups can help you make useful contacts, share with and learn from other producers, and jointly market farm products.

To learn more about the various farmer groups and how to contact them and/or become a member, contact the NSFA at 902-893-2293 (or see the list of contacts in the appendix).



Appendix 1: Contact Information

Regional Offices and Agricultural Resource Coordinators

Cape Breton (Inverness, Victoria, Richmond, and Cape Breton Counties)

- Gary Koziel: 902-563-2003, arccapebreton@gov.ns.ca

Eastern (Pictou, Antigonish, and Guysborough Counties)

- Kevin Bekkers: 902-863-4705, arceastern@gov.ns.ca

Central (Cumberland, Colchester, Halifax, and East Hants Counties)

-Michael Kittilsen: 902-893-3645, arccentral@gov.ns.ca

Valley (West Hants, Kings, Lunenburg, and Queens Counties)

-Brian MacCulloch: 902-679-6006, arcvalley@gov.ns.ca

Western (Annapolis, Digby, Yarmouth, and Shelburne Counties)

-Jean Ward: 902-638-2395, arcwestern@gov.ns.ca

Perennia

Extension and Food Safety Services, Kentville Office: 902-678-7722

Extension and Food Safety Services, Truro Office: 902-896-0277

Innovation Centre and Bioventures, Truro: 902-896-8782

website: www.perennia.ca

Farmer Organizations/Networks

Nova Scotia Federation of Agriculture

332 Willow St., Suite 201, Truro, NS, B2N 5A5

tel: 902-893-2293; fax: 902-893-7063; e-mail: info@nsfa-fane.ca

website: www.nsfa-fane.ca

Atlantic Canada Organic Regional Network

P.O.Box 6343 Sackville, NB, E4L 1G6

tel: 506-536-2867, 1-866-32ACORN (toll-free); fax: 536-0221

e-mail: admin@acornorganics.org; website: www.acornorganic.org

Nova Scotia Young Farmers Forum, contact: Brad McCallum

Tel: 902-893-2293; fax: 902-893-7063; email: bmccallum@agricommodity.ca

<http://nsfa-fane.ca/programs-projects/nova-scotia-young-farmers/>

Organic Council of Nova Scotia, contact: Angela Patterson

tel: 902-582-1363; fax: 902-582-3299; jangela@angelhoeve.ca

Regional Development Authorities

There are 12 Regional Development Authorities in Nova Scotia:

- Annapolis/Digby Economic Development Agency
- Antigonish Regional Development Authority
- Cape Breton County Economic Development Authority
- Colchester Regional Development Agency
- Cumberland Regional Economic Development Association
- Greater Halifax Partnership
- Guysborough County Regional Development Authority
- Hants Regional Development Authority
- Kings Regional Development Agency
- Lunenburg Queens Regional Development Agency
- Pictou Regional Development Agency
- Strait-Highlands Regional Development Agency

To find the RDA nearest you, call the Nova Scotia Association of Regional Development Authorities at 1-866-713-3588 or visit: www.nsarda.ca

Municipal Development Officers

Visit www.gov.ns.ca/snsmr/muns/contact/grouped/Development.asp for a directory of names and contact information or check the blue pages in your local phone book.

Appendix 2: Commodity Profiles

General Considerations for Livestock Farms

There are a number of issues that apply to most livestock farms, including animal welfare and selling meat. These are outlined below. Commodity-specific information can be found in the following pages.

Meat sold in Nova Scotia generally must have been slaughtered, cut and wrapped at a provincially-inspected abattoir. Meat produced in Nova Scotia, but sold outside the province, must have been slaughtered, cut, and wrapped at a federally-inspected abattoir. For more information, see [Fact Sheet #32 – Meat Inspection](#).

The National Farm Animal Welfare Care Council has developed Codes of Practice for the care and handling of various farm animal species. To obtain a copy of these Codes of Practice, visit the Council's website: <http://nfacc.ca/code.aspx> or contact the Council: NFACC, P.O. Box 5061, Lacombe, Alberta, T2L 1W7

Enquiries about good animal husbandry practices can be made to Dr. Leighann Hartnett, DVM: hartnelk@gov.ns.ca, 902-896-2299

Cruelty to farm animals is prohibited by the Animal Protection Act and enforced by the Provincial Farm Animal Inspector. For non-farm animals, the Animal Protection Act is enforced by the Provincial Society for the Prevention of Cruelty to Animals. Complaints of cruelty to farm animals (including horses) should be made to Dr. Leighann Hartnett, DVM.

Some good general references on raising livestock are:

Macey, Anne. 2004. *Organic Livestock Handbook*. Knowlesville, NS: Canadian Organic Growers.

Homestead Organics Ltd. 2003. *Livestock Nutrition from Field to Feeder*. Berwick, ON: Homestead Organics Ltd.

Also, Storey Publishing, based in Massachusetts, has a series of guides on raising different livestock species, both major and minor. For more information, see the website: www.storey.com

Dairy Farming

What do you need to produce cow's milk and/or other dairy products in Nova Scotia?

- A licence from Dairy Farmers of Nova Scotia to produce and sell cow's milk.
- Dairy cattle and young replacement stock.
- Quota sufficient to match production expectations (75 kg/farm is the provincial average; a minimum of 10 kg is required to be issued a milk licence).
- An all-weather barn of sufficient size to house the total number of cattle.
- Land for pasturing and producing grain and forage (unless grain and forage will be exclusively purchased).
- Access to storage structures and equipment for producing and storing sufficient grain and forage to meet the cattle's nutritional requirements throughout the year.
- A manure storage area with sufficient capacity for at least seven months and which meets Nova Scotia environmental regulations to prevent surface water and ground water contamination.
- Approved milking equipment including a bulk storage tank.

There are approximately 250 dairy farms in the province with milking herds ranging in size from 15 to 500. Dairy farming is currently one of the most stable and profitable farm commodities in Nova Scotia as a result of the supply management system. However, it can be difficult for new farmers to join the industry, as the price of quota currently averages more than \$28,000 per kg. The infrastructure and equipment investment costs are also higher for dairy farmers than for other types of less intensive farms. Dairy Farmers of Nova Scotia is developing a New Entrant Program designed to assist one successful applicant each year with a quota loan. The details of this program are available from DFNS (see the appendix for contact details).

Some farms process their own milk into cheese, yogurt, and other dairy products, but this requires additional licences and processing facilities that meet provincial food safety standards. Under the milk quota system, these farmers technically sell their milk to the Milk Marketing Board and then buy it back in order to process it themselves (even though it doesn't physically leave their farm). Dairy cattle can be kept to produce milk or other dairy products for personal consumption. Licensed dairy producers must sell all their milk to Dairy Farmers of Nova Scotia. Other than these situations, milk and dairy products cannot be sold or given away by anyone.

Resources

Dan Mosley, Perennia dairy specialist

tel: 902-896-0277 ext.223; email: dmosley@perennia.ca

blog: <http://www.novascotiadairyblog.com/>

Dairy Farming

Dairy Farmers of Nova Scotia

Suite 100, 4060 Highway 236, Lower Truro, NS, B6L 1J9

tel: 902-893-6455; fax: 902-897-9768; email: hboyd@dfns.ca; website: www.dfns.ca



If you think milking your own cows would be unfeasible, but are still interested in dairy, think about dairy goats or sheep. Goat's and sheep's milk are not supply managed and no quota is required. (See the sheep and goat sections below for other requirements.)

The cottage dairy industry is growing in Nova Scotia. You can process milk into products such as cheese or yogurt even if you don't milk your own cows by buying milk through the provincial Milk Marketing Board.

For more information on dairy processing, contact the Product and Quality Development Division of the Department of Agriculture:

Tel: 902-424-8865

Email: greatfoodideas@gov.ns.ca

Poultry Farming

What do you need to be a poultry farmer in Nova Scotia?

- For conventional broiler chickens, quota and a licence issued by Chicken Farmers of Nova Scotia (CFNS). A minimum of 235,000 kg of quota is required in order to obtain a licence.
- For free-range chickens, a licence issued by CFNS for up to 10,000 birds/year (up to 200 birds can be kept per year without a licence for personal consumption).
- For conventional layer chickens, quota and a licence issued by Nova Scotia Egg Producers.
- No licence is required to keep and sell eggs from up to 99 hens; however, if the eggs are sold anywhere but at the farm (including farmers' markets), they must pass through one of the province's 12 registered egg-grading stations.
- For conventional turkeys, quota and a licence issued by Turkey Farmers of Nova Scotia (TFNS) (a minimum of 75,000 kg of quota is required in order to obtain a licence).
- For free-range turkeys, a free-range licence issued by TFNS, for up to 1,000 kg/year in the first year and up to 10,000 kg/year in subsequent years, issued on a first-come-first-serve basis (up to 25 birds can be kept per year without a licence for personal consumption).
- For conventional poultry, an all-weather, biosecure barn.
- For free-range poultry, a coop that provides protection from the elements and protection from predators.
- A source of feed and water.
- A source of chicks, pullets, or poults.
- An identified processor (for chickens and turkeys) or identified retail markets (for eggs).

There are currently 21 egg producers located throughout the province, with an average of more than 30,000 layers per farm. There are 84 conventional chicken and 19 conventional turkey producers concentrated mainly in the Annapolis Valley. There is currently no quota available. Chicken or egg quota can be obtained through a private arrangement with a current quota holder, subject to approval by CFNS or NS Egg Producers. Meanwhile, turkey quota must be obtained through TFNS and there is currently a waiting list. Conventional poultry barns are expensive to buy or build, but the supply management system makes the investment a fairly secure one if quota can be obtained. The poultry industry is highly regulated and prospective poultry producers should contact the appropriate commodity association for a complete list of regulations (see appendix for contact details).

Meanwhile, there are a growing number of free-range chicken and turkey producers located throughout the province. The terms of a free-range licence restricts the conditions under which the birds can be kept and the feed that they can be given.

Poultry Farming

There are no regulations governing the production of other types of poultry, such as ducks and geese, except that they must be killed and dressed at an inspected abattoir (unless they are used only for personal consumption).

Resources

Alex Oderkirk, Perennia poultry specialist (conventional production practices)

tel: 902-896-0277 ext.222

email: aoderkirk@perennia.ca

Av Singh, Perennia organics and rural infrastructure specialist (free-range production practices)

tel: 902-896-0277 ext. 228

email: asingh@perennia.ca

Chicken Farmers of Nova Scotia Regulations, available from Shelley Acker, General Manager

tel: 902-681-7403; email: shelley@nschicken.com

Nova Scotia Egg Producers

55 Queen St., Suite A, P.O. Box 1096 Truro, NS, B2N 2B2

tel: 902-895-6341; website: www.nseggs.ca

Turkey Farmers of Nova Scotia

P.O. Box 407 Canning, NS, BoP 1Ho

tel: 582-7877; fax: 582-5326; email: info@nsturkey.ca; website: www.nsturkey.ca

Salatin, Joel. 1996. *Pastured Poultry Profits*. 2nd ed. Swoope, VA: Polyface.

Beef Farming

What do you need to produce beef in Nova Scotia?

- Breeding stock and/or feeder cattle of a breed suitable for your farm conditions and market.
- Around one acre of pasture per cow.
- A way of storing forage for the winter.
- A barn or shed to provide rudimentary shelter for the animals during inclement weather.
- Enough clean water for the animals' size and life stage, and the season (larger cattle require more water than smaller ones, lactating cows require more water than non-lactating cows, and all cattle require more water in hot weather than cold weather).
- A market for either calves, finished cattle, or beef.

The beef industry has struggled in recent years with high production costs and low prices for finished cattle and calves. However, many farmers are finding creative production and marketing methods to capitalize on Nova Scotia's "grass advantage." Farmers are lowering their production costs through intensive pasture management, bale grazing techniques, extending pasture seasons, wintering yards rotated through wooded areas on the farm with access to feed, innovative equipment sharing, and custom work. Farmers are also taking their high-quality 100% grass-fed beef and selling it in non-traditional ways, through farmers' markets and to restaurants. Grass-fed beef has been shown to have certain environmental and health benefits over feedlot finished beef. Local consumers are interested in connecting with how and where their beef is raised and have shown a willingness to pay a premium price for a superior beef product.

The Department of Agriculture is currently working on developing a Grassfed Certification program to ensure that all beef being marketed as 'grassfed' meets the standards that consumers expect. In addition, the Department is currently offering a Genetic Enhancement Program to provide financial assistance to beef farmers who wish to improve the performance of their cattle by purchasing cows and bulls of proven superior bloodlines. For more information on hay making and pasture management, see the **Forage** profile.

Resources

Jonathan Wort, Perennia ruminant specialist

tel: 902-896-0277 ext.232; email: jwort@perennia.ca

Nova Scotia Cattle Producers Association

332 Willow St., Suite 201, Truro, NS, B2N 5A5

tel: 902-893-7455; fax: 902-893-3397; email: info@nscattle.ca; website: www.nscattle.ca

Salatin, Joel. 1995. *Salad Bar Beef*. Swoope, VA: Polyface.

Swine Farming

What do you need to be a swine farmer in Nova Scotia?

- Pigs - your own breeding stock or a source of weaned piglets.
- An all-weather barn large enough for the number of pigs you have.
- A source of feed.
- A land base (either your own or a neighbouring farm's) large enough to dispose of the manure produced by the pigs in an environmentally responsible manner that complies with Nova Scotia's environmental regulations.
- A license from Pork Nova Scotia.

Swine producers must be licensed by Pork Nova Scotia to sell finished market hogs or weaned hogs to other finishers. Hog producers sell their animals directly to packers, which must be licensed to meet provincial or federal food safety regulations. While the province once had a large number of farms producing finished hogs, the number of farms and production model has shifted over the past five years. The vast majority of hogs born in the province are now sold as weaners and sent to Ontario or Quebec for finishing. Approximately 6,500 hogs are finished and processed in the province, which is far less than the local market demand for pork. Pork Nova Scotia is working with farmers and processors to develop a new pricing model that will ensure a sustainable local supply of finished hogs.

Concurrent with the decrease in the number of large-scale hog farms, there has been an increase in the number of small-scale producers that have developed niche markets for their meat products, including sausage and bacon, which is often marketed directly to consumers through farmers markets and CSAs. These farms often specialize in heritage pig breeds raised on pasture and supplemented with grain. Since pigs are omnivores, many small-scale producers find they can save money on feed costs by feeding their pigs waste food products. Farmers who wish to use recycled food products to supplement their pigs' diets should note that some waste food products have very low nutritional value and are not an appropriate feed for pigs, while food waste containing meat can spread diseases and parasites that can compromise the health of your pigs and the health of consumers.

Resources

Derek Anderson, Professor of Animal Nutrition at the Nova Scotia Agricultural College

Tel: 902-893-6651; email: danderson@nsac.ca

Av Singh, Perennia organics and rural infrastructure specialist (small-scale swine production)

tel: 902-896-0277 ext. 228; email: asingh@perennia.ca

Swine Farming

Pork Nova Scotia

332 Willow St., Suite 201, Truro, NS, B2N 5A5

tel: 902-895-0581; fax: 902-893-7063; email: info@porknovascotia.ca

Canadian Food Inspection Agency (for information about alternative pig feeds):

http://www.inspection.gc.ca/english/anima/feebet/regdir/sect3_19e.shtml

Minnesota Institute for Sustainable Agriculture. 2001. *Hogs Your Way: Choosing a Hog Production System in the Upper Midwest*. University of Minnesota Extension Service.



Sheep Farming

What do you need to be a sheep farmer in Nova Scotia?

- Breeding ewes or weaned lambs of a breed suitable for Nova Scotia's climate and your production objectives.
- Around 1/5 acre of pasture per sheep.
- A way of storing forage and feed for the winter (½ t. of hay and 120 lbs of grain per ewe).
- A barn or shed to provide rudimentary shelter for the animals during inclement weather (a draft-free barn is needed for winter lambing).
- A means of providing the sheep with around eight litres of clean drinking water per sheep per day.
- Fences to keep the sheep from roaming and to protect them from predators; additional predator protection may also be required.
- A market for lambs, mutton, or breeding stock (rams and ewes) and a market for wool.

The sheep industry in Nova Scotia has experienced significant growth in recent years. Consumers have rediscovered a taste for lamb and immigrants to Nova Scotia have begun to seek out lamb and mutton. Nova Scotia is an excellent place for raising sheep and the required investment in infrastructure and equipment is relatively low. Many Nova Scotia sheep farmers sell lamb directly to consumers at one of the province's many farmers markets. Prices for wool are variable. There is a small-scale mill in PEI and another in New Brunswick that offer higher prices. Some new sheep farmers learn how to shear their own sheep, but there are also custom sheep shearers available for hire in the province.

Resources

Jonathan Wort, Perennia ruminant specialist

tel: 902-896-0277 ext.232; email: jwort@perennia.ca

Sheep Producers Association of Nova Scotia: www.nssheep.ca

Business Planning and Economics of Sheep Farm Establishment and Cost of Production in Nova Scotia: <http://www.gov.ns.ca/agri/bde/news/pdfs/SheepCOPReport.pdf>

Purebred Sheep Breeders Association of Nova Scotia: www.sheepnovascotia.ns.ca

Canadian Sheep Federation. 2010. *Virtual Toolbox for New Sheep Producers*. Available online at: <http://cansheep.ca/cms/en/Resources/VTBox/VTBox.aspx>

“The Modern Shepherd” is a course on sheep raising offered by the NSAC Centre for Continuing & Distance Education. For more information, visit:

<http://nsac.ca/cde/courses/Contract/modernshepherd.asp>

Fur Farming (Mink)

What do you need to be a fur farmer in Nova Scotia?

- A site that meets the setback requirements found in the provincial Manure Management Guidelines.
- Pens and cages built in accordance with the Code of Practice for the Care and Handling of Mink.
- A licence from the Department of Agriculture for the production of mink, fox, chinchilla, or rabbit.
- Breeding stock.
- A source of feed.
- An arrangement with a pelting plant to process the pelts and an arrangement with a fur auction house to sell the pelts or a private contract with a pelt buyer.
- Adherence to the provincial Fur Industry Regulations once in effect.

The mink industry has become more centralized in recent years with many services now available to make the raising of mink easier for new producers. There are central feed kitchens that produce feed for sale to local producers, pelting plants that will do your pelting for you, and an Aleutian disease (AD) testing lab in Weymouth to help you manage AD on your ranch. AD tests can be performed in Truro. Preventing and managing AD is vital for mink production.

A Fur Industry Act was passed in 2010 to ensure the industry can be environmentally sustainable over the long term; regulations are expected to come into effect in early 2012. The mink industry is now the second largest agricultural sector in Nova Scotia. All estimates indicate there is still room for more expansion within this vibrant and growing sector.

Resources

Nancy Smith, Perennia non-ruminant specialist

tel: 902-896-0277 ext 234; email: nsmith@perennia.ca

Nova Scotia Mink Breeders Association

tel: 902-678-0985; fax: 902-678-0985; email: simeonroberts@eastlink.ca

Nova Scotia Fox Breeders Association

tel: 902-893-2293; fax: 902-893-6063

Nova Scotia Mink Breeders. 2002. *Aleutian Disease Task Force Report and Recommendations*.

Agriculture Canada. 1988. *Code of Practice for the Care and Handling of Mink*. Agriculture Canada Publication 1819E.

Perennia publications on mink ranching (scroll down to the section on mink):

www.perennia.ca/livestock.php

North American Fur Auction: www.nafa.ca

Goat Farming

What do you need to be a goat farmer in Nova Scotia?

- Goats of a breed suitable for Nova Scotia's climate and your intended market.
- Around 1/5 acre of pasture per goat.
- A way of storing forage for the winter.
- A barn or shed to provide rudimentary shelter for the animals during inclement weather.
- A means of providing the goats with around eight litres of clean drinking water per goat per day.
- A market for goat meat, milk and other dairy products, and/or fibre.
- If selling goat's milk, a milk licence must be obtained from the Department of Agriculture.
- If processing goat's milk into cheese or other dairy products, a milk processor's licence must be obtained from the Department of Agriculture.

There are more than 30 goat farmers in Nova Scotia. There is only one commercial dairy operation in the province, but other producers make and market their own cheese. The demand for goat products (both dairy and meat) in Nova Scotia currently exceeds supply, so there is room for growth in this commodity. Because goat's milk is not supply managed, it is much easier to start a commercial goat dairy farm than a cow dairy farm. Goats are enjoyable animals, easy to handle and transport, and relatively inexpensive to purchase, feed, and house. Dairy goat production, especially pasture-based production, offers the opportunity for profitable and sustainable diversity on a small farm (Coffey *et al.*, 2004).

Resources

Jonathan Wort, Perennia ruminant specialist

tel: 896-0072 ext. 232; email: jwort@perennia.ca

Av Singh, Perennia organics and rural infrastructure specialist

tel: 902-896-0072 ext. 228; email: asingh@perennia.ca

Goat Association of Nova Scotia: <http://www3.ns.sympatico.ca/gans/>

OMAFRA publications on goats (Ontario):

<http://www.omafra.gov.on.ca/english/livestock/index.html#goats>

ATTRA publications on goats (US):

https://attra.ncat.org/attra-pub/livestock/livestock.html#sheep_goat

Horse Farming

What do I need to be a horse farmer in Nova Scotia?

- Horses of a breed, quality and level of training that suit your intended purpose.
- Sufficient pasture, hay, and other feed to meet the horses' nutritional requirements.
- Horse tack and grooming equipment.
- A farrier.
- Shelter from hot sun and cold winds.

Keeping horses for work or pleasure is a long-standing tradition in Nova Scotia. Many Nova Scotians keep horses as a hobby, others earn money from them through breeding, racing, showing, sleigh rides, or working on a farm or in the woods. There has been a resurgence in interest in the use of draft horses for farming and forestry as small-scale farmers and woodlot owners look to reduce their dependence on fossil fuels and appreciate the greater delicacy draft horses bring to this kind of work versus machines.

Regardless of your reason for keeping horses, it's important to attend to the horses' welfare and also care for the environment through good pasture management and manure disposal. The Department of Agriculture has resources to help you in some aspects of managing your farm. For example, any horse owner can access information and expertise from Perennia's Agriculture Information Specialist (1-866-606-4636) to help you improve pasture and hay quality for your horses. You can also access business advisory services through the department's Business Development and Economics Division. Farms that breed horses for sale can also register their farms, gaining them membership in the NSFA and access to certain Department of Agriculture programs.

Resources

Nova Scotia Equine Federation: www.horsenovascotia.com

(see Equine Directory for a list of veterinarians, feed suppliers, tack suppliers, etc.)

Horse Hay Buying and Feeding Tips from Perennia:

[http://www.perennia.ca/Fact%20Sheets/Field%20Crops/Forage/General/Horse Hay Buying and Feeding Tips.pdf](http://www.perennia.ca/Fact%20Sheets/Field%20Crops/Forage/General/Horse_Hay_Buying_and_Feeding_Tips.pdf)

Atlantic Horse and Pony Magazine: www.atlantichorseandpony.com

Tree Fruit Farming

What do you need to be a tree fruit farmer in Nova Scotia?

- An existing orchard or suitable land and location that lends itself to tree fruit production.
- Cultivars that are suited to the local climate and marketable.
- An understanding of disease and insect control.
- Labour available at harvest.
- A packer that is willing to sell your fruit.

The commercial tree fruit industry in Nova Scotia is concentrated in the Annapolis Valley because of its suitable climate, soils and infrastructure support. There are small areas outside of the Annapolis Valley that are suitable for commercial production; however, production costs tend to be higher in those areas because of slightly lower yields and higher transportation costs. Areas outside of the Valley should be closely investigated as to climate, soil conditions and marketing opportunities before considering the establishment of an orchard.

The main tree fruit produced in Nova Scotia is apples, with annual production near the 2.5 million bushel mark, followed by pears with less than 25,000 bushels. There is limited production of peaches, cherries, and plums because of hardiness and disease issues. Given the right location and cultivar selections, there is an opportunity for expansion in these crops. The majority of the apple crop is stored and marketed by six operations. Most of these operations have up-to-date storage rooms using controlled atmosphere, which allows for certain cultivars to be stored late into the summer months. These facilities also have modern packing lines for grading and packing the fruit. There are also two processing facilities that primarily utilize Northern Spy for pies and other baked apple products. There is one juice facility that uses wind fall apples and packing line culls for apple juice production. There are a number of roadside markets where producers do direct sales. The availability of labour is always of concern for producers, especially at harvest time. The crop needs to be harvested in an orderly fashion to maintain optimum quality. To alleviate the harvest labour problem, some growers are now using migrant farm labour.

Tree fruit production, like many agriculture enterprises, is very competitive, requiring producers to obtain high yields of high quality fruit to be economically viable. Potential orchards or orchard sites should be thoroughly investigated prior to entering tree fruit production.

Resources

Bill Craig, Perennia tree fruit specialist

tel: 902-678-7722 ext. 224; email: bcraig@perennia.ca

Tree Fruit Farming

Perennia publications on orchard establishment and management (scroll down to the orchard section):
<http://www.perennia.ca/fruit.php>

Nova Scotia Apple Industry Cost of Production Study:
<http://www.gov.ns.ca/agri/bde/news/pdfs/AppleCOPStudyFINAL.pdf>

Business Planning and Economics of Apple Orchard Establishment and Cost of Production in Nova Scotia:
<http://www.gov.ns.ca/agri/bde/news/pdfs/AppleProductionReport.pdf>

Nova Scotia Fruit Growers Association
Kentville Agricultural Centre, 32 Main St., Kentville, NS, B4N 1J5
tel: 902-678-1093; fax: 902-678-1567; website: www.nsapples.com

Apple Farmers Association of Nova Scotia
2380 Harmony Rd., Aylesford, NS, BoP 1Co
email: grow@applefarmersofns.ca; website: www.applefarmersofns.ca



Small Fruit Farming

What do you need to grow small fruits in Nova Scotia?

- The right kind of land for your crop.
- Planting stock (except for lowbush blueberries).
- Labour available at harvest time.

The four main small fruits produced in Nova Scotia are lowbush blueberries, strawberries, cranberries, and raspberries. Highbush blueberries have also received a lot of attention in recent years. There is also some interest in the commercial production and/or wild harvesting of minor berry species or berry species with high nutrient content like foxberry, chokecherry, elderberry, blue honeysuckle (haskap), rosehips, and sea buckthorn.

Each small fruit species has different soil and land requirements and generally are not widely adapted. For example, only a certain amount of land in the province has the potential for lowbush blueberry production. Lowbush blueberries are not planted, rather wild rootstocks are encouraged to grow. Therefore, if wild rootstocks are not already present, land cannot be developed for wild blueberries. Meanwhile, cranberries are mainly grown in highly-engineered bogs with ditches and dykes designed to control the water table and with irrigation systems used to meet the water needs of the crop and for frost protection. Berry crops generally prefer well-drained soils with a high sand content. Blueberries (both lowbush and highbush) and cranberries require a low soil pH (4.0 - 5.5) while strawberries and raspberries require a higher soil pH (5.5-6.5).

Other considerations for small fruit production are labour at harvest and markets. Most of the small fruits produced in Nova Scotia are sold fresh to local consumers, with the exception of lowbush blueberries. Each year, 30-40 million pounds of lowbush blueberries are sold for processing.

Resources

Peter Burgess, Perennia lowbush blueberry specialist

tel: 902-896-0277 ext.233; email: pburgess@perennia.ca

John Lewis, Perennia small fruit specialist

tel: 902-678-7722 ext.223; email: jlewis@perennia.ca

Rachael Cheverie, Perennia cranberry and highbush blueberry specialist

tel: 902-896-0277 ext.226; email: rcheverie@perennia.ca

Perennia publications on small fruit production: <http://www.perennia.ca/fruit.php>

Small Fruit Farming

Perennia blogs on small fruit production:

www.novascotiawildblueberryblog.com

www.novascotiahighbushblueberryblog.com

www.novascotiacranberryblog.com

www.novascotiaraspberryblog.com

www.novascotiastrawberryblog.com

Business Planning and Economics of Cranberry Bog Establishment and Cost of Production in Nova Scotia:

<http://www.gov.ns.ca/agri/bde/news/pdfs/CranberryReport.pdf>

Horticulture Nova Scotia

Blair House, Kentville Agriculture Centre, 32 Main St., Kentville, NS, B4N 1J5

tel: 902-678-9335; fax: 902-678-1280; email: hortns@ns.sympatico.ca

website: www.hortns.com

Wild Blueberry Producers Association of Nova Scotia

168 Dakota Rd., P.O.Box 119 Debert, NS, BoM 1G0

tel: 902-662-3306; fax: 902-662-3284; email: wbpans@ns.aliantzinc.ca

website: www.nswildblueberries.com



Vegetable Farming

What do you need to be a vegetable farmer in Nova Scotia?

- A bit of land.
- Some seeds.
- Some extra time.
- Customers.

Despite a relatively short growing season, Nova Scotia is a great place to grow most vegetables. Using some relatively low-cost climate modification techniques, some farmers are even able to grow warm season crops like sweet potatoes.

Vegetable farmers are among the most diverse in the province. There are a number of large-scale farmers, mainly concentrated in the Annapolis Valley, that sell to processors and wholesalers. There are greenhouse vegetable growers who provide Nova Scotian consumers with fresh tomatoes and cucumbers throughout the winter. In addition, there are hundreds of small-scale farmers, many of them organic, who farm only one or two acres and sell directly to consumers through farmers' markets, roadside stands, farm markets, u-picks, and box schemes (CSAs). Vegetable farming is one of the easiest types of farming for new farmers to get started in because:

- the initial investment costs are low (except for heated greenhouses);
- there are no licences or regulations involved in production and marketing;
- the return on investment per unit of land area and per hour of labour is relatively high;
- it is easy to start small and gradually expand as a customer base develops.

Resources

Viliam Zvalo, Perennia vegetable specialist

tel: 902-678-7722 ext.232; email: vzvalo@perennia.ca ; blog: www.novascotiavegetableblog.com

Av Singh, Perennia organics and rural infrastructure specialist

tel: 902-896-0277 ext.228; email: asingh@perennia.ca

Horticulture Nova Scotia

Blair House, Kentville Agriculture Centre, 32 Main St., Kentville, NS, B4N 1J5

tel: 902-678-9335; fax: 902-678-1280; e-mail: horts@ns.sympatico.ca; website: www.hortns.com

Coleman, Eliot. 1995. *The New Organic Grower: A Master's Manual of Tools and Techniques for the Home and Market Gardener*. 2nd ed. White River Jct., Vt.: Chelsea Green.

Grubinger, Vernon. 1999. *Sustainable Vegetable Production from Start-Up to Market*. Ithaca, NY: Natural Resource, Agriculture, and Engineering Service Cooperative Extension.

Grain Farming

What do you need to be a grain farmer in Nova Scotia?

- Well-drained land.
- Seed.
- Access to land preparation, seeding, pest control, and harvesting equipment.
- A market.

Most grain farmers in Nova Scotia produce grain to feed their own livestock. There are a smaller number of farmers who grow grain as cash crops. Higher value grain crops include milling wheat, organic feed grains and food grains, and certified seed. Grain can be grown on a smaller scale if you have access to custom machine operators, otherwise it will be difficult for you to recoup your equipment investment costs.

Resources

Jack van Roestel, Perennia field crops specialist

Tel: 902-678-7722 ext.225; Email: jvanroestel@perennia.ca

Bill Thomas, Perennia field crops specialist

Tel: 902-896-0277 ext. 225; Email: bthomas@perennia.ca

Soil and Crop Improvement Association of Nova Scotia

www.scians.org

Wallace, Janet. 2001. *Organic Field Crop Handbook*. 2nd ed. Ottawa, ON: Canadian Organic Growers.

Brown, Chris (ed.). 2009. *Agronomy Guide for Field Crops*. Ontario Ministry of Food, Agriculture and Rural Affairs Publication 811.



Forage Farming

What do you need to be a forage farmer in Nova Scotia?

- Cleared land.
- Forage harvesting equipment.
- Storage facilities/equipment.
- Grazing animals, if desired, either ruminants (cattle, sheep, goats) or ungulates (horses, llamas).

Nova Scotia's climate is ideally suited for grass production. A century ago, many Nova Scotian farmers prospered on hay sales to New England horse owners. Today, the vast majority of forage is produced by livestock farmers for their own use rather than for export off farm.

Maintaining good quality pastures and making good quality hay or silage requires knowledge and experience. Perennia has guides and factsheets, as well as forage specialists to help get you started. Different livestock species have different forage requirements in terms of maturity at harvest, grass and legume species, and tolerance for weeds, dust and mould, so it's important to know the requirements of the livestock you're producing forage for.

If you don't keep your own livestock, you may be able to rent out your pastures or sell your hay to nearby livestock farmers. Perennia maintains a Hayline, a toll-free number at which you can list forage you have for sale or find others with excess forage to sell: 1-866-606-4636 (toll-free). There are also custom opportunities for pleasure horse and pet owners (e.g. rabbits, guinea pigs). Custom hay-making may involve making custom-sized or specially packaged bales. Finally, there are emerging opportunities in Nova Scotia in the field of energy production from grass.

Resources

Jack van Roestel, Perennia forage specialist

Tel: 902-678-7722 ext.225; Email: jvanroestel@perennia.ca

Bill Thomas, Perennia forage specialist

Tel: 902-896-0277 ext. 225; Email: bthomas@perennia.ca

Soil and Crop Improvement Association of Nova Scotia: www.scians.org

Maritime Pasture Manual: www.perennia.ca/pasture_manual.html

Business Planning and Economics of Forage Establishment and Cost of Production in Nova Scotia:

www.gov.ns.ca/agri/bde/news/pdfs/ForageCOPReport.pdf

Managing Grass for Fuel Pellet Production in Nova Scotia:

www.perennia.ca/Fact%20Sheets/Field%20Crops/Forage/General/REV_Managing%20Grass%20for%20Fuel%20Pellet%20Prod%20in%20NS.pdf

Ornamental Crops

What do you need to grow ornamental crops in Nova Scotia?

- Some land (usually not a lot) and a greenhouse.
- Propagation material and plant propagation skills.
- The ability to analyze ornamental plant trends.
- A market.

The ornamental horticulture sector in Nova Scotia is extremely diverse. It encompasses field- and container-produced landscape plant nursery stock (shrubs, trees, and herbaceous perennials); greenhouse-grown annual bedding plants, deck and patio planters, hanging baskets, potted flowering plants, and cut flowers; and field-grown cut flowers. Most smaller and mid-sized producers direct market via their own retail greenhouse and landscape plant nursery businesses and some retail at farmers' markets. There are also large greenhouse and landscape plant nurseries that wholesale market throughout Nova Scotia, the Atlantic Region and elsewhere in Canada and the United States. The industry is highly competitive, garden and landscape trends-oriented, and constantly changing. A wide array of crops is produced. Some areas within the overall industry are 'mature' and more difficult to enter but other areas are 'newer' with greater potential opportunity, such as field- and container-grown herbaceous landscape perennials, container-grown deciduous shrubs including shrub roses, well/uniquely designed deck and patio pots, and outdoor cut flowers. These crops often require more effort on the business/marketing side than the actual crop production in order to be successful.

Resources

Lloyd Mapplebeck, Associate Professor of Horticulture, Nova Scotia Agricultural College

Tel: 902-893-6683; Email: lmapplebeck@nsac.ca

Greenhouse Nova Scotia, 332 Willow St., Suite 201, Truro, NS, B2N 5A5

tel: 902-893-2293; fax: 902-893-7063; e-mail: info@greenhousenovascotia.com

website: <http://greenhousenovascotia.com>

Landscape Nova Scotia

Executive Business Plus Centre 44-201 Brownlow Ave., Burnside Industrial Park, Dartmouth, NS B3B 1W2

tel: 902-463-0519, 1-877-567-4769 (toll-free); fax: 902-446-8104

e-mail: info@landscapenovascotia.ca; website: www.landscapenovascotia.ca

Nelson, Paul. 2002. *Greenhouse Operation and Management*. 6th ed. Upper Saddle River, NJ: Prentice Hall.

Davidson, Harold, Roy Mecklenburg, and Curtis Peterson. 2000. *Nursery Management: Administration and Culture*. 4th ed. Upper Saddle River, NJ: Prentice Hall.

Wine Grapes

What do you need to produce wine in Nova Scotia?

- Deep, well-drained land with a south-facing slope in one of Nova Scotia's six wine growing regions: Annapolis Valley, Gaspereau Valley, Avon River Valley, Malagash Peninsula, LaHave River Valley, and Bear River.
- Vines of grape cultivars in demand on the market and suited to your site.
- Vine trellises.
- A market with one of the province's existing grape wineries or winemaking facilities of your own.

The wine industry in Nova Scotia is growing as wine consumption in the province increases and as Nova Scotia wines continue to garner national and international awards. The industry is seeking to expand its production capacity and as a result, there are opportunities for new wine grape growers in the province. Wine grape production is a highly specialized industry and it is imperative that growers who are unfamiliar with vineyards do thorough research on the production and marketing of wine grapes before making any business decisions.

Resources

Rachael Cheverie, Perennia horticulturalist

tel: 902-896-0277 ext.226; email: rcheverie@perennia.ca ; blog: www.novascotiagrapeblog.com

John Lewis, Perennia horticulturalist

tel: 902-678-7722 ext.223; email: jlewis@perennia.ca

Grape Growers Association of Nova Scotia

email: ggans@ns.sympatico.ca

Kittilsen, Lori. 2008. *Business Planning and Economics of Wine Grape Production in Nova Scotia*.

http://www.gov.ns.ca/agri/bde/news/pdfs/FS_grapeproduction.pdf

Nova Scotia Wine Grape Production Guide. 2009. AgraPoint International Inc., Grape

Growers Association of Nova Scotia, Winery Association of Canada, Nova Scotia Department of Agriculture, Nova Scotia Community College - Kingstec Campus.

Naugler, Christopher T., Bruce Wright, and Robert Murray. 2004. *The Tangled Vine: Winegrowing in Nova Scotia*. Bridgewater, NS: Blue Frog.

Naugler, Christopher T. and Bruce Wright. 2006. *Wamboldt's Nova Scotia Winegrower's Guide 2006 Edition*. Bridgewater, NS: Blue Frog.

Honey Beekeeping

What do you need to keep honey bees in Nova Scotia?

- A beekeeper and apiary registration.
- Bees and hives (a honey bee import permit is required if bees are to be obtained from outside the province).
- Protective clothing.
- Access to land with flowering plants suitable for bees.
- Market for honey and beeswax and/or a market for bee pollination services.

Many of today's larger beekeepers in Nova Scotia started small and expanded over time to a commercial scale. To begin keeping honey bees at a small, hobby or sideline level requires a relatively small investment and is an excellent way to gain experience and knowledge. There is no requirement to own land as many land owners are willing to have beehives located on their property. There are 225 beekeepers in Nova Scotia operating a total of about 19,000 hives. Nova Scotia beekeeping sector generates over \$3 million annually from pollination services and the sale of honey, beeswax, and bees.

In Nova Scotia, the pollination of berry crops and tree fruits are very dependent on honey bees. In 2007, over 16,000 colonies were used for lowbush blueberry pollination alone. Over the past five years, Nova Scotia beekeepers have experienced increasing demand for colonies for pollination of wild blueberries. As there continues to be a push to further develop the blueberry, cranberry and tree fruit industries in Nova Scotia, this apparent shortage of hives for pollination is expected to continue to grow.

Resources

Nova Scotia Beekeepers Association

P.O. Box 373 Aylesford, NS, B4N 1J5

tel: 902-679-6044; fax: 902-679-6062; email: jmoran@gov.ns.ca

website: www.honeycouncil.ca/index.php/novascotia_beekeepers

Joanne Moran, Provincial Bee Health Advisor/Inspector

tel: 902-679-6044; email: jmoran@gov.ns.ca

Canadian Association of Professional Apiculturists: www.capabees.com

Canadian Honey Council: www.honeycouncil.ca

Maple Syrup

What do you need to produce maple syrup in Nova Scotia?

- Reasonably easy-to-access sugar maple trees on well-drained land with a diameter of 25 cm (10") measured at a height of 1.3 m (4.5') above the ground.
- A drill, taps, and equipment to collect, filter and boil sap.
- Syrup storage containers.

There are 65 commercial maple producers in Nova Scotia producing an average of 130,000 litres of pure maple syrup from 325,000 taps each year. Most of the production is sold as syrup, but some is processed into maple butter, maple cream, maple jelly and maple sugar. These maple products are sold locally in Nova Scotia and are also sold to export markets. In addition, there are many hobby maple operations in the province.

There is strong market demand for pure maple syrup and the Nova Scotia industry cannot currently supply this demand. Maple syrup production can complement other farm enterprises since the bulk of production work is done outside of the main growing season. In fact, nearly all maple syrup producers in Nova Scotia are engaged in other types of farming. Because maple trees take decades to reach maturity, the key to becoming a maple producer is having a hardwood stand with a good concentration of sugar maples. Contact the Nova Scotia Maple Producers Association (see appendix for contact details) for help with assessing your stand.

Resources

Dale McIsaac, Perennia maple production specialist
tel: 902-896-0277; email: dalemcisaac@eastlink.ca

Maple Producers Association of Nova Scotia
email: info@novascotiamaplesyrup.com
website: www.novascotiamaplesyrup.com

North American Maple Syrup Council. 2006. *North American Maple Syrup Producers Manual*. Bulletin 856. Ohio State University Extension.

Christmas Trees

What do you need to produce Christmas trees in Nova Scotia?

- A Christmas Tree Broker or Vendor/Producer Registration from the Christmas Tree Council of Nova Scotia, if you are selling direct to consumers through a Choose-and-Cut operation or your own retail outlet.
- Well-drained land with no frost hollows and a pH of around 4.5 that is either cutover land showing balsam fir regeneration or suitable for planting balsam fir seedlings.
- A plan to deal with pests, including weeds, tussock moth, balsam gall midge, and balsam woolly adelgid.
- Tools for pruning, harvesting, and pest management with required safety equipment (e.g. hard hats, leg protection) and training (e.g. Chainsaw Safety).
- If you have more than ten acres of Christmas tree land, you may need a source of available labour to help you with pruning during the summer months and harvest in November/December.

Christmas trees can be produced in any part of Nova Scotia, with the majority of commercial operations found in the Lunenburg and Antigonish/Guysborough areas. Around 95% of Christmas tree farms are developed from naturally-regenerated stands. Nova Scotia has an ideal climate for balsam fir Christmas trees, and balsam firs typically grow on land that is unsuitable for the production of other agricultural crops. Christmas trees are more valuable than most other forest products and new growers can see a cash return in as little as two years.

The Christmas tree industry in Nova Scotia is well-developed, with strong producer organizations and government support. More than 90% of Nova Scotia Christmas trees are exported to the US, and the export industry has suffered because of the high value of the Canadian dollar, high transportation costs, and the US economic recession. However, Christmas tree growers have had success in developing markets in other Canadian provinces and diversifying domestic markets with Choose and Cut (U-Cut) operations. Integrated Pest Management (IPM) practices have been adopted almost industry-wide for cost-effective control of Christmas tree pests. Extensive research resources are devoted to improving the productivity and competitiveness of the Christmas Tree Industry in Nova Scotia, most notably through the Christmas Tree Research Centre located at the NSAC.

Christmas Trees

Resources

Christmas tree contact staff are located at every Regional Office of the Department of Natural Resources, which also has an extensive list of publications and other resources for Christmas tree growers. Visit <http://www.gov.ns.ca/natr/christmastrees/contactlist.asp> for a complete contact list.

Christmas Tree Research Centre

Dr. Rajasekaran Lada

tel: 902-893-2309; e-mail: rlada@nsac.ca; website: <http://nsac.ca/acc/>

Atlantic Canada Christmas Tree Growers Manual, available from:

Christmas Tree Council of Nova Scotia

P.O.Box 148, New Germany, NS

tel: 902-644-2271; fax: 902-644-2715; website: www.ctns.com

