



LUNENBURG COUNTY
Nova Scotia, Canada



AGRICULTURE
Sector Profile

Lunenburg County, on Nova Scotia's South Shore...

Nova Scotia has a climate and land base which supports the production of a wide and diverse variety of agricultural crops and livestock. Lunenburg County is well positioned to benefit from the growth and development of new agricultural businesses, ideas, innovations, opportunities and products for both domestic and export markets.

Over a four year period *The South West Nova Scotia Temperature and Solar Radiation Study* was undertaken which monitored and analyzed the climate conditions at select sites around South Western Nova Scotia. The study has been successful at identifying unique microclimate locations where favourable growing degree-days and climate conditions exist. These microclimates can offer crop and livestock producers extended growing seasons, milder climates and expand the varieties of plants and breeds of animals that can be produced, potentially increasing crop quality, yield, market opportunity and profitability.

The project has significantly increased the understanding of the climate, sunlight, heat units and agriculture production possibilities in both coastal and inland areas, highlighting the LaHave River Valley in Lunenburg County as an ideal location for agriculture production.

Nova Scotia has more people employed in the agriculture industry than anywhere else in the Maritimes.

Agriculture in the South Shore is characterized by a wide diversity of farm production activities including miscellaneous specialty farms, beef, dairy and poultry as well as several horticultural farms. The variety of agricultural pursuits in the region contributes significantly to its overall economic activity and that of the province itself. An established network of farming-related business and infrastructure, especially in the towns of Bridgewater,

Lunenburg and Mahone Bay, including processors, retailers, wholesalers and contractors, ensures that agriculture will continue to contribute to the economic stability of the region for many years to come.

The South Shore boasts a number of vibrant farmer's markets that regularly draw large crowds for high-quality locally produced foodstuffs, crafts and entertainment.

The expanded agriculture production environment includes but is not limited to: agritourism, value added processing, nutraceuticals, functional foods, agroforestry, biomedical products, biofuels, energy generation, biosecurity, robotics, biofabrics, alcohol, specialty crops, exotic livestock, pet products, innovative technology and much more. Greenhouse technology, high tunnels, hydroponics, GIS and GPS, row covers, high density production systems, irrigation, and fabric buildings, allow for the production of agriculture on smaller land bases and often on land that would not previously have been considered for agriculture production.

The Agricultural industry in Lunenburg County is comprised of a number of diverse sub-sectors, including:

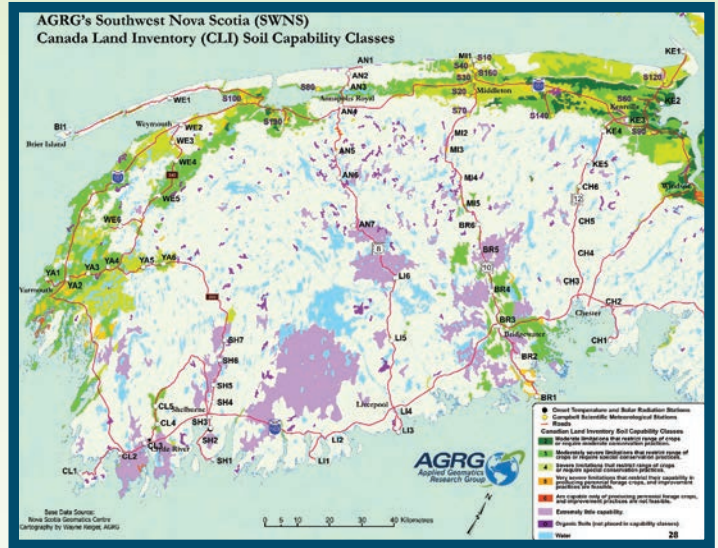
- » The processing of berries
- » Field crops
- » Livestock farming
- » Fruit & vegetable production
- » Berry farming, including a number of "U-pick" establishments
- » Vineyards & wine production
- » Breweries & distilleries



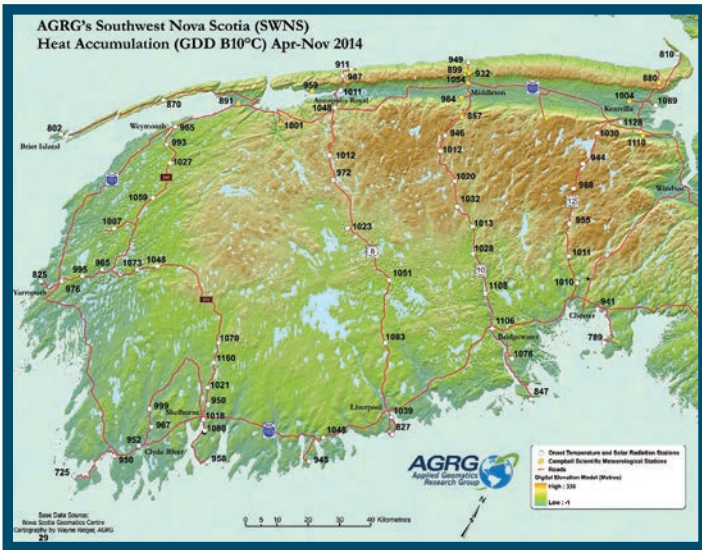
The diagrams below provide a brief overview of the 2014 study range, scope and soil capabilities. It illustrates some of the information possibilities from the study. For the detailed report please visit www.LunenburgDistrict.com/agriculture.



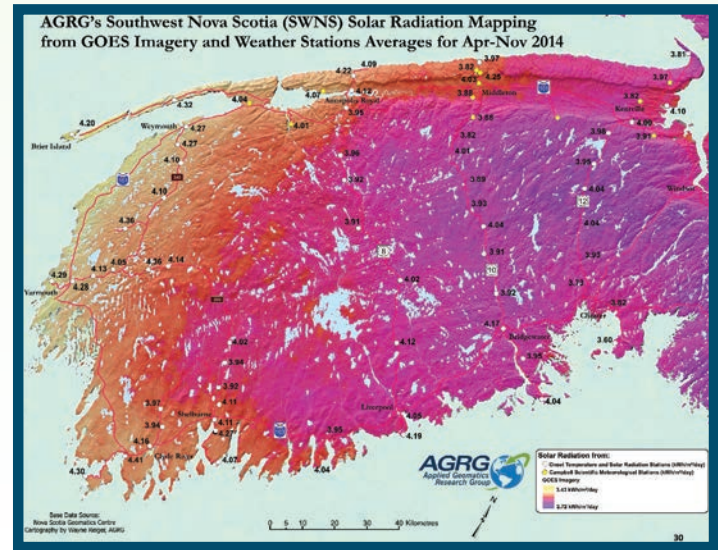
The red line identifies the project study area.



This Diagram identifies the soils capability classes in the monitoring area.



Growing degree-days recorded between April to November 2014 at each monitoring station.



Solar radiation levels recorded across the study region.



Active in the Market

Featured Businesses...

Petite Riviere Vineyards



Wines of the LaHave River Valley

Petite Riviere Vineyards is a destination winery in the LaHave River Valley Wine Region on Nova Scotia's South Shore. They rely on the unique terroir of one North America oldest grape growing regions to make distinctive wines, and is noted for the quality of its reds. The unique features of the rocky soil, the slate in the stone, the ocean breeze and the Petite area's micro climate contribute to wines that are distinctly Nova Scotian.

www.petiterivierevineyards.ca

Petite Riviere Vineyards is a destination winery in the LaHave River Valley Wine Region on Nova Scotia's South Shore. They rely on

Lunenburg County Winery



Our winery is nestled in the heart of Lunenburg Region on a drumlin surrounded by lakes & forests. All wines are made using traditionally aged methods with only the best quality, fresh fruit in season, grown on our blueberry farm or from neighbouring growers in Lunenburg County, the Annapolis Valley and Nova Scotia.

While perhaps most well known for our Blueberry Wine, we also produce a variety of specialty fruit wines including Montbeliard Pear, Honey Moon, Bear River Cherry, Rous Brook Rhubarb, Fundy Peach, Kings Kiwi, Sou'wester Strawberry, and Lake Rossignol Cranberry!

canada-wine.com

Terra Beata Cranberry Farms



Founded in 1998, Terra Beata cleans, freezes, processes and markets cranberries. They operate their own farm, plus receive cranberries from about 25 other farms in Atlantic Canada, for a total of over 5 million pounds per year. Terra Beata runs their own cleaning and packing operation and make juice, preserves, dried fruit and packs of frozen berries. They recently received BRC certification, one of the most stringent food safety programs in the world.

www.cranberryfarm.ca

Founded in 1998, Terra Beata cleans, freezes, processes and markets cranberries. They operate their own farm, plus receive cranberries from about 25 other farms in Atlantic

LaHave Forests



LaHave Forests was founded by a group of like minded friends, with a shared passion for berries. These

pioneers came together through a shared vision of finding the tastiest and healthiest berry to be grown naturally in Nova Scotia .

In 2011, the quest was complete with the discovery of the fabulous tasting Haskap berry from Japan & Siberia. Since this discovery we have grown considerably on the back of the 'little present at the end of the branch'. Today we have over 40 acres of Haskap orchards, with another 20 acres planned for 2015. We intend to bring the best and tastiest Haskap products to markets under the haskapa brand.

www.lahavenaturalfarms.com



Opportunities

There has been continued growth in agriculture and local food production in Nova Scotia. Development agencies and municipalities report an increase in the number of individuals and new entrants interested in developing farm based business enterprises in the province. In recent years the province has experienced a significant number of new farm startups. This was confirmed in 2011 by the

Agriculture Census, which identified Nova Scotia as the only province in Canada to show an increase (2.9%) in the number of farms over the previous 2006 census. People who choose to live in rural Nova Scotia often look for agriculture based opportunities to create incomes to help support a rural lifestyle.

The following are some of the factors contributing to the increase in farm numbers and agriculture sector growth.

- Affordable farms, and farmland is still available in Lunenburg County;
- Sectors like grape/wine and micro brewing have experienced growth in recent years;
- Unique microclimates and farmlands exist throughout the province;
- Nova Scotia is a place where people are choosing to retire and start small and medium sized enterprises (SME);
- Immigrants are considering Nova Scotia as a viable option to live and farm;
- There are existing agriculture, business and education support systems and infrastructures in place;
- The Maritimes is a key cluster hub for organic agriculture based businesses;
- The NS consumer has been a strong supporter of farms, local agriculture and food;
- Access to consumers through a network of farmers' markets and seasonal tourism events;
- A large rural population with one main central urban market (Halifax);
- A strong tourism culture and fall season tourist traffic;
- Value adding infrastructure;
- Good access to communications and the Internet;
- Available transportation (land, sea and air) options for domestic and export sales;
- Provincial funding programs like Growing Forward 2 & support from the N.S. Department of Agriculture Industry Development Section and Think Farm to help new farm businesses get established;
- Research collaborations exist between agriculture, fisheries, forestry and the environment to support new Bio--product initiatives, etc.;
- Dalhousie has an Agriculture Campus located in Truro with a strong research component; and
- The NS Department of Agriculture and Perennia's extension support services.
- Farm Works makes loans available for the development of new agriculture--based opportunity.







Geographic Advantages

Geographically, the Lunenburg County is ideally situated for the agriculture sector. Located at the half-way point between the Western United States and Europe allows business be easily conducted on both continents in the same day thanks to the Atlantic Time Zone (EST + 1 hour).

The region is also close to major shipping and distribution routes; both air, land and sea. The entire area is serviced by a modern 100-series highway infrastructure, as well as many well-maintained secondary roads and is strategically located in proximity to Halifax's Stanfield international airport and, due to its history as a fisheries hub, a number of major port facilities and harbour authorities.

Only an hour away from most points in Lunenburg County, the Port of Halifax is one of the largest commercial ports in Canada, handling more than 14 million metric tonnes of cargo per year.



The port of Halifax represents one of the world's deepest ice-free ports, with minimal tides and currents. It is the only port on the east coast that can accept fully-loaded post-Panamax container ships and boasts a high-speed of cargo transfer. Halifax is one day closer to southeast Asia than any other North American east coast container port.



The population in Lunenburg, Queens, Shelburne and Yarmouth combined is nearly 100,000 and Lunenburg County is close to the large HRM market. This is a sizable market opportunity. Nova Scotian's are continuing to support local farm products and producers. This is evident by the premium returns that are achievable through direct selling to the end consumer.

New agriculture initiatives no matter where they are located must be market, not product driven. It is very easy to focus on what can be grown verses what should

be grown, and on what can be sold. New agriculture developers do not want to be in a situation where they have products on hand but no markets to sell to. "Grow what a market wants not what you are setup to grow".

The local market can be a stepping-stone for a new agriculture product/business developer. Through direct sales, local markets and farmers' markets a producer can build a brand, production capacity and validate market opportunity before moving on to larger markets.

Regional & Farm Demographics

County	Yarmouth	Shelburne	Queens	Lunenburg	Total
Pop. – 2011	25,275	14,495	10,960	47,310	98,040
# Farms-2011	91	17	37	342	487
Total Farm	5,012 (H)	3,046 (H)	4,433 (H)	31,155 (H)	43,646 (H)
Average Farm Size	55.1 (H)	172.2 (H)	119.8 (H)	88.2 (H)	110.5 (H)
Gross Farm Receipts 2011	\$8,905,042	\$3,358,46	\$1,134,116	\$25,276,075	\$38,673,697
CLI 2,3,4 (H)	61,532 (3,4)	4,631 (3,4)	470 (H)	27,138 (3)	



Workforce Advantages

The South Shore is home to a flexible, talented labor force with diverse skill sets, a strong work ethic and a collective dedication to getting the job done right. The region itself hosts a labour force of almost 29,000 strong and is a short commute for the larger labour market to be found in the adjacent Halifax Regional Municipality.

The highly competitive costs of labour within the area, made possible by the reasonable cost of living, provide a valuable economic incentive to doing business in the region. This affordable pool of quality labour is expanded by the ease of hiring foreign workers in the province, who may represent skill sets that are in high demand in Nova Scotia.

Education Profile

Nationally and internationally, Nova Scotia is known as the "Education Province" of Canada, providing the South Shore with access to some of the best and brightest people in the world on top of a highly skilled and motivated workforce for a wide range of activities.

Level of Education

Region/Area	Lunenburg County	Queens County	Nova Scotia	Canada
Population 25+	35,741	8,213		
At least high school	69.5%	63.2%	76.8%	80.0%
Some post-secondary	50.8%	41.2%	56.2%	56.5%
University educated	16.5%	10.9%	22.7%	25.9%
Post-graduate degree/ diploma	4.1%	2.7%	6.9%	7.7%

Source: FP Markets: Canadian Demographics 2011



Income Profile

Households in Lunenburg County have a lower average level of income compared to the provincial and national averages. The lower average income levels are balanced by a lower overall cost of living in the region.

Comparative Income Levels

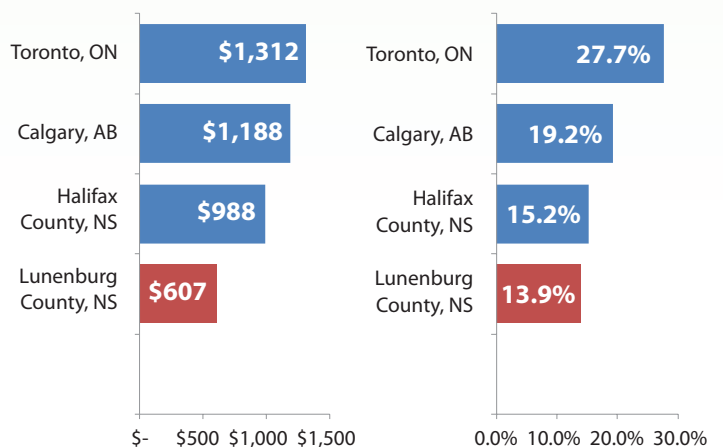
Region/Area	Lunenburg County	Nova Scotia	Canada
Avg. Household Income	\$ 60,579	\$ 68,212	\$ 82,608
Avg. Family Income	\$ 69,443	\$ 78,787	\$ 94,284
Avg. Per Capita Income	\$ 26,742	\$ 28,794	\$ 33,036

Source: FP Markets: Canadian Demographics 2011

Housing Costs Comparison

Average Monthly Major Payments - Owned Residences

Owner households spending 30% or more of household income on major payments (% of Total)



Source: Statistics Canada 2006 Census

Regional Advantages

The South Shore falls within the Atlantic Coastal region and this area's strong coastal influence provides for a moderate climate i.e. the coolest summer and warmest winter temperatures in the Province. From Shelburne through to Mahone Bay, there exists an excellent heat unit accumulation which is necessary for crops such as wine grapes. As a result, vineyards and wineries can be found in this region. Pockets of vegetables and small fruit can also be found, usually associated with the better drained soils of drumlins and eskers scattered throughout this region.

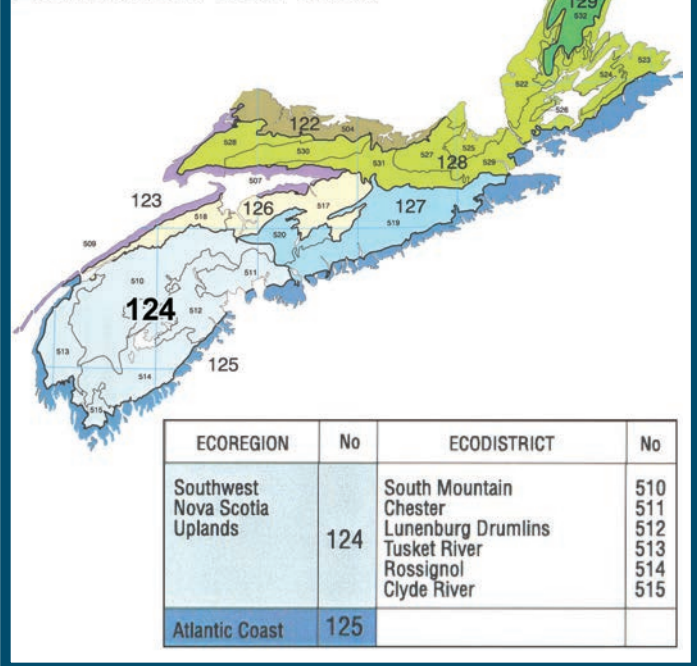
The Nova Scotia Provincial Government has committed to an economically, environmentally, and socially sustainable aquaculture industry and a recreational fishery which thrives on sustainability. A vision for the fisheries sector is one of an organized, sustainable, profitable, market-focused sector producing innovative, high-quality products. The South Shore provides ample resources by which to integrate and operate successfully within these mandates.

"IRAP (National Research Council Industrial Research Assistance Program) played a big role in supporting us through product concept testing and test marketing," says MacDonald. He adds that the program has also been crucial to enabling the company to move into new facilities, which required a redesign of operations to accommodate a much larger scale of production.

With the help of NRC-IRAP and Agriculture and Agri-Food Canada, Van Dyk's Health Juice Products was able to create a licensed, proprietary process that has given the firm a unique niche in a highly competitive global marketplace.

Source: "Success Stories - Squeezing the blues: innovation brings a berry happy ending" - National Research Council Canada, August 11, 2006

Terrestrial Ecoregions and Ecodistricts of Nova Scotia



Source: Agriculture and Agri-Food Canada, Centre for Land and Biological Resources Research, Canadian Soil Information Systems (CanSIS), Ottawa

Further Information

To learn more about our area or to enquire about your business related matters, contact:

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Lunenburg County - Agriculture Sector Profile

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Learn More Online:

**www.LunenburgDistrict.com
www.MODL.ca
www.SouthShoreAgriculture.ca**