

Denman Island Agriculture Strategy



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List of Acronyms

AAC: Agricultural Advisory Committee
AAFC: Agriculture and Agri-Food Canada
AAP: Agriculture Area Plan
ALC: Agricultural Land Commission
ALR: Agricultural Land Reserve
ArdCorp: Agriculture Research and Development Corporation
ASC: Agriculture Plan Steering Committee
AWCR: Agricultural Waste Control Regulation
BCCDC: BC Centre for Disease Control
BCMA: BC Ministry of Agriculture
BCMHS: BC Ministry of Health Services
BCMoE: BC Ministry of Environment
BCMSCD: Ministry of Community, Sport, and Cultural Development
CFIA: Canadian Food Inspection Agency
CLI: Canadian Land Inventory
CSA: Community Shared Agriculture
CVFI: Comox Valley Farmers Institute
CVRD: Comox Valley Regional District
DFO: Fisheries and Oceans Canada
DI: Denman Island
DICEEC: Denman Island Community Economic Enhancement Committee
DPA: Development Permit Area
EMA: Environmental Management Act
EPA: Edge Planning Areas
FIRB: Farm Industry Review Board
FPPA: Farm Practices Protection (Right to Farm) Act
IAF: Investment Agriculture Foundation of BC
LGA: Local Government Act
LTSA: Land Title and Survey Authority of BC
LUI: Land Use Inventory
MIR: Meat Inspection Regulation
NAICS: North American Industry Classification System
OCP: Official Community Plan
RAR: Riparian Areas Regulation
REDI: Renewable Energy Denman Island
RGS: Regional Growth Strategy
RSBC: Revised Statutes of BC
SSFPA: Small Scale Food Processor Association
SVIDFMA: Southern Vancouver Island Direct Farm Marketing Association
Texpo: Transition Expo (Transition Denman Island)
VIHA: Vancouver Island Health Authority

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Executive Summary

Denman Island is one of the Northern Gulf Islands situated between Vancouver Island and the Mainland and is separated from Vancouver Island by Baynes Sound, across from the Buckley Bay ferry. Denman Island has a population base of approximately 1,100 and a relatively mild and dry climate (Tourism BC, 2010). The Island is characterized by small-scale agricultural production and the most prominent forms of which have been orchards, dairy and beef cattle, with some variation over the years. The Agricultural Land Reserve (ALR) comprises 46% of the Island (Denman Island OCP, 2008).



A Denman Island Agriculture Strategy has been developed to determine the current context and develop recommendations for maintaining and enhancing agriculture on Denman Island. The Strategy consisted of an Agricultural Land Use Inventory, stakeholder consultation, review of background material, overview of the regulatory framework and the establishment of recommendations for pursuing an Agriculture Area Plan (AAP).

The Agricultural Land Use Inventory (LUI) involved a windshield survey of all farms on Denman Island using orthophoto and cadastral maps for baseline data. The results of the LUI will be provided to the Islands Trust GIS Coordinator for digitizing and use in a future AAP. It was determined that the main agricultural practices in terms of total land cover were fruit trees, hay/pasture, poultry and sheep. Using Canadian Land Inventory (CLI) maps it was also determined that soils on Denman Island were moderately constrained for agriculture, but could be improved with appropriate inputs.



The stakeholder consultation process included phone and face-to-face interviews with key stakeholders identified by the Agriculture Plan Steering Committee (ASC). A written exit survey was also completed by community members who attended the Transition Denman Expo (Texpo) on October 17th. The top constraints to agriculture identified by respondents included: cost of land and taxes, cost and logistics of transporting goods off-island and fresh water availability. The top opportunities included: a

good climate, the ability to sell and/or trade on the island and good soils. When respondents were asked what agricultural products were missing on Denman many

mentioned cereal grains, small-scale meat production, dairy products and berries. The small population and lack of consumer base was identified by farmers as a serious constraint to their economic viability.

An agriculture profile was developed to obtain a snap shot of agricultural production on Denman. Using Statistics Canada data from the 2006, 2001 and 1996 Census of Agriculture it was determined that the number of farms and the average age of farm operators had increased since 1996 and the majority of farm operations were between 10 and 69 acres. It was also determined that the farm capital and operating expenses increased since 1996 and that the on-farm production practices were generally considered environmentally sustainable.

The policy and regulatory framework with regards to agriculture on Denman Island was also explored. It was evident that the land use on Denman is affected by many policies and regulatory bodies including the Agricultural Land Commission, BC Ministry of Agriculture, and Islands Trust. The local government planning process and influential policies affecting agriculture such as Regional Growth Strategies, Official Community Plans, Zoning Bylaws and Agriculture Area Plans were examined and excerpts provided to inform future planning decisions. Also, a selection of land use planning strategies including farm covenants, bylaw amendments, edge planning, a Development Permit Area for agriculture and agri-tourism policies can be found in Appendix B.

The final section of the Agriculture Strategy provides considerations for pursuing and preparing for an Agriculture Area Plan. The following steps have been proposed with a focus on stakeholder consultation and community engagement:

- Step 1: Complete the Denman Island Agricultural Land Use Inventory
- Step 2: Define the Agricultural Planning Area
- Step 3: Identify Funding Sources for an Agriculture Area Plan
- Step 4: Hold an Agricultural Area Open House

Although the Denman Island Local Trust Committee is charged with much of the decision making and planning for agriculture on Denman, it is important to include local and traditional knowledge where possible.



1.0 Introduction

The development of this Agriculture Strategy has been coordinated by the Islands Trust, with 50% of the funds provided by the Investment Agriculture Foundation of BC. The purpose of the Strategy is to describe the current context for agriculture on Denman Island and identify ways it can be enhanced in preparation for a future Agriculture Area Plan (AAP). An Agriculture Plan Steering Committee (ASC) was established on Denman Island to further guide the development of the Agriculture Strategy and AAP. The Steering Committee consists of representatives from the local agricultural community, the Denman Island Local Trust Committee, the Comox Valley Regional District Board, the Ministry of Agriculture and Islands Trust planning staff. The ASC developed the following purpose statement:

"To protect and encourage agriculture within the context of Denman Island and to create guiding principles for the Islands Trust to use in making policies and bylaws through:

- *Studying and recommending resolutions for areas of regulatory conflict*
- *Educating*
- *Exploring alliances*
- *Researching and promoting agricultural facilities*
- *Strengthening food security*
- *Maximizing agricultural land protection*
- *Recognizing and supporting the local, small scale and diverse nature of Denman farming*
- *Engaging the community*
- *Working with, and providing input to other levels of government*
- *Encouraging youth engagement in farming*
- *Removing barriers to entry*
- *Recognizing the importance of healthy ecosystems and their interrelationship with farming*
- *Considering/supporting local agriforestry and its best practices"*

This Strategy document and the Agricultural Land Use Inventory that was conducted will inform a future AAP. The recommendations produced in this strategy and the future AAP will be used to create policies and regulations to protect and encourage agriculture on Denman Island.

2.0 Purpose of an Agriculture Strategy

Agriculture Strategies serve as precursors to larger Agriculture Area Plans. The Strategy provides a record of the past, a snap shot of the present and a glimpse into the future (Smith, 1998). The strategy provides a summary of the community's history, the role agriculture plays in the community, regulatory mechanisms that affect land use and the role that agriculture plays in the region's overall economy.

The purpose of this Agriculture Strategy is to analyze agriculture on Denman Island and provide recommendations for enhancing agricultural capacity. This document addresses the unique opportunities, challenges and issues facing the local agricultural sector on Denman Island, both historically and in its present state.

3.0 Denman Island Agricultural History

3.1 Geographic Context

Denman Island is one of BC's northern Gulf Islands, located between the mid-island communities of Comox and Parksville in the Strait of Georgia and separated from Vancouver Island by Baynes Sound. The island is relatively small (19 km long, 5 km wide, 51.5 km² in area) and is similar in size and shape to the island of Manhattan (VIHA, 2010).

Both Denman and the neighbouring Hornby Island are part of a group of 13 islands administered by the Islands Trust, a federation of independent local governments. The Islands Trust "plans land use and regulates development in the trust area with a unique mandate to preserve and protect the trust area and its unique amenities and environment for the benefit of the residents of the trust area of the province in cooperation with the Provincial government, municipalities, regional districts, improvement districts, other persons and organizations" (Islands Trust, 2008). Denman Island is also located within Electoral Area A of the Comox Valley Regional District (CVRD), which "is a federation of three electoral areas and three municipalities providing sustainable services for residents and visitors to the area" (CVRD, 2010). Regional districts provide a government for unincorporated (rural) areas, a forum for inter-municipal cooperation and an organization upon which provincial mandates can be imposed. The CVRD encompasses an area just over 1,725 square kilometres (666 square miles) and serves a population of 48,824 according to the 2006 Census.

Denman Island is home to just over 1,100 year-round residents and amenities include one general store (containing the gas station and government liquor store), post office, natural foods store, hardware store, bookstore, craft stores, a bistro, commercial offices, two community halls, a library, a community school, and a museum. Residential development is located primarily along the coastal areas of the central and southern portions of the island.

Sheltered from the more dramatic meteorological extremes on Vancouver Island's west coast, Denman enjoys mild and largely dry weather in spring, summer and fall. In part because of this forgiving climate, farming occurs extensively on most parts of Denman Island, including parcels of land that are sometimes located outside of the ALR.

The closest Environment Canada weather station at Comox Airport indicates average summer highs in the mid 20°C range and winter lows a few degrees above the freezing mark (Weather Office, 2010). Based on local knowledge and input from

the farm community on Denman Island, climate change is occurring and impacting local farmers. The last of three Environment Canada climate stations on Denman Island closed in 1996, but an independent climate station has made reference to an increase in frost free days since 1992. This was beyond the scope of this study, but could be researched further in a future Agriculture Area Plan or other projects of this nature.



About a quarter of the island is protected through parks, including two pre-existing provincial parks (Boyle Point and Fillongley at Denman's south and mid-eastern compass points, respectively) and a new park announced in October 2010 through a public-private partnership, located in the northern part of the island. Denman Conservancy and the Islands Trust have further acquired Central Park in the island's mid-section. Some of those parks fall within the Agricultural Land Reserve

(ALR), which encompasses 46% of the island.

A 2009 study of drainage areas prepared for the Islands Trust found 18 individual watersheds on Denman Island, five of which are known to be fish-bearing (Islands Trust, 2009). The largest water bodies are Chickadee Lake at the north end and Graham Lake in the south central region.

Denman Island's topography, which consists of a series of ridges that run lengthwise along the West-East axis, has created several wetland areas, particularly in the South East. Some of these wet areas have been designated "Seasonally Flooded Agricultural Fields" (SFAFs), meaning that they have been cultivated in the recent past, or still are, but are underwater for a portion of the year. SFAFs are an ecosystem category in the Provincial Sensitive Ecosystem Inventory (SEI) and may have been natural wetlands at one time. They provide wildlife habitat for many species including migratory birds, but many are located within the ALR. Denman Island's streams, lakes and wetlands have been the focus of mapping and conservation efforts and are protected by a Development Permit Area (DPA) that restricts development and land alteration. The Denman Island Local Trust Committee passed an amendment to the Denman Island Land Use Bylaw no. 186 on August 3, 2010, which will be reviewed at a public hearing in 2011. The Bylaw will include the addition of the following text:

"Despite the requirements of subsection 1 above, a development permit is not required for agricultural activities within a seasonally flooded agricultural field that is in the Agricultural Land Reserve as long as it can be determined by site inspection and/or by current orthophoto interpretation that it has been previously modified for agriculture. If it is not possible to make the

determination by the means, other historical evidence that agricultural activities have occurred in the subject area within the last 50 years from the date of the application may be acceptable. A development permit is still required for the activities described in subsections 2.3 and 4."

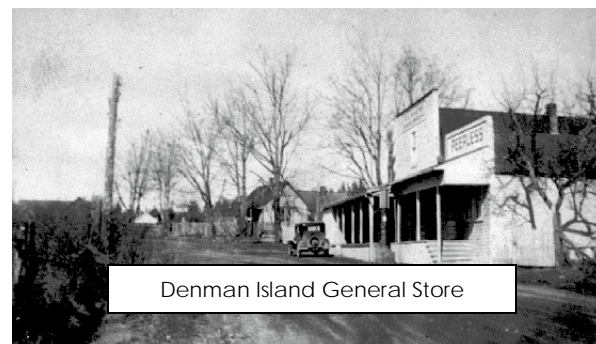
3.2 First Nations History

The Coast Salish, the region's first people, first visited Denman Island at least 5,000 years ago by canoe to find food, specifically fish, oysters, clams and roots (Tourism BC, 2010). The Pentlatch band of the Coast Salish maintained a summer village at Henry Bay near Denman's northern tip while spending their winters along the Puntledge River near Comox. As with many of the other Gulf Islands, traces of their presence can be found in middens, petroglyphs and earthworks in areas such as the Yellow Island Light House on the island's southern shore, and at Longbeak Point on the narrow northern tip of the island. Shell midden beaches are evidence of their continual presence. The Pentlatch were devastated by smallpox and other diseases brought by the Europeans in the late 1700s and early 1800s. Today the K'ómoks First Nation has territorial claims over the wider region, including Denman Island (Denman Island OCP, 2008).

Chief Frank, a hereditary chief of the Comox Band, was a respected and effective diplomat between pioneers and First Nations people. He made every effort to keep his culture current by teaching the younger generations all he knew about the West Coast legends. Chief Andy Frank and family were considered honoured guests at many of the Denman Island Women's Institute gatherings. Chief Andy Frank was born in 1906 on Tree Island and died at Fin Island, near Hartley Bay in 1972.

3.3 European Settlement

Denman was first charted in 1791/92 by Spanish explorers aboard the *Santa Saturnina*. Circa 1864, the surveyor George Richards named the island on his charts after Joseph Denman, a Rear Admiral in the regional British fleet who was commander of the Pacific station from 1864 to 1866 (Tourism BC, 2010).



Denman Island General Store

The first European settlement occurred in 1874, when settlers began to work the interior lowland. Many settlers arrived from the Orkney Islands in Scotland. George Beadnell, a medical doctor, arrived in 1888 as a teenager from England. He spent the remainder of his life on the island and developed the parcel of oceanfront land that he sold (for one dollar) to the BC government as Fillongley Provincial Park.

A school, post office, and Methodist church were built towards the end of the 19th century to service a total population that stood at 100 by 1894. Japanese settlers also established themselves at the southern tip of Denman Island at the turn of the century. The General Store was built in 1908 and the Community Hall was built in 1912. A private ferry service from Buckley Bay began in the early 1920s with the BC government stepping in to provide regular sailings in 1954.

3.4 Historic Agricultural Practices

In the late 1800s, much of Denman Island was cleared and a sawmill operated for a time, making logging a viable industry. However farming was the mainstay occupation for most islanders. Farming on Denman Island was, and still is, characterized by small-scale operations. Many of the historic farms still remain and bartering of local agricultural products is a fairly common practice. Many descendents of the island's earliest European settlers still live and farm here today.



McFarlane and First Horse Team (1900s)

Among the initial European settlers was Thomas Piercy, who cleared forest on the island's west coast and eventually planted upwards of 1,000 apple trees at what is now West Isle Farm (2830 Piercy Road), site of a produce stand and pioneer museum. The orchard included apple species such as Gravensteins, King of Tomkina and Pippins, as well as pears and cherries (Isbister, 1976).

Scottish settlers included William Blaikie, who subsequently moved his father and sister over from the Orkney Islands. The Blaikies planted an orchard and kept sheep, horses, cows, and poultry. They were followed by Tom Chalmers, another resident of the remote North Sea islands who established the still-standing Orkney Farm near the junction of Denman and East roads.

Another prominent farming family was the McMillans and by the late 1880s they had a herd of over 20 dairy cattle on the western part of the island. Alf McMillan sold his property in 1952 to Gordon Wright, what is now called Lone Pine Farm. A second generation of Wrights continue to farm Hereford beef cattle there.



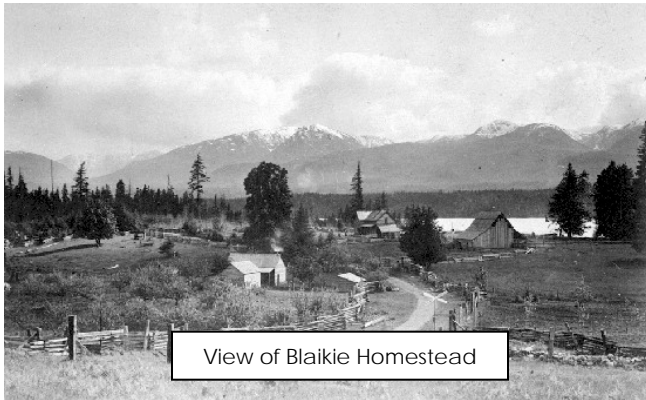
William Blaikie (1890s)

Other prominent agricultural settlers (and descendents of settlers) of Denman Island include (Isbister, 1976):

- Howard McFarlane –started a small orchard, and loaned a Jersey bull to other farmers, sold eggs to the Egg Marketing Board;

- Morrison –had oxen and a horse;
- Robert Taylor Swan – ran a dairy farm before 1932;
- George Dalziel – was a provincial wool grader;
- Jack Isbister - director for the Sheep Breeders Association;
- John Mosely – raised lamb;
- S. Sorensen and Jerry Jerrard – raised turkeys;
- Ernest Pickles – raised geese and ducks.

Apples became Denman's best-known export. In addition to the Piercy ranch, large orchards were planted below the escarpment along Lacon Road or along Denman Road. Some of these "veteran" trees continue to produce fruit to this day. Prune plums, sour cherries, pears, gooseberries and quince were also grown.



View of Blaikie Homestead

The first cattle imported to Denman Island were Durhams (shorthorns), used for dairy and beef. The dairy cows were subsequently bred with Jerseys to increase the quality of the cream. Denman dairy farmers included Alex McMillan, Harvey Piercy, Tom Chalmers, George Dalziel, Bert Fulton, Angus Bell-Irving, A.H. Swan, Irvine Piercy, McFarlane brothers, the Pickles brothers and Jack Isbister (Isbister, 1976).

The Comox creamery was opened in 1901 and became one of the oldest cooperatives in BC (Isbister, 1976). Several Denman farmers were shareholders and/or directors including Gavin Russell, George Dalziel, Jack Isbister and Harve Piercy. Dairy farming was at its peak during World War I, when the average herd per farm was a dozen cows and cream was shipped twice a week to the Comox Creamery (Isbister, 1976). However, by the late 1960s most dairy farmers stopped shipping cream and turned to beef farming.

The Denman Island Farmers' Institute was organized in 1915 by George Dalziel. Feed, fertilizer, grain and grass seed were bought through the Institute in car loads. The Boys' and Girls' Clubs held classes such as garden produce, fruit, cooking, needlework – they also had potato and poultry clubs.

Sheep herding was another popular agricultural endeavour, and the livestock were used both for their meat and their wool. By 1929 there were about 1,000 sheep on the island and many islanders belonged to the BC Sheep Breeders



Graham Family (1888)

Association (Isbister, 1976). Wool was originally shipped to Ontario, but due to high freight rates they began selling to local buyers

Another regional processing plant, the Courtenay Vegetable Cannery, was opened on Dyke Rd. in 1933 and operated for about four years.

In the 1930s, beaches at Denman's north end were seeded with oysters and the harvests grew into a million-dollar business by the 1970s (Isbister, 1976). The Pickles had oxen and horses and got involved in the oyster industry in the mid-1940s.

Other notable agricultural goods and services produced by the settlers include:

- Yorkshire pigs;
- Beef;
- Potatoes;
- Christmas trees;
- Turnips - known to be excellent quality;
- Bees;
- Cascara bark (cut and dried);
- Horse breeding;
- Slaughtering and butchering.

In 1973 the Agricultural Land Reserve (ALR) was enacted in BC through the Agricultural Land Commission Act. Currently, 46% (approx. 2,300 ha) of Denman Island is in the ALR. While most of the historic farms fell within the ALR zone, some are located in rural residential areas but continue to operate as farms. Denman Island has a significant amount of arable land, which is second only to Saltspring Island in the entire Trust Area. This was confirmed by mapping data collected by Islands Trust staff.

4.0 Agricultural Land Use Inventory

4.1 Methodology

An Agricultural Land Use Inventory (LUI) was performed to determine both the current qualitative and quantitative characteristics of farmland on Denman Island, using methodology as outlined in Runka (1973). A windshield survey was performed over the course of two days (September 20 and 21, 2010) using orthophoto and cadastral maps for baseline data. A spreadsheet of information was compiled including data referring to parcel ID, address, farm name, livestock present, crops grown, farm gate sales, potential geophysical constraints, and any home-based businesses noted.



Each farm on the island was visited, with particular attention given to operations located within the ALR (Agriculture), Resource, and Rural Residential zones.

The maps that were created from the inventory data were presented at the Denman Island Texpo event on October 17th, 2010 for feedback from stakeholders present at the event. Mapping data that was presented to the community included the following characteristics:

- Crops currently being grown;
- Animal husbandry practices, including equine;
- Presence of Environmentally Sensitive Areas and wetlands;
- Farmland covered by woodlots and other natural areas;
- Presence of agricultural constraints such as poor drainage and/or steep topography.

4.2 Initial Results

Both the spreadsheet of data and maps created during the Agricultural Land Use Inventory will be given to the Islands Trust for their Geographic Information Systems (GIS) Technician to complete the digitization. The final results will be used to inform a future Agriculture Area Plan.

The majority of soils on Denman Island are classified as Brown Podzols and Grey Gleysols. Podzols typically occur in wetter areas and at higher elevations under coniferous forests and are reddish-brown in colour. Gleysols are typically bluish-gray with brown mottles and are found in areas where the water table is high due to proximity to water bodies. Much of the western part of Denman Island is covered by a dense forest dominated by Douglas-fir, western hemlock and western red cedar on deep gravelly loam glacial till. Some areas have shallow soils over sandstone or shale. The eastern part has a loamy sand on which arbutus is frequently present.

The main agricultural limitations, as outlined on the Canadian Land Inventory (CLI) map are stoniness, steep slopes in some areas, and moisture deficiency. The majority of soils on Denman Island are classified as moderately constrained to agriculture due to these limitations, and are categorized as Class 3, Class 4, and/or Class 5 soil capability. However, with improvements, the categories increase to Class 2 in some areas. A large proportion of the best agricultural soils are on the west side of the island fronting Baynes sound. However it should be noted that a number of viable crops can be grown on Class 4 and Class 5 soils.

The main agricultural practices noted, in terms of total land cover, were:

- Fruit trees (both maintained and abandoned);
- Hay/pasture;
- Poultry (non-intensive);
- Sheep.

5.0 Stakeholder Consultation

5.1 Context

The purpose of conducting a stakeholder consultation process was to determine the challenges and opportunities associated with agriculture as well as the community vision for the future of agriculture on Denman Island. The objectives of the consultation process were as follows:

- To engage with identified stakeholders, community groups and the general public to determine key issues and community values regarding agriculture on Denman Island.
- To build a vision for agriculture within the Denman Island community.
- To identify any barriers to agricultural development in the regulatory process.
- To identify infrastructure and resource needs of producers.
- To raise awareness with Denman Island residents of the Agriculture Strategy and related land use/community issues and opportunities.

A separate full stakeholder consultation report was completed in November 2010, and a summary is provided in this section as well.

5.2 Methodology

The methodology included identifying key stakeholders to approach for interviews (phone and face-to-face) and administering an exit survey for the Transition Denman Island Expo (Texpo) event on October 17th, 2010.

In consultation with the Agriculture Plan Steering Committee, an extensive list of stakeholders was identified to be contacted for personal interviews. Seven of the stakeholders were farmers, one was a local business owner and four were either long term residents and past farmers or prominent local residents involved in food production in some capacity (i.e. preservation). Phone and face-to-face interviews with key stakeholders covered topics such as the current and historical role of agriculture, potential for expansion, conflicts between land use, market-based opportunities and constraints for agriculture, rural lifestyles and values and the need for services. A semi-structured questionnaire was developed to guide telephone and face-to-face conversations. A total of ten stakeholders were interviewed over the phone, while two were interviewed in person.



Two written surveys were developed for farmers and non-farmers based on similar questions from the phone and face-to-face interviews. These surveys were

distributed during the Texpo event on Denman Island. Nine farmer surveys and 13 non-farmer surveys were completed, compiled and analyzed using frequency tables in Microsoft Excel. This provided us with a total of 34 survey respondents (10 phone interviews + 2 face-to-face interviews + 9 written farmer surveys + 13 written non-farmer surveys = 34 survey responses).

5.3 Top Agricultural Constraints on Denman Island

Responses for agricultural constraints on Denman Island were consistent between the phone, face-to-face and written surveys. The top three constraints identified were (1) cost of land and taxes, (2) cost and logistics of transporting goods off-island and (3) fresh water availability on Denman Island (Figure 1).

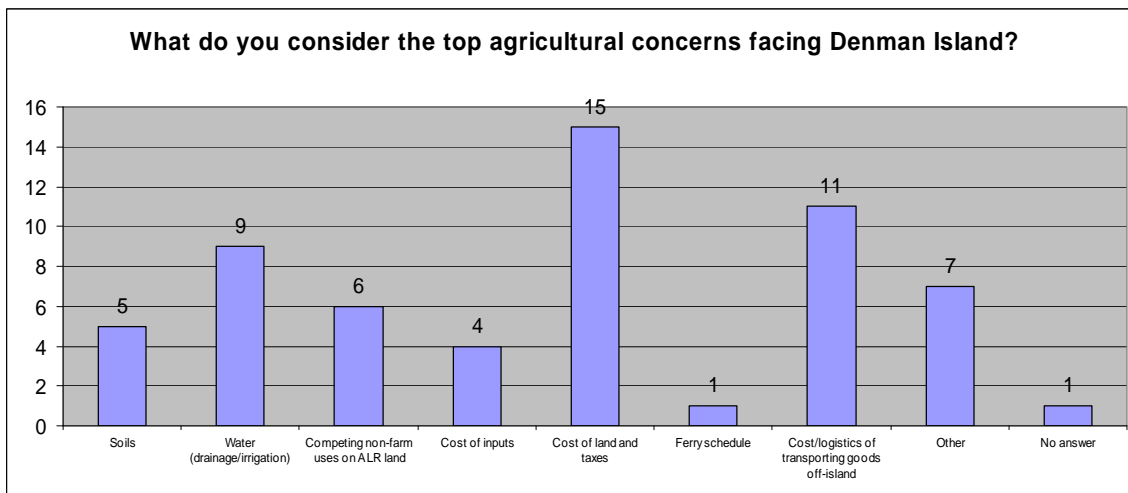


Figure 1: Top Agricultural Concerns Facing Denman Island

Respondents noted that the cost of land and taxes was the biggest constraint to farming on Denman Island. One respondent mentioned that the cost of land has prevented many people interested in farming from entering into the market due to their inability to pay.

Additionally, the cost and logistics of transporting goods off the island was a major concern for respondents. This was especially true for livestock producers who needed to ship their animals off of Denman Island for processing. For many, the cost of shipping and the high cost of slaughtering their animals at a provincially licensed facility resulted in a negative return.

The third issue that was identified by written survey respondents was a lack of fresh water for irrigation. Denman Island is a small island with relatively little fresh water access. There are no reservoirs, but there is a large wetland in the centre of the island, which is included in a conservation area.

5.4 Top Agricultural Opportunities on Denman Island

The top three opportunities that respondents identified with farming on Denman Island were: (1) good climate, (2) the ability to sell and/or trade on the island and (3) good soils (Figure 2).

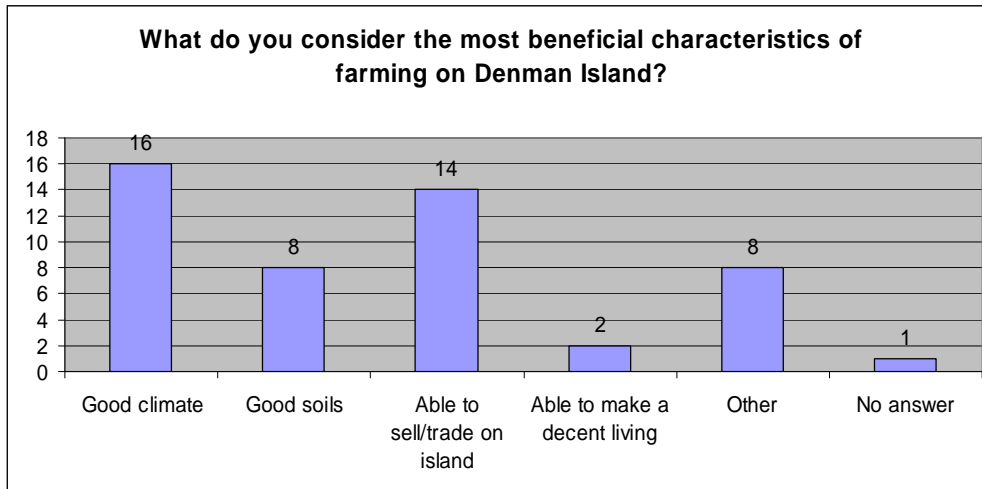


Figure 2: Beneficial Characteristics of Farming on Denman Island

The climate on Denman Island was mentioned repeatedly when this question was raised. Respondents noted that Denman Island was relatively warm and less rainy than Vancouver Island, especially on the south end of the island.

Secondly, the ability to sell and/or trade was identified as a benefit to farming on Denman Island. One respondent mentioned that he experienced a lot of support from other farmers on the island, while other respondents mentioned that it was a great community and that there was a good bartering system on the island. One respondent did notice that the volume of products to trade was not enough to make money in farming.

Good soils were also mentioned as a benefit to farming on Denman Island, but that it takes a few years to build it up. Some of the other opportunities that were identified included: knowing what is and what is not on your products, access to the larger markets on Vancouver Island, the rural character of the island and the ability to enjoy a high quality of life while eating well.

5.5 Other Key Findings

5.5.1 What agricultural products are missing?

When respondents were asked "what crops/livestock would you like to see grown/raised here that aren't already?" We received a wide variety of responses, but noticed that they fell within five main categories: meat, dairy, berries, produce

and grains. Many respondents mentioned that they would like to be able to purchase chicken, specialty livestock, bacon and small cuts of meat. Respondents were also interested in seeing dairy return to Denman Island as sheep or goat dairy operations.

There was interest in increasing the number of farms growing berries, greenhouse vegetables and root vegetables and many felt that these were in consistent demand. Also, it was mentioned that grain production should be increased for personal consumption and for livestock feed. Nursery operations, honey operations and value-added processors were also mentioned as potential agricultural endeavours.

5.5.2 Lack of Consumer Base

The farmers that participated in the phone survey expressed their concern that Denman Island has a very limited customer base. They mentioned that many consumers have become accustomed to purchasing their groceries off of Denman Island and don't support the local market. One farmer noted that he has seen an increase in support on the island for local products, but his customer base still consists of 35-40% tourists, even in the off-season.

5.5.3 Lack of Processing Facilities

It was raised by many that the lack of food processing infrastructure on Denman Island was a significant barrier to increasing production levels or diversifying crops. Suggested processing facilities that could be utilized by the community included: a communal apple press, general apple processing facilities and a mobile abattoir.

5.5.4 Regulatory Restrictions

Many respondents indicated that actual and perceived regulatory restrictions prevent farmers from selling meat locally and local businesses from purchasing directly from the farmer. A local business owner expressed her frustration with the fact that she is only allowed to serve local meats or eggs that have been slaughtered at a licensed abattoir, game that has been obtained from a commercial hunting operation and seafood from a licensed fishery. Respondents also expressed their concerns with the cost of transporting meat off the island for slaughter. Many farmers have gotten out of livestock production altogether.

5.5.5 Farm Equipment

Some respondents mentioned that a barrier for them to increase or diversify their production was the lack of farm machinery and equipment on Denman Island. One farmer suggested that a farm equipment sharing program be established to share machinery when possible.

5.6 Future Objectives for Agriculture on Denman Island

Future goals were identified through the survey and interview process. These shared objectives could be used as a starting point in developing a full vision for the future of agriculture and food security on Denman Island, preferably during a full scale AAP.

Four main themes arose when respondents were asked what their vision for agriculture on Denman Island was:

- (1) Increased production;
- (2) Increased self-sufficiency;
- (3) More young farmers and innovation; and
- (4) Fewer restrictive regulations.

The majority of the respondents indicated that they see a future of Denman Island including increased levels of agriculture production on more of the land base. Respondents also expressed their vision that Denman Island become more self-sufficient in food production. One person mentioned that they believed all residents should become involved in food production and be responsible for a portion of their own food production.

Many also expressed that the future of agriculture on Denman Island should include more young farmers that try unique forms of production. However, it was important to many that restrictive regulations be reviewed to ensure that producers can be innovative with their production practices.

5.7 Recommendations for Future Stakeholder Consultation

A full Agriculture Area Plan could include a much more in-depth stakeholder consultation. The following are some recommendations that could be implemented during the public consultation portion of an AAP:

1. **Focus group discussions** – Focus groups could be used to gain more information on public perception of agriculture and a vision for the future. These could be held at the community hall or other public location.
2. **Island-wide agricultural survey** – A written survey should be distributed to all residents of Denman Island for their input.
3. **Interviews with all farm operators** – Instead of interviewing a sample of farm operators on Denman Island, a larger stakeholder consultation should include interviewing all farm operators.
4. **Open house** – Holding an open house with a focus specifically on the Agriculture Area Plan would provide more opportunity for input from the community. Community members would be invited to view the completed digitized Land Use Inventory Maps and provide suggestions for the future of agriculture on Denman Island.

6.0 Agricultural Profile

6.1 Introduction

To get a snapshot of agricultural production on Denman Island and the economic contribution agriculture plays, an agriculture profile was developed for the island community. We were able to obtain Statistics Canada Census of Agriculture data, specific to Denman Island, for the period 1996 to 2006. The agricultural profile provided information on the following:

- Number, location, and type of farms;
- Levels of production - numbers of livestock, crop acreages, specialty operations (nurseries, horticultural, berries, tree fruit production, agroforestry, vineyards, greenhouses, etc.);
- Farm cash receipts and expenditures;
- Economic contributions of primary agricultural industry (fruit, vegetables, eggs, meat, dairy);
- Role of agri-tourism and farm-based businesses such as corn mazes, upicks, etc.; and
- Assessment of the availability and location to services such as irrigation, transportation linkages, processing, distribution, and agri-industrial land.



Due to the limited availability of Census data we were not able to determine the economic contribution of specific agricultural sectors or agritourism businesses, but we were able to determine number of farms¹, gross farm receipts and the breakdown of farms by industry group.

6.2 Number of Farms

The number of Census farms on Denman Island has increased since 1996 (Figure 3). In 1996 there were a total of 18 Census farms² on the island and in 2006 there were 28 Census farms (Statistics Canada, 1996, 2001, 2006).

¹ Many agricultural operations in Canada are composed of numerous parcels of land in a number of locations. These different locations are often situated in several geographic areas (such as townships or counties). In these situations, the "headquarters rule" assigns all data collected for the agricultural operation to the geographic area where the farm headquarters is located (Statistics Canada, 2006).

² Census farm is defined in 1996 as any person operating an agricultural holding which produces at least one of the following products intended for sale: crops, livestock, poultry, animal products, greenhouse products, nursery products, mushroom, sod, honey, maple syrup products, commercial hatcheries, Christmas trees (Statistics Canada, 2006).

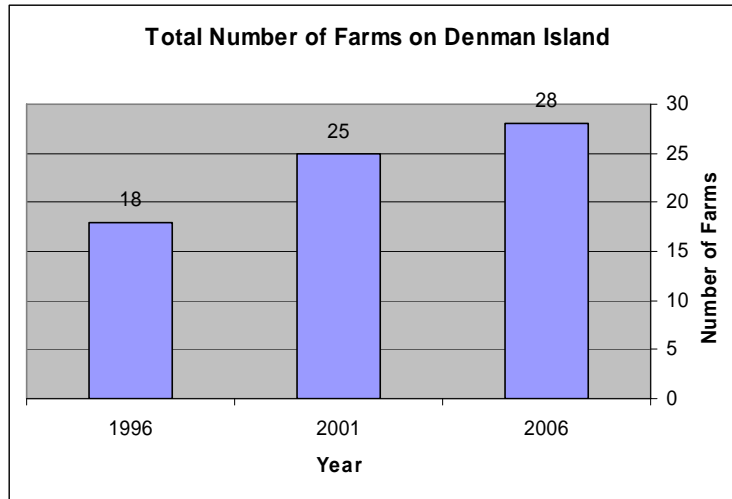


Figure 3: Total Number of Census Farms on Denman Island (Statistics Canada, 1996, 2001, 2006)

According to the Denman Island Local Foods Directory 2010, there were 48 farms that provide products for sale or trade on Denman Island. Many of these farms may not have participated in the 2006 Census of Agricultural or are new operations.

6.3 Farm Operators

Census data indicated that there were 40 total farm operators and the average age of operators was 58.2 years of age (Statistics Canada, 2006). A total of 15 of the farm operators reported that their farms only had one operator, while 25 of the farm operators reported that their farms had two or more operators. Of the farms operators that were included in the Census, 25 were male and 15 were female.

The data showed that there no farmers on Denman Island were under the age of 35 and that the majority were over 55 years old (Table 1).

Age Range (in years)	Number of operators
Under 35	0
Between 35 and 54	15
Over 55	25

Table 1: Age Range of Farm Operators on Denman Island (Statistics Canada, 2006)

The majority of the operators reported lived and worked on their farm. All 40 of the farm operators lived on the farm for all or part of 12 months of the year (Statistics Canada, 2006). Half of the operators spent less than 20 hours per week working for the farm, while 10 operators worked between 20 and 40 hours weekly and 10 operators worked over 40 hours weekly for the farm (Table 2).

Time spent working for the farm (weekly)	Number of operators
Less than 20 hours	20
Between 20 and 40 hours	10
Over 40 hours	10

Table 2: Time Farm Operators Spend Working for the Farm per Week on Denman Island (Statistics Canada, 2006)

Some of the operators indicated that they had non-farm work as well. A total of 20 operators indicated that they spent time working on non-farm work during the week (Statistics Canada, 2006). Five operators worked less than 20 hours on non-farm work, while 10 worked between 20 and 40 hours on non-farm work and 5 operators worked over 40 hours per week on non-farm work (Table 3).

Time spent working on non-farm work (weekly)	Number of operators
Less than 20 hours	5
Between 20 and 40 hours	10
Over 40 hours	5

Table 3: Time Farm Operators Spend Working on Non-Farm Work per Week on Denman Island (Statistics Canada, 2006)

6.4 Area of Farms

The majority of farms on Denman Island are between 10 and 69 acres (Figure 4). Out of 28 farms reported, 17 farms were between 10 and 69 acres and no farms were reported to be over 179 acres (Statistics Canada, 2006).

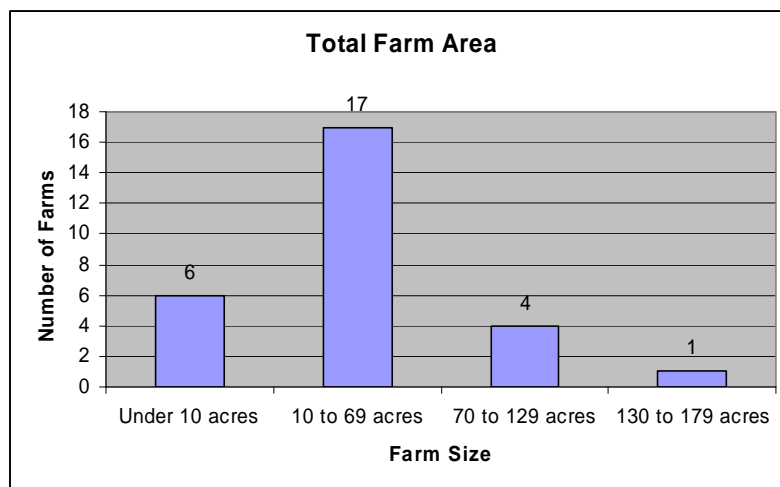


Figure 4: Total Farm Area per Census Farm Reported on Denman Island (Statistics Canada, 2006)

The total area of land owned on Denman Island varied between 1996 and 2006 (Figure 5). In 1996 there were 920 acres owned, which jumped to 1,577 acres owned in 2001 and dropped again in 2006 to 1,006 acres (Statistics Canada, 1996, 2001, 2006).

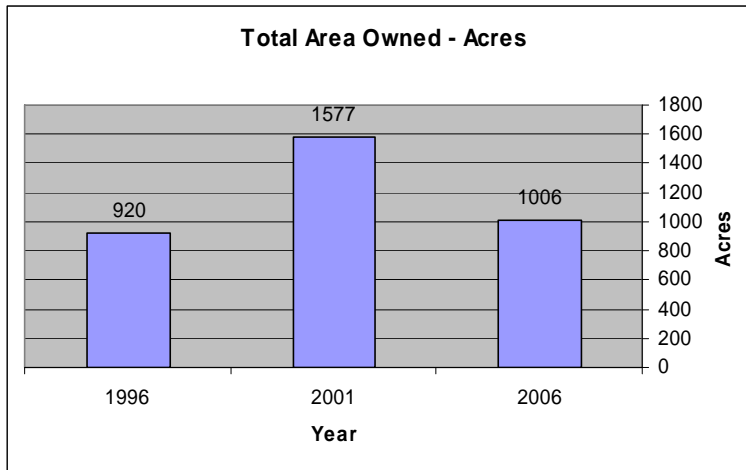


Figure 5: Total Farm Area Owned on Denman Island (Statistics Canada, 1996, 2001, 2006)

Three farms reported to use land that was rented or leased from others and one operator mentioned that they participate in crop-sharing (Statistics Canada, 2006). One operator reported renting or leasing land to others and two farmers reported that they had area on their farm that was used by others. This indicates that there is some potential to expand land sharing opportunities on Denman Island, but that few farms and operators currently participate in land sharing.

Table 4 shows the number of farms and number of acres that are under different land uses. It is interesting to note that 21 of the reported 28 farms have land in crops. It is also interesting to note that 19 farms have woodlands, wetlands and areas for Christmas trees while only 9 farms have tame or seeded pasture.

Land Type	Number of Farms	Acres
Land in crops (excluding Christmas tree area)	21	374
Tame or seeded pasture	9	145
Natural land for pasture	15	148
Woodlands and wetlands	19	292
All other land	22	98
All other land (including woodland, wetlands and Christmas tree area)	27	390

Table 4: Number of Farms in Each Land Type Category on Denman Island (Statistics Canada, 2006)

6.5 Total Gross Farm Receipts

The total gross farm receipts³ on Denman Island have varied since 1996 (Figure 6). In 1996 the gross farm receipts attributed to agriculture were \$225,339. In 2001 the gross farm receipts recorded declined to \$194,654, but increased again in 2006 to \$205,825 (Statistics Canada, 1996, 2001, 2006).

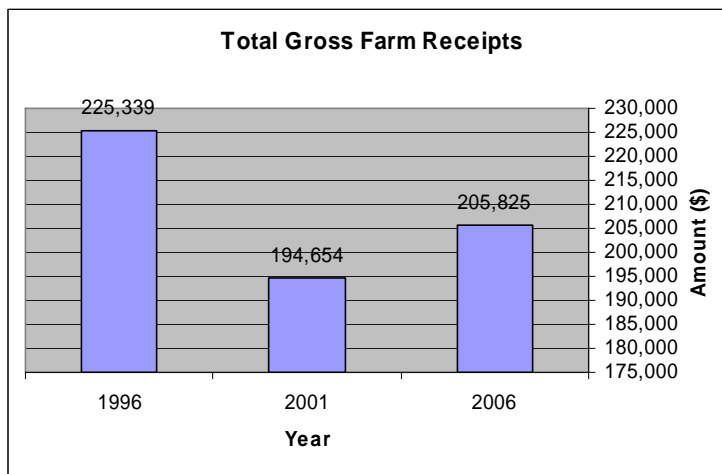


Figure 6: Total Gross Farm Receipts on Denman Island (Statistics Canada, 1996, 2001, 2006)

6.6 Value of Land and Buildings

Since land values and the cost of land was considered one of the top constraints for agriculture on Denman Island by stakeholders the land prices for 2006 were determined. The total value of land and buildings for all 28 farms reporting was \$13,584,944, which is \$485,168 on average per farm (Statistics Canada, 2006). Of the 27 owned farms reporting on the census the total value of owned land and buildings was \$12,294,944, or \$455,368 per owned farm on average. The four farms that reported renting or leasing from others had a value of land and buildings of \$1,290,000, which is \$322,500 per rented/leased farm.



Current land prices were further explored using an online realty tool (<http://www.mls.ca>). It is interesting to note that no agricultural properties were listed for sale on Denman Island. All listings were included under the residential category. The value of the land and buildings varied substantially throughout Denman Island,

³ The data for gross farm receipts and expenses are reported for the year preceding the census year (Statistics Canada, 2006).

especially if the property was on the waterfront or had an updated, large house on the premises. The properties that were not on the waterfront were priced between \$36,000 and \$550,000 per acre. Small houses on 0.5 acres were approximately \$270,000, while the other house prices varied dramatically. One house on 11.86 acres of lake view was priced at \$1,590,000 while another house on 11 acres with a large garden space was \$395,000. Waterfront properties with houses were generally priced at \$500,000 for 0.6 to 2 acres of land.

6.7 Total Farm Capital by Market Value

The market value of total farm capital on Denman Island was investigated and shown in Figure 7. The total farm capital increased from 1996 to 2006. In 1996 the total farm capital was \$5,569,820 while the total farm capital in 2006 was \$14,699,066 (Statistics Canada, 1996, 2001, 2006).

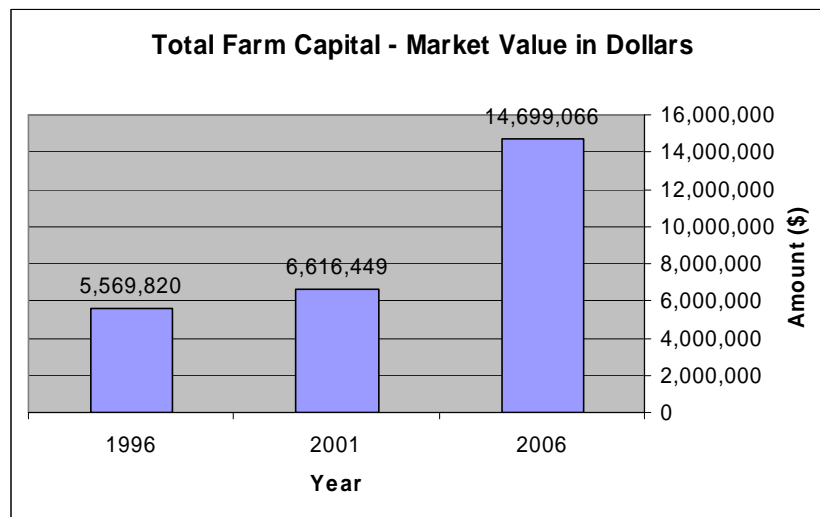


Figure 7: Total Farm Capital in Market Value on Denman Island (Statistics Canada, 1996, 2001, 2006)

6.8 Total Farm Business Operating Expenses

As is expected, the total farm business operating expenses increased on Denman Island during the period 1996 to 2006 (Figure 8). The operating expenses in 1996 were \$278,307, which increased to \$333,421 in 2006 (Statistics Canada, 1996, 2001, 2006).

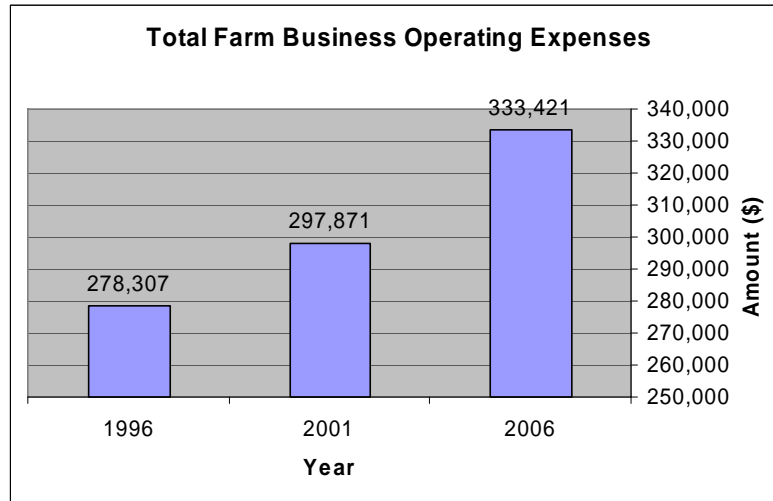


Figure 8: Total Farm Business Operating Expenses on Denman Island (Statistics Canada, 1996, 2001, 2006)

6.9 Equipment

During the stakeholder consultation lack of equipment was mentioned as a potential constraint to agriculture. One respondent mentioned opportunities for equipment sharing on Denman Island. Census data was used to determine the amount of available farm equipment on Denman Island.

A total of 21 out of the 28 farms reported owning tractors under 60 horsepower (hp). Five farms reported owning tractors between 60 hp and 99 hp, while 22 farms had tractors under 100 hp (Statistics Canada, 2006). Seventeen of the farms had pick-up trucks or cargo vans and one farm had another type of farm truck. Twelve farms indicated owning tillage, cultivation, seeding and plating equipment, but no farms owned a combine. Four farms owned swathers and mower conditioners, while eight owned balers, one owned forage harvesters and nine owned irrigation equipment.

This is a good diversity of farm equipment and definitely is a good starting point to begin an equipment sharing co-op for those that do not currently have equipment. This data is from 2006, so an updated equipment inventory would need to be completed.

6.10 Farms by Industry Group

Figure 9 shows the number of farms classified by industry group in 2006 on Denman Island using the North American Industry Classification System (NAICS) classification system. It is important to mention that 7 farms indicated they were involved in other animal production, while 5 farms indicated they were involved in cattle ranching and farming (Statistics Canada, 2006).

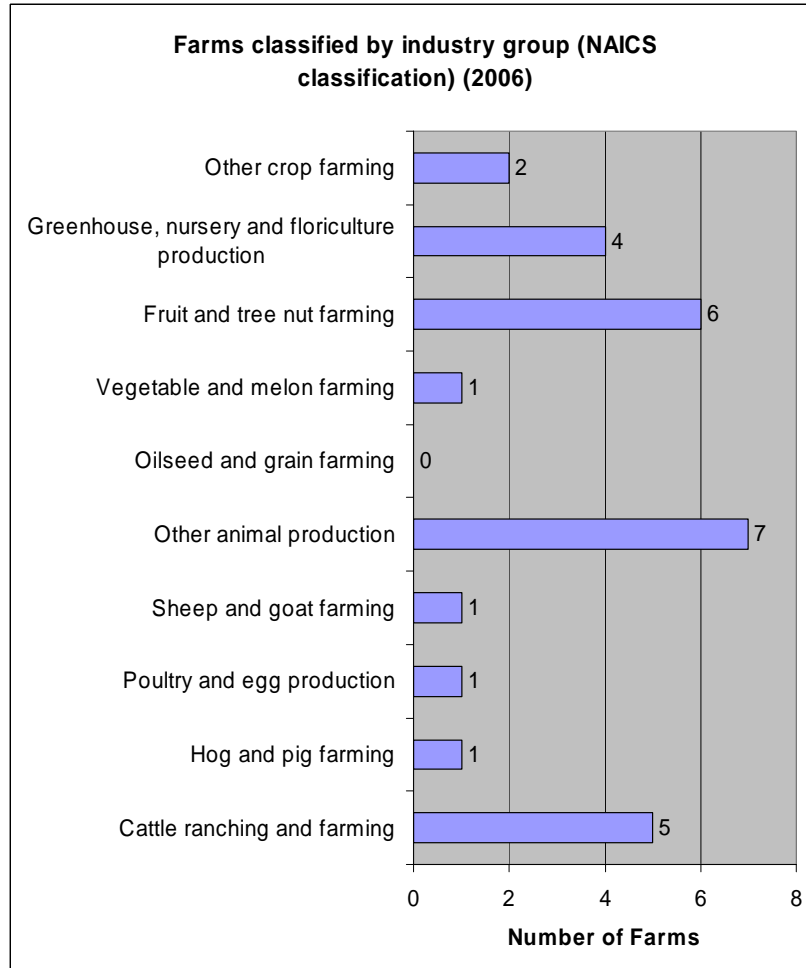


Figure 9: Census Farms Classified by Industry Group on Denman Island

Table 5 shows the number of farms in 2006 producing in each crop category:

Crop Type	Number of Farms
Grains (wheat, barley, rye, fall rye)	1-2
Alfalfa and alfalfa mixtures	1
Tame hay and fodder crops	12
Apples	9
Pears	7
Plums and prunes	6
Cherries (sweet and sour)	1-2
Peaches	2
Apricots	1
Grapes	3
Strawberries	6
Raspberries	3

Blueberries	4
Other fruits, berries and nuts	4
Vegetables	2-7
Nursery crops	2
Greenhouse vegetables	3
Other greenhouse products	1
Mushrooms	1
Forest products	2
Tap on maple trees	1

Table 5: Number of Census Farms per Crop Type on Denman Island (Statistics Canada, 2006)

Vegetables that were grown by the operators included: sweet corn, tomatoes, cucumbers, green peas, green and wax beans, cabbage, cauliflower, broccoli, carrots, rutabagas, turnips, beets, radishes, shallots, green onions, dry onions, yellow onions, Spanish onions, cooking onions, celery, lettuce, spinach, peppers, pumpkins, squash, zucchini, asparagus and others.

A total of 4 farms reported having greenhouses on the property that cover 7304 ft² of land. Four farms also reported having an area of their farm under glass, plastic or other protection at 11660 ft² (Statistics Canada, 2006).

A variety of livestock types raised on Denman Island were indicated by operators. Table 6 demonstrates the number of farms raising each category of livestock:

Livestock Type	Number of Farms	Number of Animals
Honeybees	3	32 colonies
Other pollinating bees	3	
Broilers, roasters and Cornish	4	74 birds
Hens and chickens	16	487 birds
Turkeys	1	
Other poultry	4	
Calves under one year	8	83 calves
Steers 1 year and over	4	11 steers
Total heifers 1 year and over	6	
Heifers for slaughter or feeding	2	
Heifers for beef herd replacement	5	15 heifers
Heifers for dairy herd replacement	0	
Beef cows	8	87 cows
Bulls 1 year and over	7	
Ram	1	
Ewes	4	30 ewes

Lambs	3	
Goats	2	
Boar	1	
Sows and gilts for breeding	1	
Nursing and weaner pigs	1	
Grower and finishing pigs	2	
Horses and ponies	5	12 animals
Llamas and alpacas	1	

**Table 6: Number of Census Farms and Animals per Livestock Type on Denman Island
(Statistics Canada, 2006)**

A number of operators indicated that they raised livestock, but no operators reported that they raised dairy cows. Based on these results, there appears to be an opportunity for growth in livestock production for turkeys, sheep, goats, pigs, llamas and alpacas. With the current dairy quota restrictions there may not be an avenue to raise dairy cattle for commercial production.

Representatives of the farming community mentioned that there has been a trend of producing farms converting to equine activities on Denman Island. Since data was not available for years prior to 2006, it was not confirmed whether the number of horses has increased over the years.

6.11 Farm Production Practices

A variety of farm production practices were present in the Census of Agriculture including: organic certification, pesticide use, soil conservation practices, manure management practices and seeding and irrigation practices. Each of these practices are examined in the following sections:

6.11.1 Organic Certification

In 2006, 19 farms reported organic products regardless of the certification status, while only 2 farms produce certified organic products (Statistics Canada, 2006). Three farms reported organic hay or field crops while 12 farms reported growing organic fruits, vegetables or greenhouse products. Only 2 farms reported producing certified organic fruits, vegetables or greenhouse products. Twelve farms reported raising organic animals or animal products, while only 1 farm reported raising certified organic animals or animal products. One farm reported producing other organic products.

There is the potential to increase the amount of certified organic products on Denman Island, which could provide a marketing option for some producers.

6.11.2 Pesticide and Fertilizer Use

As is expected, few farms used pesticides of any form. Only one farm reported using insecticides or fungicides, respectively. Four farms reported using commercial fertilizer on 147 acres and 6 farms reported using lime on 75 acres. This, combined with the claim of organic production practices as seen in the last section, could provide a unique marketing opportunity for Denman Island.



6.11.3 Soil Conservation Practices

Table 7 shows the soil conservation practices that Denman Island farmers reported in 2006:

Soil conservation practices	Number of Farms
Crop rotation	9
Rotational grazing	14
Winter cover crops	5
Plowing down green crops	6
Buffer zones around water bodies	9
Windbreaks or shelterbelts (natural or planted)	12

Table 7: Number of Census Farms Participating in Soil Conservation Practices on Denman Island (Statistics Canada, 2006)

These practices are important for preventing erosion of soil, retention of soil nutrition and attracting beneficial wildlife. The total number of farms was 28 and only half or fewer farms reported these practices. This indicates that more education could be needed to encourage these practices amongst all Denman Island farmers.

6.11.4 Manure Management Practices

Manure management practices on Denman Island farms indicate that almost all farms that produced or used manure applied it on their land (Table 8). Only six farms sold or gave manure to others and only one farm bought or received manure from others.

Manure Management	Number of Farms
Total number of farms producing or using manure	18
Manure applied on this operation	16
Manure sold or given to others	6
Manure bought or received from others	1
Other manure produced or applied on this operation (composted, dried, processed, stored, etc.)	5

**Table 8: Number of Census Farms Managing Manure on Denman Island
(Statistics Canada, 2006)**

This is encouraging as we can assume that very little manure that is produced on Denman leaves the island, therefore nutrients are retained on the island.

Table 9 demonstrates how manure is applied to the land when used. The majority of the farms reported that they incorporated composted manure directly into the soil while 4 did not incorporate composted manure and 6 did not incorporate solid manure.

Manure Management Practice	Number of Farms	Acres
Composted manure incorporated into soil	8	15
Composted manure not incorporated into soil	4	41
Solid manure incorporated into soil	0	0
Solid manure not incorporated into soil	6	94
Liquid manure injected or incorporated into soil	0	0
Liquid manure not incorporated into soil	0	0
Liquid manure applied by irrigation	0	0

Table 9: Number of Census Farms Participating in Specific Manure Management Practices on Denman Island (Statistics Canada, 2006)

6.11.5 Seeding, Tillage and Irrigation Practices

Other production practices such as seeding, tillage and irrigation, were used on many Denman Island farms. A total of 12 farms prepared 45 acres of land for seeding (Statistics Canada, 2006). One farm reported that they used no-till or zero till seeding. Eleven farms used tillage to incorporate most crop residue into the soil, while 2 farms tilled to retain crop residue on the surface of the soil.

Denman Island has limited access to fresh water so it is important to note how many farms use irrigation on which crops. According to the Census data 13 farms used irrigation on 102 acres of land. No farms irrigated field crops and only one farm

irrigated hay and pasture. A total of 8 farms irrigated 11 acres of vegetables, while 7 farms irrigated fruit on 79 acres. Two farms reported that they irrigated other areas of their land.

7.0 Regulatory Framework

7.1 Context

Canadian agriculture is governed by several levels of government, and as a result, producers on Denman Island are subject to municipal, provincial and federal government policies (see Appendix B). Furthermore, food is not an issue that fits within one department, one piece of legislation, or even a single level of government. Some regulations are wide in scope and far-reaching, such as national and international trade agreements, while others are site specific, such as zoning or meat processing regulations. This is in part due to a variety of agency mandates as well as the specialized knowledge of scientists and government staff. As a result, no one piece of legislation has the capacity to address agricultural issues in an integrated and holistic manner.

The most influential local policies affecting agricultural land use and farming activities in BC are Regional Growth Strategies, Official Community Plans, Zoning Bylaws, and Agriculture Area Plans. These are described in detail below.

The roles of specific Provincial and Federal agencies (such as the Ministry of Agriculture and the Agricultural Land Commission) and their related regulations (such as the Meat Inspection Regulation and the Riparian Area Regulation) as well as specific local planning tools (such as Agricultural Advisory Committees and Farm Covenants) are described in detail in Appendix B.

7.2 The Local Government Planning Process

In BC, local governments use Regional Growth Strategies (RGSs) and Official Community Plans (OCPs) to guide decisions about planning and land development. In rapidly growing regions and communities, these documents are prepared alongside industry-specific plans such as Agriculture Area Plans (AAPs). These planning policies are then reinforced by zoning bylaws at the local level.

The Agricultural Land Commission requires that local governments ensure that land use bylaws are consistent with the legislation, regulations and orders of the *ALC Act*. Any portion of a bylaw that is inconsistent with the *ALC Act* has no force or effect. Combined, the *Local Government Act*, *Community Charter* and *Agricultural Land Commission Act* allow the Islands Trust to make certain decisions involving agricultural land use activities where agriculture is seen as benefiting from their involvement. These include the establishment of bylaws and land use policies that

reduce conflicts between agricultural and other land uses, protect the health of the community and natural environment, and maintain certain form and character aspects important to the local community.

Other ways in which regional and municipal land use planning efforts affect the food system include:

- Deciding how to use locally owned lands;
- Developing plans for municipal infrastructure, buildings and properties like composting facilities, community centres and parks that can be utilized to support community food security;
- Planning around services such as drinking water, solid waste collection, stormwater management, drainage, dyking systems, and enforcing riparian regulations;
- Developing community economic development plans; and
- Encouraging community engagement to involve citizens in developing food policies and initiatives.

Specific planning tools are described below.

7.2.1 Regional Growth Strategies

Regional Growth Strategies (RGSs) are an agreement between a regional district and its member municipalities on social, economic and environmental goals and priority actions. The RGS's objectives are to coordinate action on housing, transportation, infrastructure, and economic development in recognition that collaboration on a regional level will make individual municipal action more effective. All regional district bylaws and all OCPs of member municipalities must be consistent with an RGS. Each municipality internalizes an RGS by adopting a Regional Context Statement in its OCP. The statement sets out how the municipality will meet the goals of the RGS through policies and bylaws. All zoning and infrastructure decisions must be consistent with the RGS.

RGSs can include policies of support for maintaining existing agricultural lands and enhancing the farm economy. This directly helps to reduce speculation around farmlands conversion to other uses through support for exclusion or non-farm use applications (Curran, 2005). Local governments can similarly ensure that they and other municipalities will protect farmland by insisting on the inclusion in RGSs of policies that agriculturally-zoned land will not be subject to rezoning to allow non-farm uses except in limited, defined circumstances.

7.2.2 Official Community Plans (OCPs)

The purpose of an OCP is to guide and direct land use and development decision-making within a municipality, or in the case of Denman Island, a local trust committee. It also clearly states the community's values and goals through a vision statement that steers growth management, servicing, transportation, climate

change mitigation, environmental protection, the promotion of agriculture and a variety of other issues.

An OCP affects agriculture and the use of land adjacent to agriculture in several ways, primarily by defining the type of present and proposed agricultural land uses within the jurisdiction. The OCP may contain policies of the local government respecting the maintenance and enhancement of agriculture, which can include water supply, recreation near farmland, supporting for the agricultural industry, and safeguarding the ALR.

Once an OCP is in place, local government decisions to amend existing regulations and approval requirements must be consistent with the OCP. Finally, local governments may designate development permit areas for the protection of farming in the OCP, and establish guidelines for how development may occur adjacent to the ALR.

Some examples of OCP policies that promote both agriculture and the ALR include (Curran, 2005 and Smith, 1998):

- Providing for a full range of agricultural uses in the ALR and in agriculturally-zoned areas;
- Encouraging value-added activities that can improve farm viability;
- Providing edge planning through setbacks and buffers when developing land adjacent to agricultural areas;
- Limiting subdivision through the use of large minimum lot sizes;
- Recognizing and protecting the needs and activities of farm operations when considering adjacent and nearby land uses;
- Preserving contiguous areas of agricultural land and avoiding severance by recreation, parks, and transportation and utility corridors; and
- Encouraging partnerships with the agricultural community, senior governments and private enterprise to promote the development of the agricultural sector.

Local governments may also use the OCP to commit to creating and implementing an Agricultural Strategy or Agriculture Area Plan.

7.2.3 Zoning Bylaws

Zoning allows local governments to control the use, density, nature and siting of development. Zoning bylaws also typically regulate how far buildings and uses must be setback from lot lines, the height of buildings, signage, and parking. Zoning provides the regulatory 'teeth' to complement broader land use planning and policies (such as RGSs and OCPs).

Zoning regulations that support the ALR and agricultural uses, backed up by strong OCP and RGS statements can lessen the expectations of changes in land use, and can ensure that land is not converted to non-farm uses even if it is removed from the ALR (Smith, 1998). If land is removed from the ALR but zoned at the local level for

agriculture, use of that land is still limited to agricultural activities as regulated in the local land use bylaw (Curran, 2005). Zoning regulations can also help to mitigate the cumulative impacts of farm-related activities, such as residential, marketing, processing and agri-tourism, on farmland productivity (BCMAFF, 1998). Zoning standards also help to prevent too much of an activity from becoming a nuisance to neighbours or interfering with agriculture. For example, recreational uses on one farm parcel may result in trespass and crop damage on adjacent parcels or a community festival might generate too much traffic and noise for an adjacent dairy herd. Zoning regulations may mitigate these impacts by directing where these types of activities may occur, and their extent.

Provincial regulations allow certain land uses and activities to occur in the ALR, but the regulations also allow local governments to regulate or prohibit these same activities and uses. These uses include accommodation for agri-tourism, Bed and Breakfasts, kennels, and gravel pits.

Local governments must ensure that zoning bylaws are consistent with the *ALC Act*, regulations, and other orders of the ALC. The most important restrictions on zoning are found in sections 2 and 3 of the *Agricultural Land Reserve Use, Subdivision and Procedure Regulation* where Section 2 designates certain uses as farm uses that can be regulated, but not prohibited by local government, including farm retail sales; wineries, cideries and ancillary uses; greenhouses; on-farm processing; storage and application of fertilizers; intensive agriculture; mushroom farming and seasonal agri-tourism. Many of the designated farm uses are subject to important restrictions such as limits on the size of retail sales operations.

The most important zoning considerations relating to agriculture include (Curran, 2005):

- Large minimum lot sizes and as few zones as possible for ALR land;
- Contiguous areas of agricultural land where other uses do not interfere with farming;
- Regulation of accessory and non-farm uses on agricultural land (such as maximum lot coverage and the appropriate siting of buildings, driveways and parking lots close to access roads); and
- Edge planning techniques such as buffering and setbacks to decrease conflicts at the agriculture/non-agriculture interface.

7.2.4 Agriculture Area Plans

Agriculture area plans (AAPs) recognize agriculture as the highest and best use of agricultural land, and develop strategies to support a viable agricultural industry at the local level (Smith, 1998). These plans act as sub-area plans of the OCP and provide a high level of detail specific to the issues relevant to farming. Local governments develop AAPs with the participation of the farming community, the general public, and community organizations in the planning process. Agriculture viability studies and agriculture strategies are considered pre-cursors to AAPs. Strategies contain recommendations and policy directions that identify and

respond to key issues as identified by the agricultural community, the public, and government agencies.

AAPs are often complex because the issues facing the community involve farming, food processing, sales, health agencies, consumers and landowners. AAPs can set the stage for bylaw and policy revisions, municipal investments in new infrastructure and programs, as well as public education and industry coordination (Curran, 2005). AAPs use Geographic Information Systems (GIS) to complete mapping and agricultural land use inventories. These tools assist decision-makers to understand how new policies and regulations will have an impact on farming.

AAPs can:

- Provide a status of the agriculture industry and resource base within the plan area;
- Identify the opportunities and constraints facing agriculture in a particular area;
- Consider the interaction between agriculture, resource management and the protection of environmentally sensitive areas;
- Create recommendations to deal with water-related issues;
- Address transportation and servicing issues;
- Address challenges to agriculture and opportunities to develop a strong agricultural industry;
- Detail an implementation plan with specific resource allocations;
- Establish a monitoring regime that measures ongoing progress towards plan implementation; and
- Provide linkages to the OCP and recommend appropriate zoning bylaw amendments.

7.3 Agriculture and Denman Island Land Use Planning

7.3.1 CVRD Regional Growth Strategy

Gulf island communities have somewhat unique local planning structures. On Denman Island, community planning and land use regulation are functions of the Islands Trust, whereas local services are the function of the Comox Valley Regional District (CVRD). As such, while the region's Growth Strategy does influence agriculture on Denman Island to some extent, the Islands Trust Policy Statement is more directly related to land use planning.

The CVRD includes three electoral areas and three municipalities and is responsible for providing sustainable services for residents and visitors to the area. The CVRD provides services such as preparation of overall plans for the region, assistance with Official Community Plans (OCPs), approval/inspection services, awareness and education, water and air enhancement, solid and liquid waste management, impact assessment, encouragement of environmentally appropriate development,

protective services, disaster response, recreation and culture, public utilities, advocacy and more (CVRD, 2010).

The Regional Growth Strategy (Bylaw 120, 2010) was created over a two year period (2008-2010) and at the time of writing is awaiting final approval from the Board. Goal 6 of the RGS pertains to agriculture and it is summarized here:

Goal 6 - Food Systems: Support and enhance the agricultural and aquaculture sectors and increase local food security. Policies include:

- 6A-3: All local governments will ensure appropriate buffers and transition zones between working landscapes and residential areas to minimize negative impacts from residential development on farm and resource land. Buffer and transition zones will be promoted to mitigate conflict between agricultural and non agricultural uses.
- 6A-4: Where possible contiguous areas of agricultural land should be preserved and severance by recreation, parks, and transportation or utility corridors should be avoided with the exception of environmentally sensitive areas.
- 6A-5: OCPs should include criteria to guide locations for agricultural support infrastructure (e.g., processing, production research, and market development facilities).
- 6A-6: OCP policies should be developed to guide the location of residential development on agricultural parcels to preserve the agricultural capacity.
- 6C-1: Local governments and farmers should work together to increase irrigation water supply to support agricultural activities.
- 6C-2: Local governments, agricultural stakeholder groups and farmers should work together to increase non-potable irrigation water to farmland.
- 6D-2: Support the "value chain" of agriculture through development of agricultural policies and uses in OCPs, to encourage food processing plants, storage and local markets.
- 6D-4: Support the availability of local agricultural products through encouraging local procurement at schools, grocery stores, and government offices.
- 6E-1: Support the development of a coordinated regional food security strategy. This would include a review of existing policies and agricultural opportunities such as urban gardening, community orchards and community supported agriculture programs.
- 6E-4: Review regulatory bylaws to support an appropriate level of agriculture and related uses as considered appropriate by the ALC.

Several of the RGS's *Managing Growth* policies also relate to agricultural areas. They include (CVRD, 2010):

- Minimum lot sizes in Rural Settlement Areas should fall within the range of 4-20 ha. A placement of a cap on the total number of 2 ha lot sizes will be placed in Rural Settlement Areas and there should be regular monitoring of farm sizes

to ensure that 2 ha lot sizes are being used for farming and that there is an adequate supply of larger farm parcels (20 ha or more).

- OCPs shall contain policies for Agricultural Areas that are consistent with the *ALC Act* and regulations established under the Act, including the establishment of adequate buffers that ensure abutting farm and non-farm uses do not conflict and that non-farm uses do not impede agricultural activity within the ALR. Policies regarding environmental protection must be applied with careful consideration in *Agricultural Areas*. New environmental regulations should require further consultation and collaborative planning with the agricultural community and local governments. In particular, any new policies respecting the Regional Conservation Framework set out in this RGS must recognize the environmental, social and economic benefits provided by a strong local agricultural industry in the Comox Valley. In particular, the participation of private landowners in *Agricultural Areas* within biodiversity corridors should be on a voluntary basis.

7.3.2 Islands Trust Policy Statement

The Islands Trust developed the *Policy Statement* (Bylaw 17) in 1993 and it was amended in 2004. The *Policy Statement* was developed through a comprehensive public consultation process. The purpose of the *Policy Statement* is to express a vision for the future of the Trust Area, through goals and policies to guide Trust Council, the Trust Fund Board and the Islands Trust's 14 Local Trust Committees regarding the management of development and the preservation and protection of the Trust Area (Islands Trust, 2004). The *Policy Statement* is also useful as a reference tool for the public and other agencies such as regional districts, the Province, and its agencies.

In March 2010, Trust Council established a Policy Statement Assessment Task Force to conduct a preliminary assessment of the *Policy Statement* and make recommendations regarding further actions.

The Policy Statement includes the following policies regarding agricultural land (under Section 4: Stewardship for Resources (Islands Trust, 2004)):

- 4.1.1 Trust Council recognizes that agriculture is a traditional and valuable activity in the Trust Area;
- 4.1.2 Trust Council shall consult with the Ministry of Agriculture and the Agricultural Land Commission to request that agriculture policies applied to the Trust Area are appropriate to the nature of agriculture within the Trust Area, including, but not limited to, the smaller island scale of agricultural activities.
- 4.1.3 It is Trust Council's policy to encourage agricultural management practices that are compatible with sustaining wildlife habitat.
- 4.1.4 Local trust committees and island municipalities shall, in their OCPs and regulatory bylaws, address the identification and preservation of agricultural land for current and future use.

- 4.1.5 Local trust committees and island municipalities shall, in their OCPs and regulatory bylaws, address the preservation, protection and encouragement of farming, the sustainability of farming, and the relationship of farming to other land uses.
- 4.1.6 Local trust committees and island municipalities shall, in their OCPs and regulatory bylaws, address the use of adjacent properties to minimize any adverse affects on agricultural land.
- 4.1.7 Local trust committees and island municipalities shall, in their OCPs and regulatory bylaws, address the design of road systems and servicing corridors to avoid agricultural lands unless the need for roads outweighs agricultural considerations, in which case appropriate mitigation measures shall be required to derive a net benefit to agriculture.
- 4.1.8 Local trust committees and island municipalities shall, in their OCPs and regulatory bylaws, address land uses and activities that support the economic viability of farms without compromising the agriculture capability of agricultural land.
- 4.1.9 Local trust committees and island municipalities shall, in their OCPs and regulatory bylaws, address the use of Crown lands for agricultural leases.
- 4.1.10 Trust Council encourages the Ministry of Transportation to ensure that, where a road must sever agricultural land to provide access to lands beyond, the road is built to the minimum standard necessary to service that land.
- 4.1.11 Trust Council encourages the Agricultural Land Commission to approve applications from property owners for inclusion of their land with potential for agriculture in the Provincial Agricultural Land Reserve.
- 4.1.12 Trust Council encourages the Provincial government and the British Columbia Assessment Authority to:
 - retain a separate farm class to provide significant property tax incentives;
 - ensure that the threshold for farm income necessary for farm class status is appropriate to agriculture within the Trust Area; and
 - acknowledge that the total land area subject to the farm class may include land left uncultivated.

7.3.3 Denman Island OCP

The Denman Island OCP has adopted principles to protect and enhance agriculture in the community and devised broad policies to assist in meeting that goal. The OCP recognizes that farming has been one of the most consistent contributors to the well-being of Island residents. There is an additional acknowledgement that a renewed interest in agriculture is occurring on the island in recent years.

The OCP Vision Statement includes a reference to agriculture in the following sentence:

"We have a long history of farming. We will grow most of our food and encourage small-scale, rural-compatible activities which contribute towards local employment" (Denman Island, 2008).

The following Guiding Principles have a direct influence on local agricultural policy.

- 1: To be good stewards of the natural environment and ecological integrity of the Island; and, in all decisions and regulations concerning use of the land, zoning or development, to take as a first consideration the protection of the natural environment.
- 10: To recognize that all economic activity and development, including farming, forestry and other resource use, should respect the natural environment and the character of the human community.

Land use policies as they relate to farming can be found interspersed throughout the OCP. Some of the more directly relevant policies, and advocacy policies include subdivision regulations, water use and management, the application of pesticides, covenants, greenhouse gas reduction strategies, transportation, and heritage. They include:

Land and Forest

- Policy 9: Landowners are encouraged to protect forested lands, bluffs, meadows and grasslands through the establishment of conservation covenants or other protective measures.
- Advocacy Policy 2: Government agencies should discourage the use of chemical biocides in the Denman Island Trust Area.
- Advocacy Policy 5: The Ministry of Environment is encouraged to require practices that reduce the spread of invasive plants.

Freshwater

- Guiding Objective: To preserve, and where necessary restore, watersheds, lakes, wetlands, streams and riparian areas and to retain sufficient natural habitat to ensure the preservation of native species.
- Objective 1: To protect the quantity and quality of both surface and ground water especially for agricultural purposes
- Policy 8: Landowners are encouraged to not use chemical herbicides or other pesticides

Climate Change Adaptation and Mitigation

- Policy 8: The Local Trust Committee should promote local food production as a significant step to reducing food transportation costs and greenhouse gas emissions.

Transportation and Utilities

- Objective 6: To reduce the negative impact of new and upgraded roads on the resource lands (such as the Agricultural Land Reserve)

Water Management

- Objective 3: To ensure water is available for fire-fighting and agricultural purposes.

- Advocacy Policy 2: The Ministry of Transportation and Infrastructure, Ministry of Environment and the Ministry of Agriculture and Land are encouraged to regulate against inappropriate and unnecessary drainage of land.

Archaeological, Historic and Natural Heritage Sites

- Policy 3: A Community Heritage Registry should be established, and Island heritage buildings or features that the community identifies as worth conserving should be included.

Housing

- Policy 3: In the Sustainable Resource designation, the size of new lots for forestry uses that are created by subdivision may not be less than 64 hectares, and the size of new lots for agricultural and other uses that are created by subdivision may not be less than 15 hectares.
- Policy 14: In the Sustainable Resource designation, unless otherwise permitted by Policy 29, on land in the ALR: one dwelling could be permitted per the minimum lot area permitted by Subdivision; and additional dwellings could be permitted if they are required for full-time farm help.
- Policy 25: The Local Trust Committee should not approve a zoning amendment application that could fragment large areas of forested or agricultural land.

Economic Activities

- Objective 1: To encourage a variety of economic activities to support a diverse community, and to provide an environment that supports creation and manufacture of local products and opportunities for self-employment and self-reliance
- Policy 15: The Local Trust Committee should encourage educational tourism, agritours, cultural tours, fairs, festivals, craft markets, garden or studio tours, hiking, biking, kayaking, walking, and low impact nature observation.

Resources

- Objective 1: To protect the Agricultural Land Reserve
- Objective 2: To encourage diverse agricultural activities including the marketing and promotion of locally grown products
- Objective 3: To promote employment through agricultural activities that have minimal negative environmental impact
- Policy 1: In the Sustainable Resource designation:
 - the principal uses should be agriculture and silviculture; and
 - zoning regulations may permit small-scale local value-added wood working industries and the development of non-timber forest products on land with silviculture as a principal use.
- Policy 2: All farm uses defined in the *Agricultural Land Commission Act* for land in the Agricultural Land Reserve should be permitted.
- Policy 3: Zoning regulations should establish sufficient setbacks to ensure that livestock waste does not enter lakes, streams, wetlands or the sea.
- Policy 5: The Local Trust Committee should support the inclusion of land within the ALR.

- Policy 6: The Local Trust Committee should only support an application for non-farm use or exclusion of land from the ALR if the proposed non-farm use or exclusion provides for an essential community service or amenity which cannot reasonably be located on land outside of the ALR and for which the community need clearly outweighs the loss to agriculture.
- Policy 7: The Local Trust Committee should only support an application for non-farm use or subdivision on land in the ALR if the proposed non-farm use or subdivision is consistent with zoning regulations and either:
 - allows an activity that supplements the farm income and does not decrease the farming capability of the property; or
 - protects the land for conservation purposes.
- Policy 9: The areas designated Sustainable Resource in this Plan are designated to ensure that land uses involving renewable resources are sustainable and compatible with the small-scale rural character of the Island. The objectives of the designation of this area as an area within which development approval information may be required, include protecting the Agricultural Land Reserve; encouraging diverse agricultural activities; promoting employment through agricultural activities that have minimal negative environmental impact; promoting local employment through sustainable, ecologically sensitive silviculture; and fostering sustainable use of resources. Development approval information may be required to help the Local Trust Committee to determine appropriate uses, density and siting of development in the Sustainable Resource designation.
- Advocacy Policy 2: The Agricultural Land Commission is encouraged to honour the guiding principles and objectives of this Plan and the relevant protocol agreements with the Islands Trust when considering applications.

7.3.4 Denman Island Zoning Bylaws

Zoning/Land Use Bylaw 186 (Denman Island, 2008a) establishes regulations and requirements respecting the use of land, including the surface of water, the use, siting and size of buildings and structures, the provision of parking, landscaping, screening, signs, and the subdivision of land within the Denman Island Local Trust Area. It outlines specific regulations pertaining to land use that may affect agriculture directly or indirectly.

Bylaw 186 provides definitions for *agriculture* and *intensive agriculture* to provide context for the regulations and requirements. These are as follows:

agriculture means the use of land, buildings or structures for any of the following activities:

- growing, producing, raising or keeping animals or plants, including mushrooms, or the primary products of those plants or animals;
- clearing, draining, irrigating or cultivating land;
- using farm machinery, equipment, devices, materials and structures;
- applying fertilisers, compost, manure and other growing agents;

- intensively cultivating, in plantations, speciality wood crops or speciality fibre crops prescribed by the Minister of Agriculture, Food and Fisheries;
- turf production;
- aquaculture;
- raising or keeping of game, within the meaning of the Game Farm Act, by a person licensed to do so under the Act;
- raising or keeping fur bearing animals, within the meaning of the Fur Farm Act, by a person licensed to do so under the Act;
- storage, processing or direct marketing by a farmer of farm products;

but does not include any of the following activities:

- a forest practice defined in the Forest Practices Code of British Columbia Act
- the sale of processed wood products;
- breeding pets;
- operating a kennel or equestrian stable;
- growing, producing, raising or keeping of exotic animals as defined by the Minister of Agriculture, Food and Fisheries.

intensive agriculture means the use of land, buildings and structures by a commercial enterprise or an institution for the confinement of poultry, livestock or fur bearing animals, or the growing of mushrooms, except for forest fungi, and excludes feedlots.

Zones that allow agricultural uses include:

- R1 (Residential);
- R2 (Rural Residential);
- R3 (Co-housing);
- A (Agriculture);
- F (Forest); and
- RE (Resource).

General Uses

- Intensive agriculture is permitted in A, F, and RE zones and non-intensive agriculture is permitted in R1, R2, and R3;
- Building and structures to accommodate agriculture and farm product sales are permitted in A, F, and RE;
- Buildings and structures to accommodate horticulture, agriculture and sale of horticultural and agricultural products are permitted in R1, R2, and R3;
- The sale of agricultural products produced on-site is listed as a permitted home occupation use and a maximum of four non-resident employees are permitted per lot on lots of 3 hectares or larger;
- Home-based guest accommodation must be contained within the principal dwelling unit, and is limited to a maximum of three bedrooms, including Bed & Breakfasts;
- Vacation rentals of less than one month, whether occasionally or on a repeated basis, are not permitted;
- Dwelling units for full-time farm workers employed on the lot are permitted in zone A;

- Markets and fairs are permitted in commercial (C) and institutional (IN) zones, for no more than 45 days a year (2 consecutive days for markets, 7 consecutive days for fairs).

Subdivision Approvals

- Minimum lot sizes for each Zone are:
 - R1: 1.0 ha;
 - R2: 4.0 ha;
 - R3: N/A
 - A: 15.0 ha (except A(1), where the minimum size is 64.0 ha and A(5) where it is 13.0 ha);
 - RE: 15.0 ha; and
 - F: 64.0 ha.
- The minimum lot size eligible for subdivision to provide residence for a relative (Section 946 of the Local Government Act) outside the ALR is 8.0 hectares;
- Each lot in a proposed subdivision must be supplied with sufficient potable water to accommodate all uses, buildings and structures permitted on the lot;

Siting, Setbacks, and Building Height

All new construction, additions, and/or alterations require a "Siting and Use Permit", exception for buildings less than 9.3 m², allowing for woodsheds or pump houses. The permit fee is \$200. The purpose of this permit is to ensure that buildings conform to zoning regulations. An additional permit is required for the construction of a septic system.

- The maximum height of buildings and structures used for agriculture in zones R1, R2, R3, and A is 15.0 m (this translates to about 4 or 5 storeys);
- In R1 and R2 there is an 8.0 m setback from lot lines for manure piles and livestock buildings (3.0 m for chicken coops), while in R3 the setback distance is 30.0 m. The minimum setback from lot lines for intensive agricultural uses in A, F, and RE is 30.0 m.

Parking Space Requirements

- One space per 15 m² of gross floor area for a greenhouse, a nursery, farm sales or forestry sales;
- One space per two non-resident employees in a home occupation;
- One space per rental room in a home occupation providing home-based guest accommodation;
- Where five or more automobile parking spaces are required, they must be maintained with a hard, durable surface or with gravel and be landscaped and screened from adjacent residential properties.

Development Permit Areas No. 4: Streams, Lakes and Wetlands

This DPA restricts land alteration in most surface water and associated riparian to protect biological diversity, preserve fish and wildlife habitat and prevent degradation of water supplies. Permits require landowners to maintain either a "reserve area" of 30 m where very minimal alteration can occur, or a "retention

area" of 10 m where specified minor alterations can occur. The DPA includes the following guideline for Clearing for Farm Operation:

1. On lands in the ALR, removal of vegetation for agricultural purposes is permitted to within 15 m of the natural boundary of a major stream, lake, or major wetland, providing the removal of vegetation is for a normal farm practice as defined in the *Farm Practices Protection (Right to Farm) Act*.
2. A signed letter from the applicant, stating that the clearing is for expansion of a farm operation or creation of a new farm operation on land in the Agricultural Land Reserve, shall be required as a condition of the issuance of a permit under guideline 3(1).
3. The letter referred to in guideline 3(2) shall describe in general terms, the farm operation, the soils and agricultural capability of the area to be cleared, and the expected time period for preparing the site for the proposed farm operation. It is recommended that a Professional Agrologist be consulted in the preparation of this information.
4. The requirements of guidelines 4 through 6 inclusive do not apply to development permits issued under guideline 3.

8.0 Recommendations for Pursuing an Agriculture Area Plan

The implementation of this Agriculture Strategy and initiation of an Agriculture Area Plan (AAP) will involve the coordination of a number of Provincial and local agencies, non-profit organizations, the Comox Valley Regional District (CVRD) and special interest groups.

The Islands Trust is a federation of local governments with a provincial mandate "to preserve and protect the environment and unique amenities of the Trust Area." The Trust Area stretches from Howe Sound to Comox and includes the islands and waters between the BC Mainland and Southern Vancouver Island. This area contains 13 major islands and more than 450 smaller islands with a combined total population of 25,000. Within this broader area there are 12 local trust areas and one Island Municipality. Each local trust area has its own local trust committee made up of two locally-elected trustees and an appointed chair. Each local trust committee is an incorporated, special purpose planning authority with statutory responsibility for regulating the development and use of land within its local trust area, which means that the majority of responsibility for agricultural planning is under the local trust's jurisdiction.

Since there is no local government framework to help identify and prioritize agricultural issues on Denman Island, the Denman Island Local Trust Committee (DILTC) is the body that works to develop policies and regulations regarding local agriculture. It is recommended though, that the DILTC work closely with the Agriculture Plan Steering Committee, or an Agriculture Advisory Committee, if one is formed, to play a lead role in coordinating preparation to undertake an AAP. The following four steps are recommendations for commencing the development of an AAP:

- Step 1: Complete the Denman Island Agricultural Land Use Inventory
- Step 2: Define the Agricultural Planning Area
- Step 3: Identify Funding Sources for an Agriculture Area Plan
- Step 4: Hold an Agricultural Area Open House

Step 1: Complete the Denman Island Agricultural Land Use Inventory

The spreadsheet of data and the maps created during the Agricultural Land Use Inventory conducted during this Agriculture Strategy will be submitted to the Islands Trust Geographic Information Systems (GIS) Technician for digitization. It is recommended that the digitized maps be reviewed by the DILTC and the Agriculture Plan Steering Committee to determine the cohesive agricultural communities. These communities will provide a geographic basis for undertaking further agriculture area planning and help to define an agricultural sub-area (Smith, 1998).

Step 2: Define the Agricultural Planning Area

After review of the Agricultural Land Use Inventory and identification of agricultural communities, the DILTC and the Agriculture Plan Steering Committee can then define the agricultural planning area. This is a sub-area that is designed to be predominantly, but not necessarily exclusively, in agricultural use (Smith, 1998). These areas should be based on complete communities with largely agricultural land, but will include other land uses such as rural residential, institutional, parks and rural commercial ideally tied to agricultural production. The agricultural planning area will be based on land located within and outside of the ALR that is used for agricultural purposes.

Step 3: Identify Funding Sources for an Agriculture Area Plan

Similarly to funding for the Agriculture Strategy it is recommended that the Islands Trust approach the Investment Agriculture Foundation of BC for increased funding to conduct an AAP. Additionally, the Ministry of Agriculture may have funding available through the Strengthening Farming Program.

Step 4: Hold an Agricultural Area Open House

In preparation for embarking on an AAP it is recommended to consult with the numerous small and large-scale agricultural groups on Denman Island. The following groups could be invited to an open house session to discuss the issues and opportunities associated with agriculture on Denman Island (see Appendix D for more information on these groups):

- Hornby/Denman Growers and Producers Alliance (HDGPA)
- Renewable Energy Denman Island (REDI)
- Denman Island Sowing Potatoes Underground for Denman Sustainability (SPUDS)
- Denman Island Community's Garden Parties
- Dharma Fellowship – The Hermitage
- Denman's Community Vegan Potluck Series
- Denman Island Garden Society
- Denman/Hornby Island Equines
- Denman Island Pesticide-Free Committee

Due to the limited timeframe and resources associated with this Agriculture Strategy, consultation with all of these groups was not possible, but their needs and concerns should be addressed through preparation and involvement with the AAP. Through this open house it will become clear which issues are most important to the farming community on Denman Island and which need to be considered more thoroughly in a plan.

An open house would be an excellent opportunity for stakeholders to further develop a definition of farming as it pertains to Denman Island, with suggestions put forth from the Agriculture Plan Steering Committee. Additionally, building on the

visions presented in the stakeholder consultation during the Agriculture Strategy, a unified vision for the future of agriculture on the island should be created before proceeding with an AAP. It is important that local and traditional knowledge from the community play a key role in the AAP process and roles and responsibilities could be clearly defined at this open house.

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Appendix A – Suggestions from AEL Agroecological Consulting

The following suggestions have been developed by AEL Agroecological Consulting for consideration by the Agriculture Plan Steering Committee for agriculture on Denman Island based on the stakeholder consultation, agricultural profile and existing regulatory framework. The suggestions have been divided up into five separate categories:

- (1) Marketing Initiatives
- (2) Capacity-Building and Production Initiatives
- (3) Community Development Associated with Agriculture
- (4) Enhancing Environmental Sustainability
- (5) Policy and Regulatory Amendments

The purpose of these suggestions is to create policies and regulations to protect and enhance agriculture on Denman Island. They include a combination of action opportunities for local farmers and policy recommendations to be evaluated and implemented by agencies such as the Islands Trust, Ministry of Agriculture and specific industry groups. A list of potential resources to consult when evaluating the opportunities presented.

1.0 Suggestions for Marketing Initiatives

During the stakeholder consultation process it was clear that marketing of Denman Island agricultural products was of serious concern to many local farmers. A limited consumer base combined with the cost of transportation of goods off the island make it difficult to profit in agriculture on Denman Island. The following opportunities address some of these concerns and suggest alternative marketing channels that could be explored by the Islands Trust, Agriculture Plan Steering Committee (ASC), the Ministry of Agriculture and other local non-profit organizations or committees.

	Potential Resources	Opportunities
1	Local Trust Committee Ministry of Agriculture SSFPA Local Farmers	Consider conducting a feasibility study for agricultural processing operations (i.e. cider processing facility). Sea Cider Farm and Ciderhouse, based on the Saanich Peninsula, has been a successful model for agritourism and marketing efforts (http://www.seacider.ca/).
2	ASC REDI	Build upon the current Denman Island Local Food Directory using the results from the Agricultural Land Use Inventory.
3	ASC Local Trust Committee	Determine the interest level of creating a seasonal agritourism marketing plan to ensure that more economic returns are gained from those visitors traveling to and from Hornby Island. The agritourism plan could identify opportunities for producers to diversify their farm operations, create a brand, and to sell more products directly to consumers. This could include a Circle Farm tour, or a Slow Food Cycle Tour for Denman Island, similar to those created for Lower Mainland communities (http://www.seacider.ca/ , http://www.slowfoodvancouver.com/).
4	Local Trust	Consider starting a Community Shared Agriculture (CSA)

	Committee ASC Local Farmers	program, if not already in existence, on the more prominent and prolific farms. The Urban Grains CSA in the Lower Mainland has been very successful in Vancouver and could be a potential model (http://www.urbangrains.ca/).
5	Local Trust Committee	Encourage the Denman Island Farmers Market to run once or twice a week year-round (many farmers reported obtaining the majority of their income there). Explore opportunities for indoor market space during the winter months. Update zoning to reflect the number of markets desired per year.
6	Local Trust Committee DICEEC ASC	Further develop relationships between Denman Island farmers and hotels and restaurants on the island or in the Comox Valley. Some food distributors, such as Sysco and Gordon Food Services (Neptune), are assisting initiatives like this by developing contracts with local producers for restaurants who want to profile local foods. Comox Valley hotels and restaurants already purchasing local food that could be approached include: <i>Locals Restaurant, The Kingfisher Spa and Luxury Resort, Atlas Cafe, Avenue Bistro and Mad Chef Cafe.</i>
7	ASC NGOs Volunteers SVIDFMA	Consider developing an online web-based tool for residents and visitors to see where farms are located, what they are growing, and what is being sold at the farm gate. The site would be voluntary and farmers would be able to update their information. Shared Harvest Canada could be updated to include the Comox Valley region, where farmers, the food industry, and community members can list and source food and farm products for sale or donation: http://www.sharedharvest.ca/bcmap.html). Alternatively, or additionally, the Island Farm Fresh Guide could be updated to include Denman Island farms (http://www.islandfarmfresh.com/).

2.0 Suggestions for Capacity-Building and Production Initiatives

The following opportunities focus on capacity-building activities, educational possibilities and ways to enhance or diversify agricultural production on Denman Island.

	Potential Resources	Opportunities
8	ASC Islands Trust Ministry of Agriculture	Consider liaising with Ministry of Agriculture staff to explore information extension opportunities for farmers. Topics of workshops could include: meat processing regulations and licensing, business development, farm value assessments, crop diversification, long term leases, covenants, marketing and pricing, equipment rental and sharing, pricing products appropriately, etc. The Ministry's Farm Business Advisory Services Program could be a good place to start.
9	ASC	Explore the promotion and introduction of new crop varieties and techniques to extend the growing season. West Coast Seeds could provide some assistance on this

		(http://www.westcoastseeds.com/) .
10	Local School Trust ASC Educators Volunteers	Encourage school policies that provide and promote nutritious, local food choices for school lunch and snack programs. Act Now BC, in conjunction with funding from several provincial ministries, has organized the BC Fruit and Vegetable Nutritional Program. It provides students in elementary schools two servings of fruit and vegetables for fourteen weeks in the school year. Identify a leader to resurrect the Denman Island Community School vegetable garden.
11	ASC Ministry of Agriculture CVRD	Explore the potential for incubator farms on Denman Island. Incubator farms are a new concept for agriculture that offers a low risk entry avenue for new farmers in need of land and resources. Skeeter Farm in Abbotsford is a successful example of an incubator farm (http://www.skeeterfarm.com/). The City of Abbotsford leases the land to the Barrowtown Agricultural Development Society who then rents the land to new farmers for 3 years to apprentice and learn agricultural skills. The farm is then passed on to other new farmers.
12	ASC Local groups	Consider performing an inventory of on-island farm equipment and determine if enough farmers are willing to form an equipment co-operative or on-island share/rental system. The B.C. Cooperative Association provides information and other support for cooperative farms where resources, capital and knowledge can be pooled. Also, the Comox Valley Farmers Institute operates a similar equipment sharing endeavour that could be used as an example.
13	ASC	Consider assisting and encourage local food security groups to develop facilities for storing shared tools and equipment for canning, dehydration, and other forms of food preservation.
14	Ministry of Agriculture Local Trust Committee DICEEC ASC SSFPA	Encourage the development of processing, warehousing, and distribution facilities for local agriculture. These may require identifying areas for light Industrial practices and/or creating a new Agricultural Enterprise Zone. Develop connections between local farmers and organizations such as the Small Scale Food Processor Association.
15	ASC Local Groups WOOFers Volunteers	Develop (if no local group provides this service) and/or support local tree fruit gleaning programs to harvest tree fruit (apples, pears, plums) that would otherwise not reach the food system. For example, the LifeCycles Fruit Tree Project (http://lifecyclesproject.ca/), Richmond Fruit Tree Sharing Project, Vancouver Fruit Tree Project, North Shore Fruit Tree Project and the Surrey Food Bank's Gleaning Project all organize volunteers to harvest healthy produce from private residences, farms and trees on public lands to redistribute to households in need. Initiate a program through an on-line bulletin board that links producers and community groups to field crops available for harvesting (or gleaning) for redistribution to charitable food organizations.
16	ASC Local Farmers	Explore Sustainable Farm Apprenticeship Programs for increased farm labour and education on farming practices. A popular example on Vancouver Island is the Stewards of

		Irreplaceable Land (SOIL). SOIL links farmers willing to take on and train apprentices with folks wanting to work and learn on an organic farm using sustainable practices and mentoring (http://www.soilapprenticeships.org/).
17	Ministry of Agriculture Local Groups	Consider conducting educational outreach workshops on agriculture and food production for citizens on Denman Island. Local groups can continue to provide and diversify their education programs regarding food production on topics such as: backyard vegetable growing, winter gardening, preserving, etc. Increased knowledge of agricultural production throughout the community will encourage support of local farmers.
18	Local Trust Committee ASC	Explore the feasibility of creating a Regional Farmland Trust (either through the Comox Valley Regional District or the Islands Trust) that could be used to purchase farmland for sale, in or out of the ALR, to lease to farmers who cannot afford the purchase price.
19	ASC Local groups	Explore management tools and programs that will support the sustainable harvesting of wild foods like honey, berries and mushrooms.

3.0 Suggestions for Community Development Associated with Agriculture

There was some concern raised during the stakeholder consultation process that initiatives regarding agriculture on Denman Island were somewhat fragmented. The following opportunities provide suggestions for ways that community groups can work together to promote and improve agriculture and food security efforts on Denman Island.

	Potential Resources	Opportunities
20	ASC Local Groups Independent Moderator	Consider hosting a meeting with all the local groups involved in agriculture (please see Appendix C) and food security to examine objectives, opportunities for collaboration, and identify areas of overlap.
21	ASC DICEEC Restaurant operators	Consider creating stronger links between DICEEC, farmers, and the food purveyors (restaurants, B&Bs, etc). Hold a meeting to explore avenues to enhance the distribution and use of local food products on DI. Regulatory barriers should be addressed and solutions developed to work with the current policies.
22	Ministry of Agriculture Commercial and non-commercial fishers ASC	Develop and encourage communication between aquaculture and agriculture to ensure the entire scope of food is considered in food security planning.
23	ASC Local groups	Investigate needed support for seniors living on Denman Island in accessing nutritious food. Explore possibilities of initiating a Meals-On-Wheels style program. One example is Valley Home Meals in Comox (http://www.valleyhomemeals.com/).

4.0 Suggestions for Enhancing Environmental Sustainability

While compiling the agricultural profile of Denman Island it was evident that many farmers implement many practices to enhance environmental sustainability such as reduced pesticide and fertilizer use, crop rotations and sustainable manure management practices. However, there were areas for improvement. Below are suggested opportunities to improve sustainable agriculture practices.

	Potential Resources	Opportunities
24	Ministry of Agriculture ASC Local Farmers	Support efforts of farmers in developing alternative water sources, including recycled water, for irrigation.
25	ASC Farmers	Encourage composting of manure to retain nutrients on the land and prevent the spread of pathogens through surface and groundwater. The Langley Environmental Partners Society's Manure Maiden program provides information on how to compost manure and can assist in site assessments (www.manuremaiden.com).
26	CVFI ArdCorp Ministry of Agriculture	Encourage implementation of the Environmental Farm Plan on farms that qualify for Farm Classification under BC Assessment.
27	Local Trust Committee Local groups ASC Local Farmers	Encourage the adoption of on-site and off-farm rainwater management practices to promote more infiltration and stream recharge.
28	Ministry of Agriculture ASC Local Farmers	Encourage adoption of more soil management practices (i.e. crop rotations, cover crops, buffer zones, etc) to prevent soil erosion and run-off.

5.0 Suggestions for Policy and Regulatory Amendments

The following comments and suggestions are intended to provide guidance towards regulatory updates to local planning documents (OCP, Zoning Bylaw, Development Permit Areas) that would further enhance and strengthen agriculture on Denman Island. As an element of the Agricultural Strategy, they are listed here to identify areas for regulatory improvement only, within the context of directing detailed implementation within a future Agriculture Area Plan. General policy updates are listed first, followed by more specific suggestions and wording for OCP and Zoning Bylaw updates. The opportunities are listed in no particular order, without a priority level assigned, as it is assumed that most would be incorporated into an OCP and/or Zoning Bylaw amendment concurrently. Public review and input of the recommendations would be an obvious requirement prior to adoption. A number of strong agricultural OCPs and Zoning Bylaws already exist in B.C., and for ideas and suggestions the City of Richmond and Township of Spallumcheen offer particularly relevant local policies and regulations for consideration.

5.1 General Policy Updates

	Potential Resources	Opportunities
29	Local Trust Committee	Consider reviewing and updating land use policies, zoning and OCP amendments outlined in 5.2 and that may arise through the AAP process.
30	Local Trust Committee ALC ASC	Attempt to reduce agricultural land speculation by restricting or banning any further conversion of farmland (ALR and/or 'agriculture' zone) into non-farm uses, including parks, recreation areas, or conservation areas.
31	ASC Local Trust Committee	Consider creating an Agricultural Advisory Committee for Denman Island (either with the Agriculture Plan Steering Committee members or by starting a new committee) to advise the Islands Trust on issues related to agriculture, land use planning, infrastructure, and related services.
32	Ministry of Agriculture	Explore ways to promote, encourage, and streamline the process for small scale food producers to apply for Class E licensing to enable local sales.
33	Local Trust Committee ALC	Consider adopting an ALR compensation policy that requires any land excluded from the ALR be matched, two to one, with an inclusion of new land (of equal or great capability) in the ALR.
34	Ministry of Agriculture Local Trust Committee	Explore what is involved in conducting an inventory of unused, or underused, farmland and contact landowners to determine the level of interest in enhancing farming on those properties. Include public lands in this inventory (i.e. parks, right of ways, and rooftops that could be used for agriculture).
35	Local Trust Committee ASC	Consider identifying a new Agricultural Enterprise zone, outside the ALR, where tax exemptions and comprehensive zoning could be used to encourage the development of support services and value-added production.
36	Local Trust Committee ASC	Consult the document "A Seat at the Table", produced by the Provincial Health Services Authority to provide local governments with examples of policies to improve food access.
37	Local Trust Committee ALC ASC	Consider the need for agricultural impact assessments when major new non-farm development is proposed in the community, regardless of the development's proximity to farming.
38	Local Trust Committee ASC	Explore the potential to design greenways and other forms of linear recreational trails to avoid farm areas. Where agricultural land is involved, policy development could focus on mitigating impacts on farming.

5.2 Specific Suggestions for Amendments to the Official Community Plan

Suggested OCP Updates to Enhance Agriculture	
a	Include a general provision that recognizes the authority and jurisdiction of the ALC for ALR lands. For example: <i>Notwithstanding any other provision of this bylaw, all lands with the Agricultural Land</i>

	<i>Reserve (ALR) are subject to the Agricultural Land Commission Act, the regulations and orders of the ALC. The Act and regulations generally prohibit or restrict non-farm use and subdivision of ALR lands, unless otherwise permitted or exempted.</i>
b	Include a general statement that recognizes that agriculture is the priority use for ALR and other agriculturally-zoned lands. For example: <i>Land designated as Agricultural is intended to be used for agricultural purposes only. All uses and subdivision of Agricultural Land Reserve land, shall be in accordance with the provisions of the Agricultural Land Commission Act, regulations thereto or Orders and Policies of the Agricultural Land Commission.</i>
c	Include provisions such that when a non-agricultural property abuts an agricultural property and a subdivision application has been received for the former, an appropriate buffer strip will be established and protected by covenant on the non-agricultural property following the "Landscape Buffer Specifications" published by the ALC.
d	Include a statement that discourages the creation of panhandle lots within the ALR because of the withdrawal of land from farm production for a driveway area.
e	Include provisions for the separation and buffering of trails from adjoining agricultural areas and for early consultation with affected landowners. Roads and corridor routes, including recreational trail systems through the ALR require ALC approval.
f	Include provisions that make it clear that neither the approving officer nor ALC is obliged to approve subdivisions that meet minimum lot sizes. For example: Notwithstanding the minimum lot size standards and land use policies cited in the OCP or the Zoning Bylaw, the Trust may, after due consideration, not authorize an application to the Agricultural Land Commission if the proposed subdivision or use would have a negative impact on agricultural land or the farming community even if the proposed subdivision is consistent with these minimum lot size standards or the proposed use is consistent with existing land use policies.
g	Incorporate buffering on residential land adjacent to the ALR in the subdivision and development control bylaws. For example: <i>The minimum parcel size of X hectares applies to land that is designated zoned Agriculture (or other designation that permits agriculture) and is in an ALR designated under the ALC Act, if the land is excluded from the ALR; the land is approved for subdivision within the ALR, under the ALC Act; or subdivision is permitted or exempted from approval under the ALC Act, Regulation or Order of the Commission.</i>
h	Include goals about pursuing the development of an Agriculture Area Plan and keeping Land Use Inventory maps up-to-date.
i	Address the conversion of farmland outside the ALR and/or areas zoned A, such as in R2 and RE zones, for non-farming purposes.
j	Consider adopting a "no net loss" approach to farmland quality and quantity.
k	Review the adequacy of the industrial land base for agricultural support services.
l	Encourage the creation of a Development Permit Area for lands adjacent to the ALR and other agriculturally-zone lands specifying the construction and maintenance of buffers, the siting of buildings, and notification to owners of the potential impacts of farming practices (e.g., noise, dust, odour), as well as restricting future subdivision.
m	Confer with the agricultural community for input and recommendations to the ALC and subdivision approving officer about any applications for subdivision, exclusion, or non-farm use application.
n	Include provisions in all existing DPAs that agriculture is recognized as the priority use in the ALR, and that agricultural uses should not be effectively prohibited, as a consequence of protecting other values.
o	Include a discussion of agri-tourism and specify objectives regarding agri-tourism activities that the community encourages and goals around economic diversification

	and agri-tourism.
p	Consider the impacts of some of the Advocacy Policy statements on the viability of agricultural activities, such as the discouragement of chemical biocides. While the objective may be laudable, the impacts on farmers may result in limited abilities to treat plant and animal diseases. Furthermore, an outright prohibition of chemical usage would likely not be recognized by the ALC.
q	Include a statement encouraging agricultural landowners to consolidate two or more parcels into a single larger parcel which may be more viable for agricultural purposes and will contribute to conserving the long-term agricultural character of the community.
r	Discuss objectives surrounding water conservation and agricultural practices, and encourage farmers to adopt efficient watering practices, such as spray irrigation.
s	Encourage the agricultural use of existing small parcels of ALR land and discourage policy and regulations that provide for the use of small lots for non-farm uses.
t	Medium to large scale agricultural processing and related services should be located outside of agriculturally-capable land whenever possible.

5.3 Specific Suggestions for Zoning Bylaw Amendments

Suggested Zoning Bylaw Updates to Enhance Agriculture	
a	Identify Agricultural Enterprise Zones, outside the ALR, where revitalization tax exemptions and comprehensive zoning could be used to encourage agricultural related businesses and services, including support services and value-added production.
b	Consider allowing accommodations for seasonal farm labour in zone A.
c	Reduce setbacks lot lines on agriculture land to 15.0 m when adjacent properties are also farms.
d	Add "Direct Farm Marketing" as an allowable use in R2, A, and RE zones.
e	Increase height provisions for silos and grain bins of up to 41 m.
f	Off-street parking should not have to be covered by permeable surfaces for direct farm sales and should be required as follows: <ul style="list-style-type: none"> • Produce stands: 1 parking space per 20 m² of direct farm marketing area • Greenhouses: 1 parking space per 15 m² of direct farm marketing area • Nurseries: 1 parking space per 20 m² of direct farm marketing area.
g	Agritourism accommodation could be provided in Zones A, RE, and R2.
h	The following on-farm uses should be permitted where the lot on which the use occurs has some commodity productions of the farm unit and approval from the ALC is obtained as required: <ul style="list-style-type: none"> • small-scale processing; • product preparation; • soilless medium production; • storage use.
i	The design of residential, commercial, and industrial areas should avoid road endings pointed into farmland.
j	Implement Development Permit Areas for agriculture through permit conditions that require edge planning on R1 and R2 land adjacent to farmland.
k	Prior to issuance of a Building Permit, a covenant could be registered, pursuant to the provisions of Section 219 of the <i>Land Title Act</i> , including agreement by the owner of property adjacent a parcel containing lands within the <i>Agricultural Land Reserve</i> to: <ol style="list-style-type: none"> 1) <i>Acknowledge, understand, and agree that their lands are adjacent to lands within</i>

	<p><i>the Agricultural Land Reserve and may be adversely affected by normal farm practices carried out by the owners of the farm land (including, but not limited to odour, noise, dust, chemical sprays, light, and aesthetic appearance of land including unkempt areas and material storage).</i></p> <p>2) <i>Consult with the owner of farm land before planting shrubs, trees or other plants within 15 metres of the farm land to ensure that the plants will not have a negative impact on farming operations.</i></p> <p>3) <i>Not apply any chemicals including pesticides, herbicides and fungicides, except in accordance with the manufacturer's directions, and contain all spray drift within the boundaries of the property.</i></p>
l	In addition to a principal single family dwelling, consider allowing one building for accessory farm sales use.
m	Allow secondary suites in principal single family dwellings in agricultural areas.

Appendix B – Regulatory Framework

The purpose of this regulatory review is to provide a summary of the legislation and planning directives in place that have an impact on land use and farm practices on Denman Island, highlight policy tools, and identify opportunities for strengthening local plans and policies. Focus is placed on agricultural land use regulations and policies at the local and provincial levels rather than on associated environmental and health issues such as food safety and waste management. In addition to the review of the current regulatory framework within which agriculture resides, recommendations are offered regarding steps and methods available to enhance conditions upon which diverse farms can flourish on Denman Island.

1.0 Regulatory and Legislative Framework

1.1 Federal

Agriculture is included in federal policy through trade agreements, food safety and inspection, food labelling, and the promotion of quality of life through healthy eating.

- ***Agriculture and Agri-Food Canada*** focuses on domestic and international trade, farm income stabilization, research and development, and the regulation of animals and plants. It provides information, research and technology, and policies and programs towards the security of the food system, health of the environment and innovation for growth. Partners include the Canadian Dairy Commission, Canadian Food Inspection Agency, Canadian Grain Commission, Farm Credit Canada, and the Farm Products Council of Canada (AAFC, 2010)
- ***The Canadian Food Inspection Agency*** regulates food products, packaging and labelling. It is responsible for testing food products, setting requirements on traded goods, and protecting plants from pests and diseases (CFIA, 2010).
- ***The Department of Fisheries and Oceans*** is responsible for protecting aquatic ecosystems and administers the *Fisheries Act*, which is potentially one of the strongest pieces of environmental legislation in Canada, though its lack of enforcement has been criticized. DFO strives to work with commercial, recreational and First Nations fisheries to support sustainable aquaculture (DFO, 2010).
- ***Health Canada*** regulates agriculture indirectly by tracking outbreaks and diseases and overseeing environmental health programs. The Public Health Agency of Canada, together with Health Canada and the Canadian Food Inspection Agency, work cooperatively with health authorities to protect the public from food contamination outbreaks (HC, 2010).

1.2 Provincial – Agricultural Framework

The Province of BC shares a mandate for the promotion of agriculture and health with the federal government. Detailed descriptions of the provincial agencies and associated legislation involving farming and agricultural land use are provided below. They include the Ministry of Agriculture (formerly the Ministry of Agriculture and Lands), the Agricultural Land Commission, and the Ministry of Community, Sports, and Cultural Development (formerly the Ministry of Community and Rural Development). In addition, several other areas of jurisdiction have food-related legislative authority and a brief description of each is provided.

Ministry of Agriculture

The Ministry of Agriculture is responsible for providing a balanced approach that will promote economic and social development objectives with those of environmental sustainability for the agriculture, aquaculture and food sectors in B.C. In addition, the Ministry funds the Agricultural Land Commission and the B.C. Farm Industry Review Board (BCMAL, 2010). A wide variety of legislation that involves or affects agricultural land, farm workers, and farm activities is administered by the Ministry of Agriculture, including:

Agri-Food Choice and Quality Act
Agricultural Produce Grading Act
Agrologists Act
Animal Disease Control Act
Bee Act
British Columbia Wine Act
Farm Income Insurance Act
Farm Practices Protection (Right to Farm) Act
Farming and Fishing Industries Development Act
Fish Inspection Act
Fisheries Act
Food Products Standards Act
Fur Farm Act
Game Farm Act
Greenbelt Act

Insurance for Crops Act
Land Act
Land Reserve Commission Act
Land Title and Survey Authority Act
Livestock Act
Local Government Act (sections 916-919 only)
Milk Industry Act (ss. 1-11, s.12 in respect of tank milk receivers licenses, ss. 13-43)
Natural Products Marketing (BC) Act
Plant Protection Act
Seed Potato Act
Veterinarians Act
Water Utility Act
Weed Control Act

Agricultural Land Commission

The Agricultural Land Commission (ALC) was created in 1973 to preserve agricultural land as an issue of provincial concern. At the time, thousands of acres of prime farmland were being lost to non-farm uses every year. The ALC's mandate has three objectives (ALC, 2010):

1. To preserve agricultural land;
2. To encourage farming on agricultural land in collaboration with other communities of interest;

3. To encourage local governments, first nations, the provincial government and its agents to enable and accommodate farm use of agricultural land and uses compatible with agriculture in their plans, bylaws, and policies.

The ALC administers the *ALC Act* and is responsible for the Agricultural Land Reserve (ALR), a provincial zone in which agriculture is recognized as the priority use. The purpose of the ALR is to ensure that the province's agricultural land base is preserved and available for farm uses both now and in the future. The ALR is unique in Canada and the envy of jurisdictions across North America. Only Quebec's *Loi sur la protection du territoire et des activités agricoles (LPTAA)* and the *Greenbelt Act* in Ontario (which only applies to a sub-region of that province) have similar agricultural land protection objectives (Commission de la protection du territoire agricole, 1996 and Ontario Municipal Affairs and Housing, 2005).

The *ALC Act* requires that agricultural land within the ALR not be used for non-farm uses unless specifically permitted by the Act or its associated regulations. The *ALC Act* takes precedence over other provincial legislation and local bylaws and policies. Applications regarding changes to the ALR are considered by a regional panel of three members that carry out the duties of the Commission. There are six panel regions in BC, and Denman Island is located within the ALC's Island Panel Region. These three panel members are responsible for deciding the fate of exclusion, inclusion, subdivision, and non-farm use applications within the Island Region.

Farm Practices Protection Act

Working in tandem with the ALR is the *Farm Practices Protection (Right to Farm) Act (FPPA)*, which is administered by the *Farm Industry Review Board (FIRB)* and protects farmers from liability related to nuisance complaints relating to odour, noise, dust or other disturbances resulting from normal farm operations on ALR land. The purpose of this legislation is to safeguard farmers from lawsuits from local governments or individuals in near-residential areas (RSBC, 1996). Unless farm practices contravene existing provincial or federal legislation, they are considered to be "normal farm practices" and they supersede local bylaws that would otherwise infringe upon those activities (Curran, 2005). The only method to restrict farm activities at the local level is through a *Farm Bylaw*, which requires provincial approval.

1.3 Provincial – Health Framework

Key Players in Food Health and Safety

The BC Ministry of Health Services (MHS) administers the *Public Health Act* and *Food Safety Act* and establishes standards and procedures aimed at protecting public health. The *Food Safety Act* was established in 2002 to consolidate food safety aspects of the Milk Industry, Meat Inspection, and Health Acts under one statute administered by MHS (BCMHS, 2010).

Regional Health Authorities administer the *Food Premises Regulation* under the *Health Act* and licence, inspect, and respond to complaints regarding food facilities under their jurisdiction. The Vancouver Island Health Authority (VIHA) is responsible for the inspection and enforcement of food safety regulations in the Gulf Island communities. In addition to the *Food Premises Regulation*, VIHA administers the FOODSAFE training program (which teaches safe food handling procedures to those in the food services industry) and the Food Security Program (VIHA, 2010).

The BC Centre for Disease Control (BCCDC) operates the Food Protection Services division under the Provincial Health Services Authority (PHSA), which addresses public health concerns regarding food and food protection by providing scientific expertise to the Regional Health Authorities and to the BCMHS (BCMHS, 2010). BCCDC is responsible for the inspection and licensing of provincial dairies and abattoirs and for providing food safety guidelines, training and information, and laboratory services to Public Health Inspectors.

In 2006, the Federal government provided BC with \$2.64 million to enhance and promote food safety systems in the food processing industry (BCCDC, 2010). The partnership included:

- o BC Centre of Disease Control
- o Regional Health Authorities
- o Small Scale Food Processing Association
- o BC Food Processors Association
- o Food processing industry
- o BC Ministry of Agriculture and Lands

The Provincial Meat Inspection Regulation

The Meat Inspection Regulation (MIR) sets out construction, inspection and other requirements for provincially licensed slaughter facilities in BC. The regulation came into force in 2004, compliance became mandatory in September of 2007 and significant changes to licence classes were made in April 2010 (BC Laws, 2004). The number of licensed slaughter plants in B.C. has increased from 12 in 2004 to 37 in 2010 (BCMHS, 2010a).

Until the 2010 amendments, the MIR included three class levels of licensing for meat sold in the province:

- Class A - facilities providing slaughter and cut-and-wrap services;
- Class B - facilities only providing slaughter services; and
- Class C - facilities operating without inspection until upgrades to full licensing are completed. This was introduced as a temporary measure in 2007 and is now being phased out.

The language of the regulation allows for innovative approaches, such as mobile slaughter facilities that can provide services to several rural communities. However, many small scale producers criticized the move as restricting their ability to slaughter their animals in areas not served by provincially-licensed facilities. This created high costs associated with meat processing for farmers in more remote communities, such as the Gulf Islands, Sunshine Coast, and Central Coastal areas.

In 2009, a MIR Transition Strategy was announced to further support operators in the transition to full licensing under the MIR. The strategy included collaboration with small rural operators to determine minimum food safety requirements and a viable licensing approach for producers in isolated areas with limited capacity to establish a fully licensed abattoir. As a part of the Transition Strategy, two new categories of licences (Class D and Class E) were introduced in April 2010 to better serve remote and rural communities (BCMHS, 2010a). Denman Island is located within the Comox Valley Regional District (island section) and small-scale producers can apply for Class E licences. Class E (Direct Sales) allows direct producer sales to consumers from the producer's farm (farm gate sales). Production is limited to 10 animal units per year (approximately 4,540 kg live weight) and the permit allows only the slaughter of the licence holder's own animals. Prior to being eligible to apply for a Class E license, operators must complete and submit a feasibility study clearly demonstrating a lack of slaughter capacity. Applications are reviewed on a case-by-case basis and guidelines are being developed to assist farmers in completing the feasibility study.

1.4 Provincial - Environmental Framework

Ministry of Environment

The BC Ministry of Environment (BCMoE) manages and delivers a wide range of programs and services that support the Province's environmental and economic goals. The Ministry is a leader in implementing the government's climate change initiatives and also promotes recreational opportunities, such as hunting, fishing and exploring B.C.'s parks. BCMoE is responsible for a wide variety of legislation that involves or affects agricultural activities including the *Drainage, Ditch and Dike Act*, *Environmental Management Act*, *Fish Protection Act*, *Integrated Pest Management Act*, *Water Protection Act*, and *Wildlife Act* (BCMoE, 2010). BCMoE's role in sustainable environmental management and stewardship includes implementation of B.C.'s Climate Action Plan and Living Water Smart Plan.

Agricultural Waste Control Regulation

The Agricultural Waste Control Regulation (AWCR) is enforced under the *Environmental Management Act* (EMA). Agricultural waste discharges require authorization and can be regulated by a code of practice. Minor amendments were made to the AWCR in 2004 and 2008, to establish consistent rules for all boilers used in agriculture, as well as emission standards for biomass (wood-fired) boilers used in agriculture. In October 2009 the BCMoE announced a review of the AWCR, which is still underway, to harmonize the standards in this regulation with other regulations, update handling and disposal of agricultural technologies regarding agricultural wastes, and for compliance and enforcement issues (BC Laws, 2008).

Riparian Areas Regulation

The Riparian Areas Regulation (RAR) was enacted under Section 12 of the *Fish Protection Act* in 2004, and calls on local governments to protect riparian areas during residential, commercial, and industrial development by ensuring that proposed activities are subject to a science based assessment conducted by a

Qualified Environmental Professional (QEP) (BCMoE, 2010a). Riparian areas are defined as linking water to land along the border of streams, lakes, and wetlands.

The RAR applies only to communities on the east side of Vancouver Island, the Lower Mainland and the Southern Interior, as these are the parts of the province that are experiencing the most rapid urban growth. Local governments must ensure that its bylaws and permits under Part 26 of the Local Government Act provide a level of protection that is comparable to or exceeds that of RAR (MLAP, 2006). Part 26 of the Local Government Act includes:

- (a) removal, alteration, disruption or destruction of vegetation;
- (b) disturbance of soils;
- (c) construction or erection of buildings and structures;
- (d) creation of non-structural impervious or semi-impervious surfaces;
- (e) flood protection works;
- (f) construction of roads, trails, docks, wharves and bridges;
- (g) provision and maintenance of sewer and water services;
- (h) development of drainage systems;
- (i) development of utility corridors;
- (j) subdivision as defined in section 872 of the *Local Government Act*;

The RAR does not apply to agricultural activities, however, the construction of residential structures or other "development" activities within agricultural areas (such as within the ALR), would be subject to the RAR. It also applies to non-farming activities on non-ALR lands that may otherwise be used, designated, or zoned for agriculture. Other aquatic-related regulations also still apply to agricultural activities, such as the *Water Act* and *Fisheries Act*, and practices to encourage stewardship in agricultural lands are highly recommended (MWLAP, 2006). The Islands Trust has a legal obligation to implement the RAR, even in lands currently designated for agriculture.

1.5 Provincial - Land Use Framework

Ministry of Community, Sport, and Cultural Development

Formerly the Ministry of Community and Rural Development, the BC Ministry of Community, Sport, and Cultural Development (BCMCS CD) is responsible for the administration and maintenance of a number of statutes establishing the legal framework for local governments in BC. The purpose of the BCMCS CD is to equip communities across BC to build strong, competitive economies (BCMCS CD, 2010). The four key pieces of policy and legislation administered by the BCMCS CD affecting agricultural land use at the local level are the *Community Charter* the *Local Government Act*, the *Assessment Act* and the *Land Title Act*.

Community Charter

The *Community Charter* came into effect in 2004 and establishes the legal framework for core municipal powers (BC Laws, 2003). The purposes of the *Charter* are to provide municipalities and their councils with:

- (a) A legal framework for the powers, duties and functions that are necessary to fulfil their purposes;
- (b) The authority and discretion to address existing and future community needs; and
- (c) The flexibility to determine the public interest of their communities and to respond to the different needs and changing circumstances of their communities.

Local Government Act

The *Local Government Act (LGA)* establishes the legal framework for regional districts and contains important local government regulations concerning planning and land use. Under the *Local Government Act* and *Community Charter* the Islands Trust is responsible for the development and application of official community plans (OCPs), land use zoning and other land use bylaws.

The LGA provides several directions toward farming through local land use planning, including (RSBC, 1996):

- Section 878 (1) stipulates that local governments may include in OCPs “policies...respecting the maintenance and enhancement of farming on land in a farming area or in an area designated for agricultural use the community plan”;
- Section 903(5) states that “...a local government must not exercise the powers under this section to prohibit or restrict the use of land for a farm business in a farming area unless the local government receives the approval of the minister responsible for the administration of the Farm Practices Protection (Right to Farm) Act.”
- Section 917 provides the authority for local governments to adopt farm bylaws to regulate farm management activities in farm areas, subject to approval from the Ministry of Agriculture;
- Section 919.1 (1) provides local governments with the authority to designate a development permit area (DPA) for the “protection of farming.”

Assessment Act

The *Assessment Act* is administered by BC Assessment, a provincial Crown Corporation responsible for the classification of properties in B.C. for property assessment and tax purposes (RSBC, 1996a). Farm classification is a voluntary program that provides the benefit of a low tax rate for assessed properties.

Even though property may be zoned as agricultural land, or in the provincial ALR, farm classification will only be granted if the land (or at least a portion of it) is being actively used for primary agricultural production and it meets the other requirements of the Regulation. Only land can be classified as farm land - buildings (residences and outbuildings) are classified separately, typically as residential.

Land qualifies for farm classification under the following conditions:

- The land is used for “primary agricultural production”;
- The land is the site of “a farmer’s dwelling”;
- The land is used for training and boarding horses in a horse rearing operation;

- The land otherwise contributes to primary agricultural production such as land used for drainage, irrigation, buffers and windbreaks.

Agricultural production for purely on-site consumption and the breeding and raising of pets, other than horses, do not qualify. A certain minimum amount of income must be produced from the primary agricultural production, and these requirements vary depending on the total land area. For example, a minimum annual value of \$2,500 is required for land between 8,000 m² and 4.0 ha and \$10,000 if the total land area is less than 8,000 m².

The Assessment has been criticized in the past as creating an unfair burden to small lot farmers and farmers who operate outside of the ALR. In 2009, the Farm Assessment Review Panel provided a report to the Provincial Government recommending a number of changes to the farm assessment process and Regulation 411/95 (Farm Assessment Review Panel, 2009). Prior to the review, assessment policy dictated that within a parcel of land, only that portion that was actually in agricultural production would be classed as farm, with the remainder of the parcel was classed as residential by default. This approach is commonly referred to as “split classification” of farm land, and it applied to farms both in and outside of the ALR. At the time of the review there were about 8,000 farms that were “split classified” around the province and was of particular concern for smaller farms in the rural areas of southern Vancouver Island, the Gulf Islands, and the Lower Mainland, where property values are very high.

Some of the Panel’s recommendations have been incorporated since the review, including the elimination of the split classification of farm properties in the ALR that are not used for other purposes and for non-ALR properties where at least 50% of the property is in, or contributes to, production, or 25% is in production and meets a higher income threshold (\$10,000). For leased land, only the land actually in production will be classed as farm.

Land Title and Survey Authority Act

The Land Title and Survey Authority of BC (LTSA) is a statutory corporation responsible for managing the land title and survey systems of BC and its mandate and responsibilities are set out in the *Land Title and Survey Authority Act*. The mandate of the LTSA is to create confidence by delivering assured land title and land survey systems essential to the property market and economic foundation of the province (LTSA, 2010).

As pertaining to agriculture, the LTSA provides specific directions regarding subdivision through the *Land Title Act* (RSBC, 1996b). Section 86 (1) states that an approving officer may refuse to approve a subdivision if:

- (ix) the subdivision is unsuited to the configuration of the land being subdivided or to the use intended, or makes impracticable future subdivision of the land within the proposed subdivision or of land adjacent to it;
- (x) the anticipated development of the subdivision would unreasonably interfere with farming operations on adjoining or reasonably adjacent properties, due to inadequate buffering or separation of the development

from the farm, or;

- (xi) despite subparagraph (ix), the extent or location of highways and highway allowances shown on the plan is such that it would unreasonably or unnecessarily increase access to land in an agricultural land reserve.

Under section 219 of the *Land Title Act* states that a municipality or regional district may register a covenant on the title to land to protect specific characteristics of land in or adjacent to the ALR.

2.0 Specific Agricultural Planning Tools

2.1 Subdivision and Minimum Lot Sizes

One of the most important tools that local governments can use to protect the viability of farming is to limit the subdivision of agricultural land by maintaining large lot minimums. While there are many successful small lot farms in BC and smaller lots assist first-time farmers to enter the land market, subdivision of land in the ALR generally undermines the viability of farming in three important ways (ALC, 1997):

- Certain commodities become limited by smaller pieces of land;
- Subdivision of land adjacent to the ALR creates more conflict between residential land use and farming at the edge; and
- Subdivision fuels land speculation because it creates an expectation that farmland will be converted into rural residential and other uses.

Generally, the minimum parcel size provisions applied to the ALR should discourage rather than encourage subdivision and the objective in the OCP should be to reduce expectations for subdivision approval (BCMAFF, 1998). Provincial approving officers may decline an application for subdivision, both within and outside of the ALR, if the anticipated development of the subdivision would unreasonably interfere with farming operations on adjoining or reasonably adjacent properties (ALC, 1997). “Unreasonable interference” resulting from subdivision may include:

- Inadequate drainage near farmland;
- Increased traffic on rural roads;
- Incompatible non-farm uses adjacent to the ALR;
- Roads that end at the ALR boundary;
- Inadequate parcel size that will not support buffers and setbacks;
- Inappropriate park or school dedications; and
- Awkward location of sewer, water and other services.

Provincial approving officers may also decline an application if the road allowances shown on the subdivision plan are such that they would unreasonably or unnecessarily increase access to land in the ALR (ALC, 1997). The purpose of these powers is to eliminate road endings next to the ALR that anticipate future development and invite trespassing. The ALC receives, on average, 500 applications per year, of which 50% of new applications are typically requests for non-farm use or subdivision within the reserve (Curran, 2005). Between 2001 and 2005, the ALC approved over 1,450 subdivisions on agricultural land. However, it is important to note that even if the ALC approves an application to subdivide farmland, a local

government is not required to rezone the property to accommodate the approved subdivision (ALC, 1996). Subdivision approved by both the ALC and the local government will still be subjected to the minimum lot size provisions as set forth in the local plans and bylaws (Smith, 1998).

2.2 Edge Planning and Development Permit Areas

Local governments, the Ministry of Agriculture, and the farming community are increasingly referring to the 600 metres on either side of the farmland/non-farmland boundary as edge planning areas. Edge Planning Areas (EPAs) require a partnership of local and senior governments, the agricultural community, and other sectors to ensure the continuation of farming adjacent to urban uses (Smith, 1998). EPAs practices include:

- Establishment of buffers in residential areas, such as landscaping and the siting of buildings, which can be detailed in development permit areas, zoning bylaws, subdivision and development control bylaws, OCPs, and covenants;
- Zoning bylaws that direct the siting of farm uses, farm buildings and farm structures that may cause conflicts,
- Farm bylaws that establish farm management standards for practices such as manure storage and handling, and activities that create significant noise, dust and odour; and
- Communication efforts to improve relations between the urban and farming communities (e.g., signage regarding the value of buffers, farming in the ALR, protected normal farm practices, and the right to farm).

Development permit areas are one effective way of ensuring that edge planning practices are employed (Curran, 2005). Section 919.1 (1) of the Local Government Act provides local governments with the authority to designate a development permit area (DPA) for the “protection of farming.” DPAs are one of the strongest tools for shaping new development to ensure that it respects adjacent farmland and farming practices. DPAs allow local governments to create site-specific requirements for development over and above basic zoning (BCMAFF, 1998). A permit must be obtained before a private land owner may subdivide, alter land, or construct or alter a building in a DPA, and development must be in accordance with the terms of the permit. DPA guidelines designated to protect farming may include land requirements that result in buffering or separation of development from farming on adjoining or reasonably adjacent land (ALC, 2010). This includes:

- Screening, landscaping, and fencing;
- Setbacks of buildings from agricultural land;
- Open space uses adjacent to farming;
- Sensitive handling of walkways and trails in buffer strips;
- Specifying limits on total impervious surfaces to prevent flooding;
- Prohibiting road endings adjacent to farmland; and
- Minimizing pedestrian and vehicle traffic near the ALR.

Many local governments have incorporated the ALC's Landscaped Buffer Specifications into DPA guidelines.

2.3 Covenants

Municipalities, regional districts and other organizations such as farm and conservation groups can use covenants to restrict the use of land to activities and areas of use that respect farming, as established through the *Land Title Act*, to protect specific characteristics of land in or adjacent to the ALR. A covenant is a voluntary agreement between the landowner (often a farmer or a developer) and a covenant holder (a municipality, regional district, or non-profit organization). The landowner agrees to protect the land as set forth in the wording of the covenant and the covenant holder has the right to monitor the property to make sure the landowner is using the land in accordance with the covenant (Curran, 2005). Registering the covenant on the title of the land ensures that the covenant applies to future owners and endures indefinitely.

Covenants may contain provisions specifying that the land is:

- Used for specific purposes (including that it be used for agricultural purposes);
- To be built on in accordance with the covenant or is not to be built on at all;
- Not to be subdivided except in accordance with the covenant or is not to be subdivided at all;
- To be protected, maintained, enhanced, or restored in accordance with the covenant.

For example, covenants can require that a wetland be maintained as a buffer between agricultural land and residential area. Covenants are often secured on land that is being subdivided adjacent to farmland to ensure that future activities and development of that land does not hinder the productive ability of the land in the ALR (BCMAFF, 1998). Covenants also provide notice to potential buyers that the land is adjacent to farmland, which helps prevent future conflict about farming practices. ALC approval must be obtained where covenants pertain to properties within the ALR. Any covenants that include prohibitions or restrictions of agriculture in the ALR will unlikely be granted approval.

2.4 Farm Bylaws

As set forward in the *Farm Practices Protection Act*, farmers cannot be sued for nuisance-type impacts to nearby landowners, such as noise and odour, from normal farm practices (ALC, 2005). However, in recognition that some farming activities can create exceptional impacts for residential neighbours and require a more fine-grained regulatory approach, designated local governments may enact farm bylaws such as:

- Designating the conduct of farm operations as part of a farm business (e.g., noise control regulations for audible bird scare devices);

- Regulating the types of buildings, structures, facilities, machinery and equipment specified by the local government that are a prerequisite to conducting farm operations (e.g., for mushroom farming and on-site composting);
- Regulating the siting of stored materials, waste facilities and stationary equipment (e.g., for manure storage, compost storage and waste water management); and
- Prohibiting specified farm operations.

Farm bylaws may only be adopted with the approval of the Minister of Agriculture, and only in an area declared by regulation. To date, the Provincial government has enabled only the local governments of Abbotsford, Delta, Kelowna and Langley Township with the ability to have farm bylaws enacted (BCMAFF, 1998).

2.5 Agricultural Advisory Committees

Agricultural Advisory Committees (AACs) provide a formal and ongoing mechanism by which local governments can consult with the agricultural community and assess the farming impacts of new initiatives, plans and bylaws (ALC, 2005). AAC members are appointed by the local government and the majority of the Committee members represent the agricultural community. Other sectors represented on Committees include local government staff and council or board members, water providers, environmental advisory committees, economic development commissions, landowners who live adjacent to agricultural land, and citizens (Barry, 1998).

AACs ensure that local governments understand how their operations and planning affect the business of farming. They keep agricultural concerns and impacts on the local government agenda and respond to local government requests to proactively make recommendations for local government action, such as (Curran, 2005):

- Participating in the development of Agriculture Area Plans (often as the steering committee);
- Making recommendations on amendments to OCPs, re-zonings, and applications for subdivision and exemption of land from the ALR;
- Assisting staff to develop policies such as edge policies and disclosure statements that address the interface between agricultural and residential areas;
- Providing input on the impacts to the agricultural community of transportation, economic development and other strategies;
- Advising local governments on drainage and water supply issues; and
- Reporting on infrastructure needs.

Committees can also act as agricultural ambassadors and participate in activities that increase the non-farming public's awareness of agricultural issues. This includes hosting or assisting with farm tours, participating in the Ministry of Agriculture's Agriculture in the Classroom program, acting as a resource for other organizations, and hosting other farming events.

2.6 Agri-tourism Policies

Agri-tourism can supplement and diversify agricultural income, contributing to the stability of agriculture in rural communities and may help visitors to better understand agricultural practices (ALC, 2005). Examples of agri-tourism activities that local government cannot prohibit include (Curran, 2005):

- Retail sales of products primarily from the farm, from farm stands and farmers' markets;
- Tours, including pumpkin patch tours and activities;
- Product processing and retail sales;
- Horse riding, guest ranches and livestock shows;
- Hay, tractor and sleigh rides;
- Fishing from a stocked pond;
- Wine tasting and food services associated with vineyards;
- Educational activities such as cooking classes using farm products;
- Special events like harvest fairs, farm product promotion, charity fundraisers using farm products, or catered food and beverage service special events;
- Bed and breakfast, cottages or other accommodation such as camping.

Agri-tourism activities that do not involve accommodation are an allowable farm use if they meet the following criteria (ALC, 2005):

- (1) The land must be assessed as a farm;
- (2) The activity must be temporary and seasonal (note: with some additional criteria, wineries, cideries and farm retail sales are not required to be temporary or seasonal); and
- (3) The activity must be secondary to the farming activity, relate to the principle farm use, and promote or market farm products produced on the farm.

Local governments usually regulate agri-tourism through zoning, and include requirements for (Curran, 2005):

- Maximum building area or site coverage and setbacks;
- Signage and parking;
- Maximum number of bedrooms and guests (note: Provincial regulation specifies that agri-tourism accommodation in the ALR must involve 10 or fewer sleeping units (including bed and breakfast rooms) and occupy less than 5% of the total parcel area).
- Food service to guests only;
- Maximum length of stay;
- Owner residing in dwelling and operating;
- Business licence;
- Servicing requirements (water, electrical, liquid waste);
- The meaning of 'temporary' and 'seasonal.'

It is important to note that it is possible for too much agri-tourism to actually serve to undermine the business of agriculture and farming communities, for instance if a

farming area or parcel is paved over to accommodate parking for agri-tourism uses (Smith, 1998). To avoid negative impacts on the primary agriculture operations and the surrounding community, a number of local governments are developing regulations for agri-tourism activities.

Appendix C - Denman Island Stakeholder Survey – Compiled Results

1. How do you define farming?

- Traditional – sale of agricultural products
- A commercial endeavour
- Working with the land to produce crops and livestock (economic definition)
- Rural
- If you're buying property you need to be on a large scale – hard to recover the cost when engaged in agriculture
- Mainly hobby farmers on Denman, but people enjoy it
- Depends on the scale – grains need a lot of acreage, but can grow vegetables on a couple of acres

2. How long have you been farming or involved in food production? Did previous generations of your family farm?

- Came to the island 15 years ago
- Has lived on the island for 8 years
- 4 generations have been farming
- Grandfather came to Denman Island in 1875 and the family has been farming ever since.
- Started farming in 1947 and has been farming for 65 years
- Over 30 years (on DI for 4 years) - First generation
- 8 yrs total (7 on Denman Island) - Grandparents were farmers, but not parents.
- For over 20 years but originally grew up in a city. Grandparents farmed (but not on DI). Parents did not farm.
- Is now retired but farmed her whole life. She comes from a long line of farmers, but she is the first generation on the island.
- Has been operating since 1978 – the house and buildings were built in 1896. They have been there for 3 years.

3. What crops, livestock, or products do you currently produce/create?

- Only has one acre of land – very small-scale (herbs, eggs, bedding plants)
- Raises horses
- Subsistence garden – just purchase dairy and meat
- Grow almost all their own vegetables and fruit (grapes, apples, peaches, figs)
- Son produces beef (also involved in milling and has an oyster lease)
- Makes jams and preserves.
- Has fruit trees, greenhouse – cucumbers, peppers, cabbage, broccoli, tomatoes
- Uses own produce for preserving
- Runs a produce market for 4 months each year – open one day per week. 18 types of vegetables at the market in October.

- Vineyards, sheep, chickens, ducks, vegetables, berries (blue, rasp, black) – for personal consumption. 10 acres.
- Focus is on permaculture practices. Fruit and nut trees, small nursery, mixed herd of livestock (a dairy cow, some chickens, sheep, etc).
- Apples for sale (5 acres) and veggie patch for personal use.
- They had goats and produced goat cheese and yoghurt. Also chickens, eggs, fruit, veggies, and flowers.
- Presently raising cows, pigs, chickens. Hay and personal veggies.
- Used to have a herb business and farmed on a commercial scale
- Did sell fresh flowers to a distributor
- Grandfather purchased the property in 1908 and had a mixed farm (dairy, turnips, sheep)
- Retired – used to raise beef and sheep, grew hay, turnips
- Sold turnips to Turnip Marketing Board on Vancouver Island (60 tonnes)
- Daughter owns offshore and beach leases for oysters
- Currently logs – a few small tree farms on the island
- Moved over in 1992 – had a 7000ft² garden – sold the vegetables
- Had Pekin ducks, wild turkeys and pheasants
- Family was into dairying first, then vegetables, beef cattle and Christmas trees. Also have a chuck wagon that they would bring to fairs and rodeos.
- Used to raise pigs. Could sell the hogs to a butcher in Cumberland.
- Father planted 1000 fruit trees in 1890 – the fruit was shipped to Cumberland.

4. Do you produce for your own use, trade or sale?

- Sells products on the island when she has extra
- Some special private orders
- Produces beef mainly for the island customers
- Produces for sale at farmers market
- Vegetables and eggs are sold locally – at farm gate. Grapes are young (4 years old) so have not been used for wine yet. Will be ready next year. Certified organic. Member of environmental farm plan.
- Plan to sell a portion of the grape crop and distill some on site. Want to eventually have a tasting room.
- Sell some lambs.
- The mixed herd of animals is for personal use. The nursery plants are sold. The fruit and nut trees will eventually be sold (when they are mature). They will be sold as entire trees (ie the fruit/nuts will not be harvested). Has sold some items in previous years at the DI farmers market and on Vancouver Island at the Seedy Saturday events.
- Produce for own use, a small amount for sale on Denman and mainly sales off the island.

5. Where do you market your products (On Island, Other Gulf Islands, Vancouver Island, Lower Mainland, Across BC, etc.)?

- Sells on Denman at the farmers market and from her farm gate
- On Denman and to Vancouver (beef cattle)

- When locals are stuck on the island because of tourists and the really busy ferry then locals will purchase from them
- Summer tourists buy from the farm
- Vancouver Island – Comox Valley (lambs)
- Comox, Vancouver and Okanagan for processing.
- Sold and traded everything on DI.
- Some goes to Vancouver.

6. Have you made any recent changes in your farming methods (crops, livestock, irrigation, or production)?

- No changes - Do not irrigate the vines because it affects the taste of the grapes.
- Everything is always in a state of change/flux on the farm because they are always trying new techniques, new plants, etc.
- No real changes, but have noticed that climate changes are beginning to influence crop health. In the past the tomatoes would grow without help, now they seem to get blight more often.

7. Do you farm full-time or part-time? Do you have work/income outside of farming?

- Full-time. Yes – not work, but investments. Could not rely on farming to make a living. Farm classification helps (with lower taxes).
- Full-time. Yes.
- Full-time - No – it is a viable business.
- It was always full time.
- No – they were always poor, but were able to make income via the farmers market and spent their money wisely (salvation army for clothes, etc). When they were younger they lived on a houseboat and had a small greenhouse on it. They realized that they wanted more land but they had very little money. So they bought 10 acres on DI that was totally covered in trees (bushland) and cleared it themselves.
- Full-time. Yes (carpentry, gardening). Residents live rent-free and get a share of food in exchange for work.

8. How do you find labour for your farming operation (Local workers on Denman Island, Workers off Denman Island, WWOOFers, etc.)?

- So far it has just been the family. They have a small sawmill which helps get a lot of the work done. In the process of constructing a small greenhouse to grow young vines (want to sell rooted vines as a side business). They have mechanized their farm as much as possible to reduce the amount of labour. Would possibly be interested in WWOOFers at some point down the road.
- WWOOFers - informally
- Family

- They don't have enough finances to hire labour. They have had friends and acquaintances stay with them in exchange for working on the farm (informal WWOOFing).
- Occasional hire, or trade picking labour for apples, as well as WWOOFers.
- They used WWOOFers and had a mixed experience with it. Some were very hard workers, but others treated it like a vacation and didn't work hard.
- They hire local workers on Denman Island for hay baling (temporary work).

9. What do you consider easy to grow on your farm on Denman Island?

- Considers salad greens easy to grow – can grow 9 months of the year
- Fruit trees grow well
- Bedding plants – warm climate (vegetables, basil)
- Eggs and organic chicken sell really well – not enough to meet demand
- On her site she finds eggplant, peppers and tomatoes easy to grow
- Feels that you can grow anything you want on Denman
- Considers vegetables easy to grow – lots of sun exposure on her property
- Vines are supposedly easy but they do require a lot of labour (trellising, weeding between rows). They have invested in a 'weed badger' to control the weeds between rows. Also grow grass between rows to help reduce erosion.

10. Do you have any soil constraints on your farm (stones, shallow soil, poor drainage, high irrigation needs, steep slopes, etc.)? What is your biggest concern?

- None – on shale bedrock so it drains very well. Uses her own horse manure compost as well, which helps immensely.
- Needed drain tiles under all fields
- Clay base, shallow soil, had to pick rocks regularly
- None – add lots of compost
- No issues. They have lots of irrigation on site – go through 100 to 150 gallons per day.
- They cleared the land themselves and not only removed stones, but very large rocks. It is so stony that you can't really plow the fields, but it works well for vines. They irrigate their vegetables for about 2 hours each morning in the summer months. They have a small water reservoir on site that they use. Drainage is good, have considered irrigating more so that they could plant earlier in the season and/or grow some things year-round. The soils have fairly low pH (5.1) so they have added lime over the years. Use their animal's manure for fertilizer.
- Areas of poor drainage and poor fertility
- Not sure about stoniness because the orchard was already planted when they bought the farm. They are lucky because they are next to a lake and are able to use that for irrigation, so they have no real constraints.
- When they bought the property it was covered in trees and they had to clear it. They did it mainly by hand, with a winch and a roto-tiller. It took a couple of years, three before they had crops to sell. But the goats and chickens did

fine. Their soil is not very stony as it is next to the marsh. They built a fish pond on higher ground and use it (gravity-fed) to irrigate using drip lines. No drainage/tiles required. They have a gentle slope.

- Need to dredge and re-ditch the ponds. Haven't tilled the fields in over 10 years, so unsure of stoniness. 20 acres of plowing and planting is a lot of work, so hay has been the default crop. That being said, they don't grow top-quality hay (they know they could try harder with more inputs for higher protein yields).

11. What do you consider the top three agricultural concerns or threats facing Denman Island (soil, water (drainage/irrigation), Competing non-farm uses on ALR land, Cost of inputs, Cost of land and taxes, Ferries schedule, Cost/logistics of transporting goods off-island, etc.)? Can you suggest any solutions for these concerns or constraints?

- Cost of the ferries
- Cost of the land – young people can't afford to buy land
- Not enough fresh water
- Parochialism
- Need more sophistication and education about scale and marketing for efficiency in farming – how to earn an income from farming (marketing to restaurants, grocery stores, at the farm stand, etc.)
- The challenges in agriculture are the same everywhere – it's a level playing field
- Land prices
- Ferry cost and inconvenience
- Access to water
- Land value – wouldn't be able to afford to buy land now
- Competing against China for agriculture and food.
- Can't make a living farming on Denman
- Cost of the ferry is a major barrier.
- People do not support one another on Denman. They do not buy locally, go to events, etc. They have access to the large supermarkets and choose to shop there instead.
- Cost of land is a barrier – about as high as it gets.
- Cost of inputs and machinery.
- Notices an increase in support from Denman Islanders, but base is 35-40% tourists.
- Need to increase local awareness of agriculture – need to change the mentality that you can't get groceries on the island.
- Main problem is a lack of population (not enough customer base), small scale of farms, and lack of income. Many people romanticize farming but don't realize how much work it actually is. People are doing it because they want to know where their food is coming from. Ferry logistics are difficult. At a certain scale of farming it doesn't make sense (in some ways it's better to remain small) but there is definitely a lack of customer base.
- Not enough farmers on the island, not enough supporters (customers) on the island, and not enough of a financial incentive to stay in farming generally.

- Off island travel and transportation is expensive. Ideally would like to be able to sell all their apples on DI but there is not enough of a customer base, and there are other apple farms on the island, so too many apples in general on the island.
- Cost of land is too high. Leasing should be a good option but they have not had much response to their offer to lease out 3 acres.
- Nothing in particular.
- Only about 15 cows, scale makes it hardly worth doing their own hauling to slaughterhouses. Every year it seems like less and less beef cows are raised.
- Hard to sell locally (not much of a market). They have to ship cows to a certified slaughterhouse. Considering getting out of the beef business altogether.
- Soil not great
- Birds are a serious constraint here
- Can trade, but the volume available to trade is not enough to make money.
- There is not enough support from government (too many regulations provincially around meat sales and too strict rules around number of buildings allowed and other permitting requirements from Islands Trust). Land access due to costs is a huge barrier.

12. What are the top three *beneficial* characteristics of farming on Denman Island (Good climate, Good soils, Able to sell/trade on Island, Able to make a decent living, etc.)?

- Climate – less rainy than Vancouver Island, warm
- Denman is ideally suited to market garden production and specialty crops
- The way people get along – farmers work together and discuss things
- You know what is and what is not on your products (most people don't spray)
- Biggest farming project on Denman is oyster growing.
- Good climate – especially on south end of DI
- Good soils – eventually (takes a few years to build it up)
- Good climate (this is the main benefit)
- Nothing in particular stands out.
- Able to sell/trade on Island – there is a good bartering system on the island.

13. Are you interested in expanding and/or diversifying your farm operation? If so, what do wish to do?

- Would expand if she were younger
- Not enough land or water
- Interested in expanding.
- Want to work with more local farmers and purchase products from them for the market (i.e. garlic, eggplant, leeks, etc.).
- Want to keep beef cattle, but charge more for the meat.
- Would like to add another greenhouse, bring on more chickens and offer eggs and expand vegetable production.
- Would like to bring in fruit from the Okanagan.

- Wanted to start a salad greens business, but it was not affordable with a perishable product

14. What services would you require to start, increase, or diversify your farming operation (More equipment/machinery, Increased labour, Better access to customer base off island, Increased veterinary services, etc.)?

- Doesn't require much. Can't keep up with the current demand.
- Might need more farm workers.
- A lot of people living on the island have their own gardens and produce enough for themselves, so they don't buy from actual farms. Need more of a customer base.
- Need an apple processor to setup on the island. This would be a great local business model as there are a lot of apples. Would be used to make apple juice and other value-added products.
- Need an apple drying processing plant set up on the island. Currently the apples are shipped in bulk to the Okanagan for drying. This does not make sense economically or from a carbon footprint standpoint. If they were dried on DI they could then be sold directly and more money would be retained on the island.
- More equipment/machinery:
- Would love to be able to use a no-till field drill (big metal plates to cut a trough 1/8" wide for seeding under the surface of the soil). The farmer's institute has one but it is a huge expense to get it to the island and try to coordinate sharing it with other farmers is a bit complicated (timing, etc). An aerator would be good too. Never going to share equipment during haying time as the equipment is in such high demand (2,000 bales).
- Irrigation would be great – no great source of water nearby – would help to diversify garden and crops.
- They are thinking of doing more meat birds – people pay more for fowl than for beef. But mink are an issue – they kill a lot of the chickens. The attraction is that it is easier to sell birds than a side of beef.
- Mobile slaughterhouse would be good.
- If there was an auction in Courtenay that would be great. As it is they have to ship to Vancouver for auction. Making sure that Gunter's stays open is important (only slaughterhouse in the region). Portable abattoir would be good but not sure how it would work. What would they do with the offal? Would they ship it off-island?

15. Are you interested in getting involved in agrotourism on your farm? If so, what form would it take?

- Would be interested in possibly putting in a B&B, tent spaces and adding a couple of horses for horseback riding.
- They operate a u-pick for grapes and berries, mainly when the supply is higher than what they can deal with themselves. The grapes aren't old enough to be used for wine, so they have been selling them through the u-

pick. Eventually they want a wine-tasting room but need to demolish an old house on the property and re-build it as a winery.

- Yes – would eventually like to include a B&B and create educational opportunities on the farm. Strongly feels that farms should be learning spaces.
- Yes – they ran a B&B on their property in the past and would consider doing it again. There is not very much demand for B&Bs, so the market can get saturated easily.
- No – it was never in their plans.
- They put an ad for farm tours in the local map that is distributed at the ferry terminal, but only 3 people phoned and stopped by this year. One of the houses could do a B&B, but didn't want strangers walking all around the farm and disturbing the animals, the farm. There is a bit of a biosecurity issue to some extent, some concern about people getting injured/hurt. Additionally, during the summer it's almost too busy with farm activities for there to be guests around.

16. Do you have a plan in place for future management of your farm (i.e. passing it on to children, farm co-operative, sell to another farmer, attempt to have the farm re-zoned, etc.)?

- Sold farm already to people who are hobby farming
- Kids will inherit the property
- Son is taking over the farm
- Would like to see his 13 year old son get involved in farming.
- Has a wife who is quite a bit younger than him. His children own and operate a nursery farm in Black Creek. His intention is to keep the land in farming, he has no need for the extra funds that would be involved in rezoning/selling it.
- No plan in place yet, just kicking around ideas.
- Lease it out or find another person to partner with them. Wants to keep it in agriculture.
- Passing it on to children, some of whom are farmers. But the children don't seem very enthusiastic about it.
- At the moment it's being passed down to the original owners' kids. Used to be 3 couples in charge, now it's 9 couples, so decision making can be problematic.

17. Have you experienced conflicts with your neighbours (Subdivisions, water quality concerns, noise and smells, etc.)?

- None
- Had no complaints from neighbours, but did have to work with neighbour growing organic garlic. Needed to establish buffers because he used to farm conventionally and used pesticides.
- Tree huggers were angry that they removed some dead trees on the property
- They have not had any conflicts. There is 40 acres of crown land on one of their adjacent fields and a 10 acre hobby farm on another side. In general, people are supportive of agriculture.

- No complaints – they have 40 acres so no close neighbours. Only conflicts are behaviour-based, but not unique to farming.
- No problems. They are certified organic, so no complaints about spraying or anything like that.
- No conflicts ever, not even when they used to have a loud donkey!
- None

18. What non-economic values do you associate with farming (Green space, Access to locally produced food, Wildlife habitat, Rural lifestyle, Scenic value, Farm animals, Cultural heritage, etc.)?

- Into a sustainable, self-sufficient style of living
- Quiet
- Many people move to the island because it's beautiful, not for the rural lifestyle
- Nothing ends up being non-economic
- It suits some people to be connected to the land
- There is a sentimental and symbolic value associated with farmland – affects everyone in their heart
- "Part of the blood of the country"
- Parks and farms are different
- People love the idea of making a place for themselves in the natural world
- Wildlife habitat – he is a hunter
- Likes the good neighbours
- Neighbours are not right in your face – privacy
- They really notice how many different species of birds use the land.
- Green space
- Wildlife habitat
- The ability to be in charge of your own survival, to be responsible for your own subsistence.
- All of the above apply. Farming was their main reason to move from the city, to have a new way of life. Wanted to be able to grow organic food that they could trust eating and DI is a beautiful place to live.
- They love the proximity of the marsh and the associated wildlife, especially ducks and geese and other birds. They also love the lifestyle, the ability to have their own land and to work for themselves.
- Cheap living due to particular situation, quality of life, open space. Nice to know where it comes from.

19. Do you support 'buying local' by purchasing items grown on Denman Island at the General Store and/or restaurants/coffee shops?

- Don't buy much from the store – produces so much of her own
- Some support of local markets – do not buy groceries in town or visit restaurants (too expensive)
- Yes – tries to buy products on the island
- Buys beets and cucumbers from Piercys
- Buys mangoes and citrus off the island

- Does not buy from the General Store – too expensive
- Does not visit coffee shops or restaurants
- Yes
- Yes but there are not enough options (the local stores cannot sell local meats due to provincial regulations, etc). Yes, recognizing that a lot of people just seek out the cheapest food possible, but at the same time some people go out of their way to buy apples directly from her farm.
- Yes – although they understand that the store is limited in what they can sell due to provincial regulations (no dairy or meat).
- No, not really. Go to Piercys (on Denman Island), but often just go to Safeway in town. Look for local but don't really try too hard about it.

20. Are you able to adjust your eating habits to eat seasonally (eat products when they are produced and harvested in our region)?

- Already does – they do their own canning and have their own subsistence garden
- Yes
- Yes – already doing that to a large extent.
- Yes
- Yes
- Somewhat.

21. What crops or livestock would you like to see grown here that aren't already?

- Organic chicken
- Milk
- Denman needs a nursery
- Produce – on a commercial scale (on a larger scale than Piercy)
- Blueberries!
- More potatoes, turnips
- Specialty livestock (small-scale specialty meat)
- Not a lot that isn't already being grown
- Could use more squash
- Dairy could return
- Most vegetables are already being grown
- Cereal crops (would love to be able to buy wheat and feed for livestock locally. But realize that a lack of arable land exists for growing cereal crops).
- Carbohydrates: cereal crops, potatoes, yams. More mixed green vegetables, more dairy. Right now there is a lot of hay being grown that is fed to beef cows and recreational horses. There is enough to feed a small-scale dairy in his opinion, so the dairy could potentially be situated on a relatively small parcel.
- More vegetables, people could set up small greenhouses and do very well. Need more value-added processing plants. Need to encourage tourists to come and stay, we need them for business.
- Berries (all kinds) and more vegetables.

- Local meat would be better. All the meat at the local store comes from Alberta.

22. What is your vision for agriculture on Denman Island?

- More of the land being used for agriculture
- More young people
- At the beginning stages – need to say 'yes' to what people might try
- Let's see what's needed to make the most out of agriculture possible.
- Concerned that agriculture will become extinct. Fear that people moving to the island are pushing out small-scale farmers.
- Regulations are getting too restrictive – especially in dairy
- Denman will see more small farmers producing for themselves
- Change in slaughtering regulations could open up more doors
- Can see potential growth in logging industry
- Farms utilizing the land for grains (not just straw and hay) – such as wheat or rye. There is a bakery on Denman that could use these items.
- Would like to see agriculture on Denman grow and expand.
- DI circumstances is currently making it very difficult for young people to get involved and make a living. Comox Valley has more options for new farmers; therefore no one is really attracted to DI to farm. There needs to be more tourists attracted to the island as a customer base. DI is not as friendly to tourists as Hornby Island is. There are no docking facilities (for boats) here, no pub, not many B&Bs. There is a drawbridge mentality generally on the Island, and this can seriously hurt farmers who are trying to sell their goods because there is not enough demand within the Island.
- Used as subsistence for residents, everyone should be involved and responsible for their survival. Agriculture could and should be used as a learning tool.
- Would like to see less food being shipped off the island so that the community is more self-sufficient and creating a smaller environmental footprint.
- Would like there to be enough food available on the island to provide all islanders with food in hard times, especially if there was an emergency or crisis.
- Want to have an easier time to sell what they raise in the fashion that they do.

23. Comments?

- Glad that people are more conscious about buying locally (people willingly pay the same prices as Edible Island in Courtenay)
- Denman needs more education on pesticide-free living
- Aquaculture should be included – considers oyster farming and lumber production to be intrinsic in farming – if you don't talk about it, you can't include it.
- Has previous experience getting involved with DI groups who are active in the farming issue and other environmental issues, but the general feelings he

got from those meetings were negative, the meetings themselves were negative, so he stopped attending.

- They were involved with the farmers market for years and had a positive experience with it. Feel that there needs to be better parking system at the market, current setup is a problem where cars just park on the grass. Would also like to see the market set up on an additional day of the week and try to get a winter market going at the community hall – although they think this was attempted and did not do well.
- They have tried to lease out their extra 3 acres and haven't had much interest. Last year they rented out garden plots to islanders but the experience wasn't good. The plots were often neglected, not visited regularly enough to be irrigated. Some of the gardeners were from the city and didn't know anything about growing food/tending to a garden. This surprised them a lot as they thought that the garden plot rental would be a success.

Appendix D - Community Groups to Consult

Hornby/Denman Growers and Producers Alliance (HDGPA)

The HDGPA consists of farmers from both Denman Island and Hornby Island and has the following purpose:

"To advocate for all Hornby and Denman agricultural sectors and their offshoots, and to provide a forum for cooperation, communication and support among island growers and producers."

Website: <http://islandagriculture.wordpress.com/about/>

Renewable Energy Denman Island (REDI)

(Text taken from the Denman.link.com website)

"REDI is an informal gathering of residents intent on helping Denman prepare for the coming demands of Peak Oil and Climate Change. The group sponsors the Island RideShare site (www.islandrideshare.com), the solar power tour, films & educational events (incl. natural building techniques & food crop related workshops)."

REDI also produced the Denman Island Local Foods Directory 2010.

Denman Island Sowing Potatoes Underground for Denman Sustainability (SPUDS)

A local potato co-op that grows potatoes on land at The Hermitage, based on the Linnaea Farm model on Cortes Island. Residents can sign up for membership in the co-op and receive potatoes at the end of the year in exchange for a commitment to participate on the farm.

Website: <http://www.wearespuds.blogspot.com/>

Denman Island Community's Garden Parties

(Text taken from the Garden Parties website <http://www.fireweed.ca/cgp.html>)

"Denman Island's Garden Parties are mini community work bees that are fun, productive, and rewarding in so many ways. It's just amazing how much a small group of organic enthusiasts of various ability levels can accomplish in such a short period of time! We limit our task sharing to two hour stints, so that those of us with busy schedules- and/or demanding gardens of our own- can still find time to show and share our support for the organic growers in our community who make their healthy, ecologically sustainable harvests available to the public at the Farmer's Market or farm gate."

Website: <http://www.denmangardenparties.blogspot.com/>

Dharma Fellowship – The Hermitage

(Text taken from the Dharma Fellowship webpage
<http://www.dharmafellowship.org/hermitage/>)

"The Dharma Fellowship of His Holiness the Gyalwa Karmapa maintains a Hermitage for meditation and spiritual practice on Denman Island, one of the small gulf islands that lie off the West Coast of British Columbia, Canada.

Founded in 2005, the Hermitage provides simple facilities for those seeking spiritual renewal, for inner peace and self-realization, within a serene Buddhist setting. Still very new, and with no funding other than what comes from dedicated members, the property is very much in an early stage of development; nevertheless events, meditation retreats, teaching sessions, the participation of Lamas and teachers, and the growth of a definite spiritual presence, has already begun to emerge.

The Hermitage is made up of 60 acres of extremely beautiful gently rolling farm land, consisting of four open grassy meadows bounded by thick forest, and a number of buildings including a 30 foot Yurt used as our temple. Deer roam freely throughout the day through the fields. The place is utterly fantastic!"

Website: <http://www.dharmafellowship.org/hermitage/>

Denman's Community Vegan Potluck Series

(Text taken from the Vegan Potluck Series website
www.denmanpotlucks.blogspot.com)

"Denman Island's Community Vegan Potluck Series began in the mid 90's, hosting monthly 100% plant-based group meals over many years for food lovers of every persuasion, and after dinner presentations- meetings, guest speakers, films or slide shows on a wide variety of topics pertaining to social justice and environmental issues.

There is no formal group structure to the series, but former Salt Spring Island resident John Robbins' best-selling, "Diet for a New America", was our original inspiration. Robbins' founded 'Earth Save,' a now worldwide initiative to raise consciousness about the global impact of our dietary choices, and in larger communities Earthsave chapters host similar potlucks promoting the many advantages to personal, environmental and animal well-being through eating lower on the food chain.

In the spirit of community inclusivity, our vegan potluck series also encourages a fragrance-free environment, for the comfort of chemically-sensitive individuals."

Website: www.denmanpotlucks.blogspot.com

Denman Island Garden Society

The Denman Island Garden Society is made up of 40 members that grow vegetables and engage in horticulture. They meet once per month.

Denman/Hornby Island Equines

(Text taken from the website <http://islandequines.webs.com/>)

"We are a group of equine enthusiasts from both Denman and Hornby Islands, in beautiful BC. First and foremost, we aim to have fun with each other and our critters. Encouraging an excellent standard of trail stewardship, and promoting riding opportunities on public land are important parts of our goals."

Website: <http://islandequines.webs.com/>

Denman Island Pesticide-Free Committee

The Pesticide-Free Committee is a subcommittee of the Denman Island Residents Association (DIRA). Their mandate is to "...seek information, explore options and develop a plan of action for encouraging Denman Island to be pesticide free, and promote toxic free living to the greatest extent possible. The committee shall develop a plan to provide information about pesticides and alternatives to pesticide use in the community."

Website: <http://www.denmanresidents.com/committee.html>

Appendix E – Agricultural Land Use Inventory Data

Parcel ID	Address	Farm Name	Livestock	Field Crop	Orchards
4580	7646 Denman Rd		Beef	Forage	Apples
19060	3290 Lacon Rd				Fruit and nut mixed
27947					
29921	Nixon Rd	Dragonfly Farm			Apples
38346	1530 Schmidt		Llamas and free range chickens		
41384				Wetland	
41442	3680 Lacon Rd	Tajmahal Acres		Vegetables, pasture/forage	
60281	Triple Rock Dr		Horses		
387711	Denman Rd & Lacon Rd				Apples
11675_6	NW Rd			Mixed veg	
11675_7	2976 NW Rd	Northwest Greens		Herbs, vegetables	Apples and grapes
11675_8	NW Rd			Garlic	
17730_1	Nixon Rd			Crop in transition	
18907_A	5435 East Rd		Highland cattle	Forage/pasture	
24836_1	8441 McFarlane Rd	Corland Vineyard		Grapes and veg	
24836_2	8511 McFarlane Rd	Brodsgaard Farm	Chickens and turkeys		
25516_10	MacFarlane Dr				Nut trees
25516_9	MacFarlane Dr				Apples
25516-6	4796 Lacon Rd		Chickens/eggs	Grapes	
26275_3	Lake Rd	Apple Lane Orchards			Apples
26275_4	Lake Rd				Apples (abandoned)
26275_5	Lake Rd	Fawks Farm			Apples
26309-5	2575 Jimena Rd			Vegetables, raspberries	
26525_A	1256 Lacon Rd			Forested	

Parcel ID	Address	Farm Name	Livestock	Field Crop	Orchards
26525_B	1416 Lacon Rd			Forested	
29387_2	4745 East Rd		Free range turkeys		
32106_1				Forage unused	
32106_2				Forested	
32106_3				Forested	
32301_1				Forested	
32301_2				Forested	
39263_A	1990 Lacon Rd		Chickens and ducks		
41384_15	8700 Owl Cres	Windy Marsh Farm	Chickens (layers)	Mixed veg	Fruit trees
41442_1	Lacon Rd		Horses	Vegetables, pasture/forage	
41442_2	4000 Lacon Rd			Grapes and forage	
41442_3	3900 Lacon Rd	Tiresias Reach	Dairy sheep (East Friesens), chickens/eggs, bees	Vegetables, pasture/forage	
41442_4	3800 Lacon Rd		Horses (1)		
42399_2	Lacon Rd				Apples
45252_2	9300 Greenhill Rd		Horses (3)	Vegetables	
46827_D	Corner of Denman Rd & Lacon Rd				Apples
5017?	2830 Piercy Rd	Westisle Farms	Beef	Vegetables, pasture/forage	Apples
52326_A	Denman Rd (beside firehall 5771)		Sheep	Forage/pasture	
52326-A	Denman Rd		Sheep/Lamb	Forage/pasture	
53100-A	2431 Lacon Rd		Horses		
59126_1	Denman Rd		Chickens (layers)		
60281_2	Triple Rock Dr		Horses		
60281_4	Triple Rock Dr		Horses		
65761_A	North Central RD	Treeter Farm		Edible nursery	

Parcel ID	Address	Farm Name	Livestock	Field Crop	Orchards
65761_B	North Central RD		Horses	Forested	
65761_C	North Central RD	Denman Island Fruit and Nut Farm	Horses	Nursery	Fruit and nuts mixed
73986_1	2000 Scott Rd				Fruit trees
73986_2	Scott Rd		Beef cattle	Forage/pasture	
PI 1242R	NW Rd			Forage	
PI 14042	Northwest Rd			Forested	
PI 14042_6	Northwest Rd			Forested	
PI 1656_R				Forested	
PI 16663				Forested	
PI 17777_B	1770 Corrigan Rd	Wildside Native Plant Nursery		Plant nursery	
PI 18655	2831 East Rd	East Cider Orchard			Apples
PI 2191	1428 Lacon Rd	Greenridge Farm	Beef (10), geese, horses (2), chickens (50), ducks, goats	Vegetables, berries, nursery, pasture/forage	Vineyard (drip irrigation), test edible blue honeysuckle
PI 22783_1	North Central RD			Forested	
PI 22783_2	North Central RD			Forested	
PI 22783_3	North Central RD			Forested	
PI 23155	2071 Northwest Rd		Horses (2)	Pasture	
PI 23218	3611 East Rd		Chickens	Raspberries, veg	
PI 23870	1795 Swan Rd	Swan Farm	Beef (8), pigs (4)	Forage	
PI 23928	3970 Northwest Rd.		?		
PI 23938_7				Forested	
PI 2464	1261 Swan Rd		Horses (2)	Forage/pasture	
PI 25905_1	Lacon Rd	Hilberry Farm	Sheep/lamb	Forage/pasture	
PI 25905_3	Lacon Rd			Forested	
PI 28333	1830 Scott Rd		Horses (1 or 2)	Forage/pasture	

Parcel ID	Address	Farm Name	Livestock	Field Crop	Orchards
PI 31399_5	McFarlane Dr			Wetland	
PI 31899_2	2231 East Rd		Beef, sheep	Forest/pasture	
PI 32019				Wetland	
PI 32019_A				Wetland	
PI 3233_3	3553 Northwest Rd				Fruit trees
PI 3293	6791 Denman Rd				Apples
PI 3293-1	6951 Denman Rd	Spruton Farm		Forage and some vegetables	
PI 3293-2	7131 Denman Rd	The Hermitage - Dharma Fellowship		Fruit trees, raspberries, vegetables, pasture	
PI 3323_2	Corner NW road and Scott Rd	Callaghan Family	Bees	Pasture	
PI 3323_3					Apples and mixed fruit
PI 3325	6611 Denman Rd			Forage	
PI 41251	1171 East Rd	Orkney Farms	Beef, pork, eggs	Mixed vegetables, forage	
PI 41861	Corrigal rd				Fruit trees
PI 41861	1461 Corrigal Rd	Sunflower Farm		forage	Nuts
PI 43740				wetland/forested	
PI 53615l	2881 Northwest Rd	Lone Pine Farm	Beef (35 and 40 calves)	Forage/Pasture and mixed veg	Apples (organic)
PI 62480i	2021 Northwest Rd	Oyster Beach Farm	Beef/Lamb	Forage/Pasture and blueberries	
PI 6601-2,3				Forage/pasture	Apples
PI 685R	3421 Northwest Rd	Possum Lodge	Chickens		
PI 884521l	Lake Rd			Berries	
PI 92999L	Corrigal rd		Sheep	Pasture	
R6 (85742)	Lacon Rd	Sacred Harvest		Vegetables. Herbs	
VIP 52326	Denman Rd		Horses	Forage/pasture	

Parcel ID	Address	Farm Name	Livestock	Field Crop	Orchards
VIP 55499_A	Pickles Rd			Forested	
VIP 55499_B	Pickles Rd			Forested	
VIP 63963_A	1896 Corrigan Rd	Denman Island Heritage Apple Trees			Apple trees for sale
VIP 74719_A	Swan Rd			Forage	
VIP 74719_C	2626 Swan Rd			Forage	
VIP 78651	7500 MacFarlane Dr			Mixed vegetables, onions	
	End of Pickles Rd		Beef	Forage/pasture	
	6080 Woodham Rd		Horses (2)	Forage/pasture	
	7650 Corrigan Rd		Chickens, Horses (4)	Forage/pasture, cucumbers, tomatoes	