



KEATING FARM ESTATE

PRELIMINARY LAND USE PLAN

November 2005

Prepared for

 **TLC The Land Conservancy**

By

 **MASSELINK**
ENVIRONMENTAL DESIGN

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1 EXECUTIVE SUMMARY

The Land Conservancy recently purchased the historic Keating Farm Estate in the Koksilah area of the Cowichan Valley, near Duncan on Vancouver Island. This 27-acre (13ha) farm property contains a number of important heritage structures, the most significant of which is the 1880s-era farmhouse containing a unique Great Hall designed and built by architect John Tiarks in 1894.

The cost to fully acquire the property is approximately \$750,000. The expected costs for restoring the buildings and upgrading the associated Farm infrastructure will be considerable. The Land Conservancy (TLC) is committed to the restoration and preservation of Keating House and the dairy barn. TLC has expressed a strong desire to maintain the agricultural use of the farm, while preserving its ecological, social and heritage values. However it requires an assessment of the site if TLC takes a project of this size and scope on at this time. The Preliminary Land Use Plan provides an initial understanding of the Farm, its supporting landscape, and community.

Key Findings

1. There is considerable local support and interest to have Keating Farm Estate developed into a sustainable agriculture facility that promotes and demonstrates appropriate and responsible land care.
2. The manner in which Keating Farm Estate is developed should be informed by TLC's uncompromising ecologically and socially focused values and principles. To do otherwise would tarnish TLC's reputation.
3. Keating Farm Estate offers TLC a unique opportunity to develop an educationally focused historic Farm that models and promotes its values and approach to land ownership and management.

4. Keating Farm's original expression as a mixed farm system should act as the model during the redevelopment of the Farm's systems. A mixed farm operation would be more sustainable, less susceptible to environmental or market perturbations and would provide a superb foundation for potential educational and agri-tourism ventures.
5. Keating Farm Estate provides TLC with an opportunity to learn first hand what is involved with the management of an agricultural property. This experience will be very helpful as it grapples with increasing responsibility for the management of its growing list of agricultural properties. Ultimately Keating Farm Estate may inform the development of TLC's agricultural policy.
6. TLC needs to involve the local community in the purchase, development and ongoing management of Keating Farm Estate. Particular effort should be made to involve the Cowichan First Nations community.
7. TLC should consider arrangements that would see the sale or long-term leasing of identified areas of the Farm in order to help pay for the property. TLC should retain management responsibilities over these areas.
8. The Preliminary Land Use Plan should be the first step in an open master planning process that culminates with the implementation of a plan that the community fully understands, values and supports.



2 OVERVIEW

2.1 Background

On June 29, 2005, The Land Conservancy (TLC) purchased the historic Keating Farm Estate in the Koksilah area of the Cowichan Valley, near Duncan on Vancouver Island. This 27-acre (13ha) farm property contains a number of locally important heritage structures, the most significant of which is the 1880s-era farmhouse containing a unique Great Hall designed and built by architect John Tiarks in 1894.

The property is in the Agricultural Land Reserve and has significant agricultural potential. Agricultural attributes currently include hay fields, a heritage orchard and dairy barn.

TLC purchased the property for approximately \$700,000 and is currently making interest payments of approximately \$5,500 per month. TLC expects to be able to raise enough funds to fully restore the heritage structures but there is a strong desire to have activities or programs that contribute to the financial viability of the Farm.

In the meantime TLC has begun recording the property and its contents, and will embark on structural and facility planning analysis, before undertaking any restoration work. TLC would like to be able to eventually make the Keating House, including the Great Hall, available for public use.

TLC is also interested in protecting the agricultural history of the property through preservation of the barn and dairy building, as well as the dairy machinery and artifacts. There is also interest in reviving the agricultural use of the property, which may include historically appropriate and sustainable

agricultural activities.

Given TLC's conservation mandate it is expected that the natural areas of the Farm will be protected and enhanced. In addition, there are a number of recreational opportunities such as utilizing the old CNR right-of-way that passes through the southern portion of the Farm as trail that potentially could be connected to the Trans Canada Trail to allow passage for hikers, cyclists and equestrians.

2.2 Client Requirements

TLC has expressed a strong desire to maintain the agricultural use of the farm, while preserving its ecological, social and heritage values. The specific nature of the agricultural use(s) is yet to be determined.

2.3 Methodology

In order to assist with decisions regarding the management and ownership of the Keating Farm Estate's agricultural lands and operations, TLC commissioned Masselink Environmental Design to initiate a preliminary land use plan. Ramona Scott, TLC Agricultural Liaison, was the lead contact and collaborator in this study.

A target date of November 2005 was established to identify potential compatible land uses for the property and to identify potential partners to operate the property and generate revenue.

Two site visits were made to the farm to collect information necessary to initiate the land use planning process. The first visit occurred on September 20th, 2005 during which the entire property was walked and photographed to develop an understanding of the site's extent and features. The second, more intensive, visit occurred over a three-day period from October 3rd - 5th, 2005 during which



specific areas of the site were inspected, and interviews conducted with the former property owner, local farmers and prospective user groups. On October 4th, 2005, Robert Maxwell conducted a review of the Farm's soils. Maxwell's report accompanies this plan (Appendix 2).

Study Goals

TLC identified two broad goals for this planning exercise:

1. Determine how TLC can sustain the agricultural use of Keating Farm Estate, while preserving its ecological, social and heritage values in a manner that is compatible with the TLC's mandate and is economically sustainable; and
2. Evaluate if Keating Farm Estate can be run as a model farm operation, providing leadership in the areas of agricultural land use, management and ownership.

In addition, special consideration has been given to the following areas:

- The heritage value of the property;
- Ecologically sensitive areas, wildlife and plant populations;
- Context - within the surrounding locale and region;
- Necessity for an ecologically focused management regime;
- Opportunity for innovation;
- Potential educational opportunities;
- Economic sustainability; and
- Promotional opportunities for TLC.

Additional time was spent:

- Gathering and summarizing relevant land use information;
- Consulting with local interest groups;
- Identifying additional information needs;
- Identifying potential issues and opportunities
- Developing a range of potential land use and management scenarios

- Providing a number of key land use and management recommendations

2.4 Project Guidance

Ramona Scott, TLC's Agricultural Liaison, provided administrative and professional guidance and over the duration of the project. This study would not have been realized much less completed without her enthusiastic assistance.

2.5 Acknowledgements

The project depended heavily on the participation and input from a number of key people. Without their assistance and information this project could not have been completed. They include:

Hilary Abbott, Hilary's Cheese Shop, Cowichan Bay, BC
 Larry Bomford, Agrologist, Victoria, BC
 Trudy Chatwin, Ministry of Environment, Nanaimo, BC
 Dave Friend, Friendly Organics, Sidney, BC
 Wayne Haddow, Regional Agrologist, Ministry of Agriculture and Lands, Duncan, BC
 Jed Harrison, Cowichan Valley Regional District, Duncan, BC
 Heide Hermany, Gaia College, Cowichan Station, BC
 Steve Inglis, Owner, Inglis Drainage Ltd., Ladysmith, BC
 Mara Jernigan, Fairburn Farm, Fairbridge, BC
 Jonathan Knight, Bakery, True Grain Bread, Cowichan Bay, BC
 Lawrence Lampson, Glenora Farm, Glenora, BC
 Olaf Lampson, Glenora Farm, Glenora, BC
 Robert Maxwell, Saanichton, BC
 Sharon Rempel, Wheat Breeder/Consultant, Nanaimo, BC
 Alfred Schmidt, Keating Farm Estate Caretaker, Duncan, BC
 Katrina Stipek, BC Conservation Data Centre, Victoria, BC
 David Tattum, Glenora, BC
 The Venturi family, Venturi-Schulze Vineyards, Cobble Hill

Pamela Williams, 'l tst hwialasmut tu tumuhw (Environment and Natural Resources Department), Cowichan Tribes, Duncan, BC.
Ken Winchester, Victoria, BC

3 CONTEXT

3.1 History¹

One of the oldest farms in the Cowichan Valley, Keating Farm Estate's history can be traced back as far as the 1870s when the first farmhouse was established on the property by the family of Alexander and Ann Blyth.

In 1888, Andrew Keating, a wealthy businessman, purchased the small farmhouse from the Blyth family as a home for his wife and large family. This acquisition was added to the 4000 acre of land holdings the Keatings held in the Cowichan Valley.

Shortly after purchasing the Farm the Keatings doubled the size of the farmhouse presumably to better accommodate their large family. In 1894 they initiated a complete renovation of the farmhouse hiring the architect John Gerhard Tiarks to design an English inspired "Great Hall" and dining area. At the same time a larger kitchen was added to the northwest corner of the house and the entire house was resided and re-roofed.

In 1901 Andrew Keating died tragically. Shortly after Keating's death the family moved out of Keating House before renting it to the MacAdam family. In 1919 the house and surrounding 30 acres of property were put up for sale. It was purchased by A. Complin who then leased it out for one year before farming it himself for a period of 22 years.

The property was again put up for sale in 1942 and was eventually purchased by Hugo and Wanda Tews who developed a small dairy and poultry operation. The Tews actively farmed the property for over 50 years. They made significant changes to the original layout of both Keating House, which they adapted to





their own needs, and the farm property. The Farm has 14 outbuildings, most of which were built by the Tews. Of these the dairy barn, built in 1949, is the most significant.

3.2 First Nations

It is very likely that this area was historically important to the local First Nation community. This is suggested by the common occurrence of First Nation names in this area, which was referred to as Koksilah at the turn of the Century. Other examples include Koksilah and Tzinguaw Roads, and Sh-hwuykwsele Creek that flows through the lower portions of the Farm property. The farm is also situated between and within easy walking distance of three Indian Reservations. An effort was made to talk to local Elders about the history and importance of this site to the Cowichan people. Scheduling conflicts and time constraints prevented this from happening.

Efforts should be made to involve the Cowichan First Nation in the land use planning process in order learn and better represent the aboriginal significance and history associated with Keating Farm Estate.

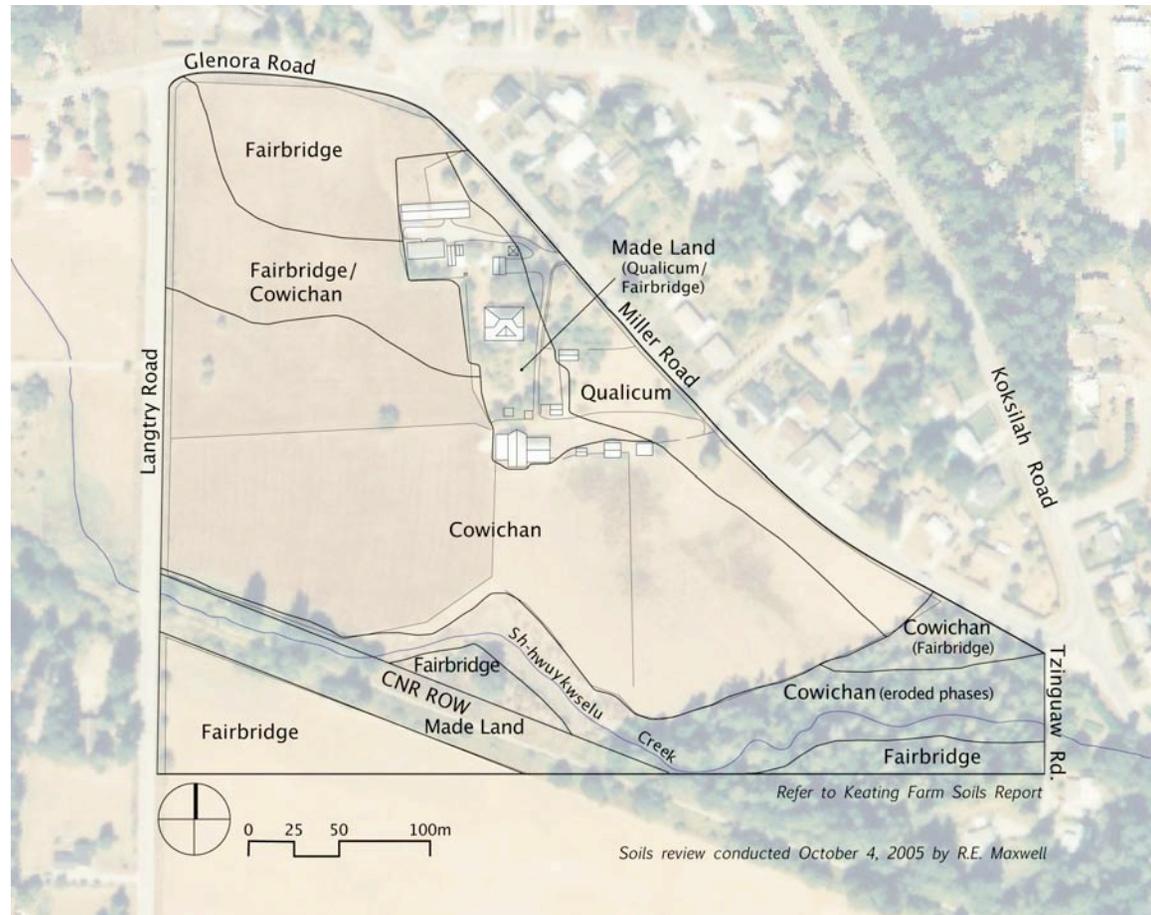
3.3 Biophysical Characteristics

3.3.1 Soils²

Robert Maxwell, P. Ag. conducted a preliminary soil review of the Keating Farm Estate property on October 4th, 2005. Soil characteristics were matched to a published soil map and soil properties were discussed as to uses, limitations and improvements. The review largely confirmed the soil map boundaries and classifications.

The region was glaciated about twenty thousand years ago and the farm site was subjected to many geological processes. The upper most 'ridge' portion of the farm that lies along Glenora and Miller is likely glacial outwash gravels and sands. As the post glacial sea level was about 80 metres higher than current sea levels the farm area was inundated with seawater and associated marine sediment and washing processes. The upper area was likely wave washed to some degree and finer sediments were winnowed from the gravel surface. This notion is supported by the presence of stony, well-drained Qualicum soils in this area. Just down slope of this 'ridge' clayey poorer-drained silt sediments were deposited and blanketed the remainder of the farmland. This is corroborated by the presence of Fairbridge and Cowichan soil types – soils that have a good agricultural capability. Sh-hwuykwselu Creek, which drains the Farm and the local area, cuts down through these sediments to depths ranging from three to six meters.

These three soil associations – Qualicum, Fairbridge and Cowichan – provide for a variety of agricultural and development opportunities suggested in the layout of Keating Farm Estate. Facilities and crops requiring better drainage and soil



Keating Farm Estate's soils.



stability were generally restricted to the upper areas of the Farm adjacent to Miller Road where the majority of the Qualicum soils are found. More productive but poor-drained field areas of the Farm were generally protected from development and used exclusively for the cultivation of forage and vegetable crops and for pasturing livestock.

Please refer to Maxwell's Soils Report (Appendix 2) for a more detailed description and understanding of the soils underlying Keating Farm Estate.

3.3.2 Hydrology

A formal hydrological study of the site was not conducted. However, during the investigation of the property a basic understanding of the Farm's hydrology was developed.

Sh-hwuykwselu Creek that runs along the southern property line drains the Farm. The wet winter season and poorly drained nature of a majority of the Farm's soils suggest that water is located on or very near the surface during the wet winter months. Field areas with extensive stands of sedge, such as those areas below the granary and barnyard, mark the presence of excessive moisture and indicate the presence of standing water during the wettest periods of the year.



The soil study coupled with anecdotal information provided by long-time resident Alfred Schmidt indicates that all three abandoned wells express spring-like characteristics during the winter months.³ The one exception is the well site located down-slope from the granary - it appears to spring throughout much of the year. All three of these wells are located on or very near to contact areas between Qualicum and Fairbridge/Cowichan soils.

While the presence of water coupled with the silty clay composition of much of the Farm's soils present a number of cultivation challenges, the apparent presence of large quantities of water even during the driest time of the year is

a very valuable asset. It may allow the Farm to limit its current dependence on City water and be able to draw on its own water resources to meet irrigation needs. Other uses of water such as ponds, gardens and riparian-like crops also may be contemplated.

3.3.3 Climate⁴

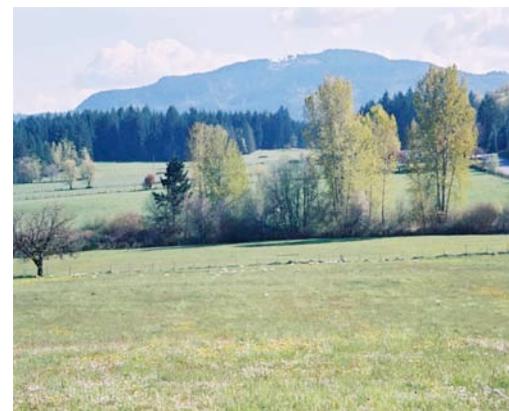
Keating Farm Estate is located in the Cowichan Valley or 'warm land' - an area found within the distinct climate zone that occurs over the southeastern lowlands of Vancouver Island, the southern Gulf Islands and the Fraser River Estuary typically characterized by cool wet winters and mild, dry summers.

During the winter the climate is controlled by moist maritime air masses originating in the north Pacific and flowing onto Vancouver Island. This easterly flow brings frequent cyclonic storms responsible for the cloud cover and rain that dominate the area during the winter.

Peak precipitation occurs in December and January. Approximately 85% of the mean annual precipitation falls during the period between the beginning of October and the end of April. January is generally the coldest month with mean daily air temperatures falling between 2 - 4 °C. During the winter months the prolonged periods of cloud cover and cool temperatures minimize evapo-transpiration, which results in a climatic moisture surplus for the period between October and April. Improperly drained soils quickly reach field capacity and can become saturated.

Summers are mild and dry. In particular, July and August are normally dominated by a high-pressure system, resulting in average monthly precipitation of 22 mm and average maximum temperatures of 25 °C.

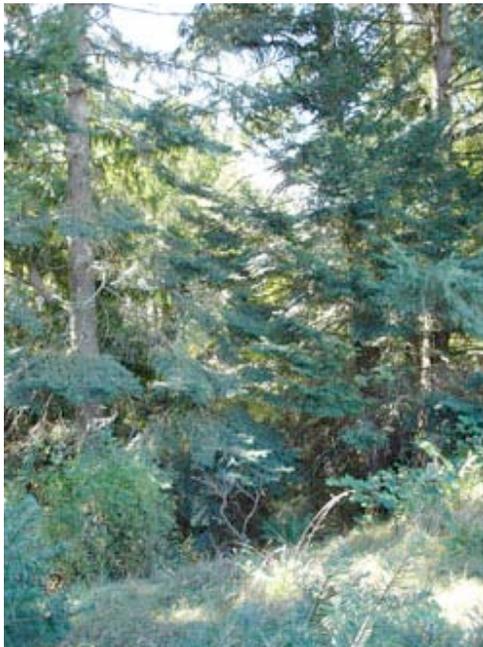
From the beginning of May to the end of September evaporation is approximately 460 mm at Duncan while, on average, accumulated precipitation is



160 mm. This results in a climatic moisture deficit of 300 mm during the growing season. As a result, in an average growing season, droughty conditions will be experienced on most moderately to rapidly drained soils. Moisture stress is most evident during the months of July and August.

On average Duncan receives approximately 1050 mm of precipitation per year. On average it enjoys 160 frost-free days between May and October. A study conducted near Keating Farm Estate recorded an average of 183 frost-free days and 900 heat units over an eight-year period during the 1980s.⁵ This long frost-free period contributes to substantial accumulations of seasonal growing degree-days.

The relatively long frost-free period, abundant sunshine of approximately 1800 hours, and warm summer temperatures provide a very favourable climate for a wide variety of agricultural pursuits. Low precipitation during the summer months is the major climatic limitation. However, if water is available for irrigation the area has one of the highest climatic capabilities for agriculture in Canada.



3.3.4 Vegetation^{6,7}

Keating Farm Estate lies in the Coastal Douglas-fir biogeoclimatic zone – an area that is limited to a small part of southeastern Vancouver Island. Much of the original vegetation of this property has been removed and altered over the past 150 years as the property was developed into a farm. The most recent vegetation removal occurred in the past ten years when almost all the mature Douglas-fir trees were removed from the forested area of the property adjacent to Sh-hwuykwselu Creek.

Prior to the logging and cultivation of Keating Farm Estate the vegetation likely consisted of mature stands of the coastal variety of Douglas-fir (*Pseudotsuga menziesii* var. *menziesii*). It would have been found in association with the existing stands of grand fir and Western red cedar. Western flowering dogwood

and big leaf maple, which are found on the Farm, would have been part of this association.

The shrub layer in these mature stands would have consisted mainly of salal and Oregon-grape with lesser amounts of red huckleberry and baldhip rose. The herb layer in on all but the wettest areas of the site would likely have consisted of bracken fern, trailing blackberry, common snowberry with the occasional western trumpet honeysuckle.

In the wetter, more nutrient rich areas of the Farm, such as around below the granary and along Sh-hwuykwselu Creek a slightly different vegetation association would have been found. Most of the Douglas-fir would have been replaced with western red cedar, and red alder which are able to tolerate wet, anaerobic soil conditions. The shrub layer would have been dominated by salmonberry, with some Indian-plum and red elderberry. The herb layer would have consisted of lady fern, spiny wood fern, giant horsetail false lily-of-the-valley, and sword fern with skunk cabbage occurring in the wetter areas. Remnants of this association occur along forested areas of Sh-hwuykwselu Creek.

Today, the establishment of fields, gardens orchards, roadways and buildings has displaced much of this forest. Remnant stands of native vegetation are restricted to areas along Sh-hwuykwselu Creek and the CNR right-of-way (ROW), and the hedgerows that stand between Keating's fields and Langtry, Glenora, and Miller Roads. Few native trees remain within the heavily used areas of the Farm, having been replaced by specimen or orchard plantings. Most notable are the grounds around the house which offer a variety of stunning mature specimen trees such as beeches, lindens, horse and Spanish chestnuts, and English walnuts, and the orchard area with its over-mature plantings of heritage apples, plums, pears, cherry and walnut trees.



Due to time and resource limitations a survey was not conducted to better determine the extent and condition of the Farm's tree resources. Given the age and quality of many of the anthropomorphic plantings a tree inventory should be conducted.

There are a few areas of the Farm that have been invaded by non-native plants. The two most noticeable species are Scotch Broom and Himalayan blackberry, which appear to be concentrated around the disturbed riparian area south of the barn along Sh-hwuykwselu Creek.

3.3.5 Wildlife⁸

While a formal wildlife survey of the Farm was not conducted, an understanding of the types of species associated with the Coastal Douglas-fir zone allows us to infer which species likely are to be found there.

The area's mild and moist winters, and warm and dry summers should allow for a varied assemblage of species at Keating Farm Estate. The mix of habitat types such as agricultural fields, forest, and riparian area potentially allows for an even greater diversity of wildlife species.

It is anticipated that Black-tailed Deer are the most abundant ungulate at Keating Farm Estate. In the past, when this area was more forested, Roosevelt Elk may also have been found here. Large predators such as Black Bear and Cougar may occasionally occur but are likely excluded by the surrounding developments.

Other mammal species that likely occur at Keating include raccoon, river otter, mink, deer mouse, shrews and a variety of bat species. Possible reptiles and amphibians include Red-legged Frog, garter snakes, Western Toad, Western Red-backed Salamander, Ensatina Salamander, Northwestern Salamander, Long-toed Salamander, Pacific Tree Frog, and Rough-skinned Newt. Bird species are likely

numerous - too numerous and speculative to mention here. TLC should establish a bird and wildlife list for the property.

According to provincial records there are only two wildlife species of concern, both blue listed, that may be found on the Farm.⁹ They are a subspecies of Ermine *Mustela erminea anguinae*, last recorded in the Duncan area in 1925 and Townsend's Big-eared Bat, *Coynorhinus townsendii*, which has a known maternity colony in the Farm's dairy building.¹⁰ Given the relative rarity and presumed seasonal sensitivity of *C. townsendii* maternity colonies particular care and protection will be required for any activities conducted in the barn when the colony is active. Currently this colony is not listed with the BC Conservation Data Centre (CDC). TLC may consider registering its location with the CDC; however, registration will require TLC to stop publicizing the location of the colony in their public literature.¹¹

Keating Farm Estate has been impacted by local introductions and the spread of non-native wildlife species. Over the course of this study Eastern Grey Squirrels and feral rabbits were seen. These species pose challenges for certain agricultural crops. In addition, if areas of the Farm are developed as wetlands it is highly likely that they will attract bullfrogs, a very aggressive introduced amphibian species that are present in the Duncan area.

¹ Historical information was gathered from a number TLC's Keating Farm Estate handouts.

² Soils information taken Robert Maxwell's soils report.

³ A. Schmidt. 2005. Personal communication.

⁴ Jungen, J.R., P. Sanborn and P.J. Cristie. 1985. *Soils of southeast Vancouver Island: Duncan-Naniamo area*. Ministry of Environment, Lands and Parks Technical Report 15. Victoria, BC.

⁵ Vielvoye, J. and B. Warner. 1992. *The Duncan Project: Summary Report*. Ministry of Agriculture Fisheries and Food. Victoria, BC.

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- ⁶ Meidinger, D. and J. Pojar. 1991. *Ecosystems of British Columbia*. Ministry of Forests Special Report Series 6. Victoria, BC.
- ⁷ Pojar, J. and A. MacKinnon. 1994. *Plants of Coastal British Columbia*. Lone Pine Publishing, Vancouver, BC.
- ⁸ Ibid.
- ⁹ Information provided by the BC Conservation Data Centre, Ministry of Environment, Victoria, BC.
- ¹⁰ TLC information.
- ¹¹ Information provided by the BC Conservation Data Centre, Ministry of Environment, Victoria, BC.

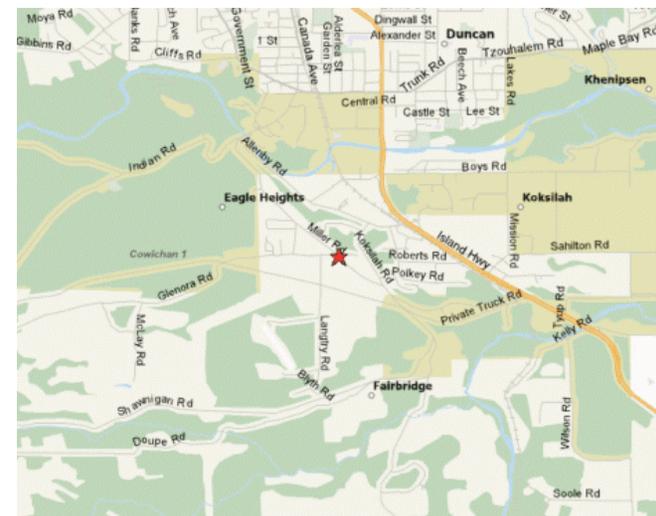
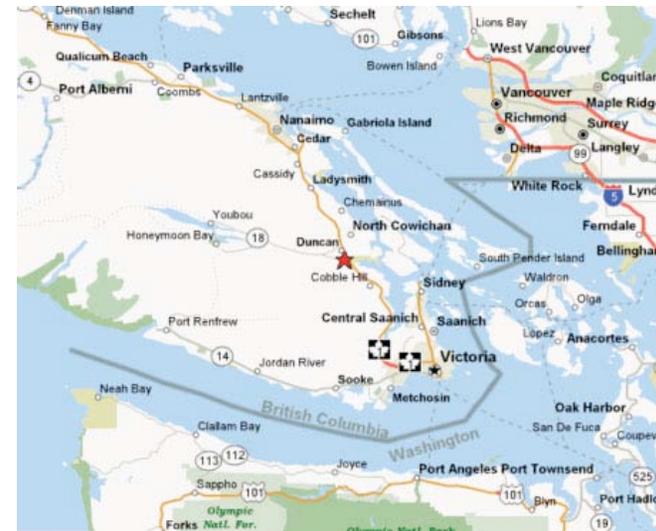
4 SITE ASSESSMENT

4.1 General Description

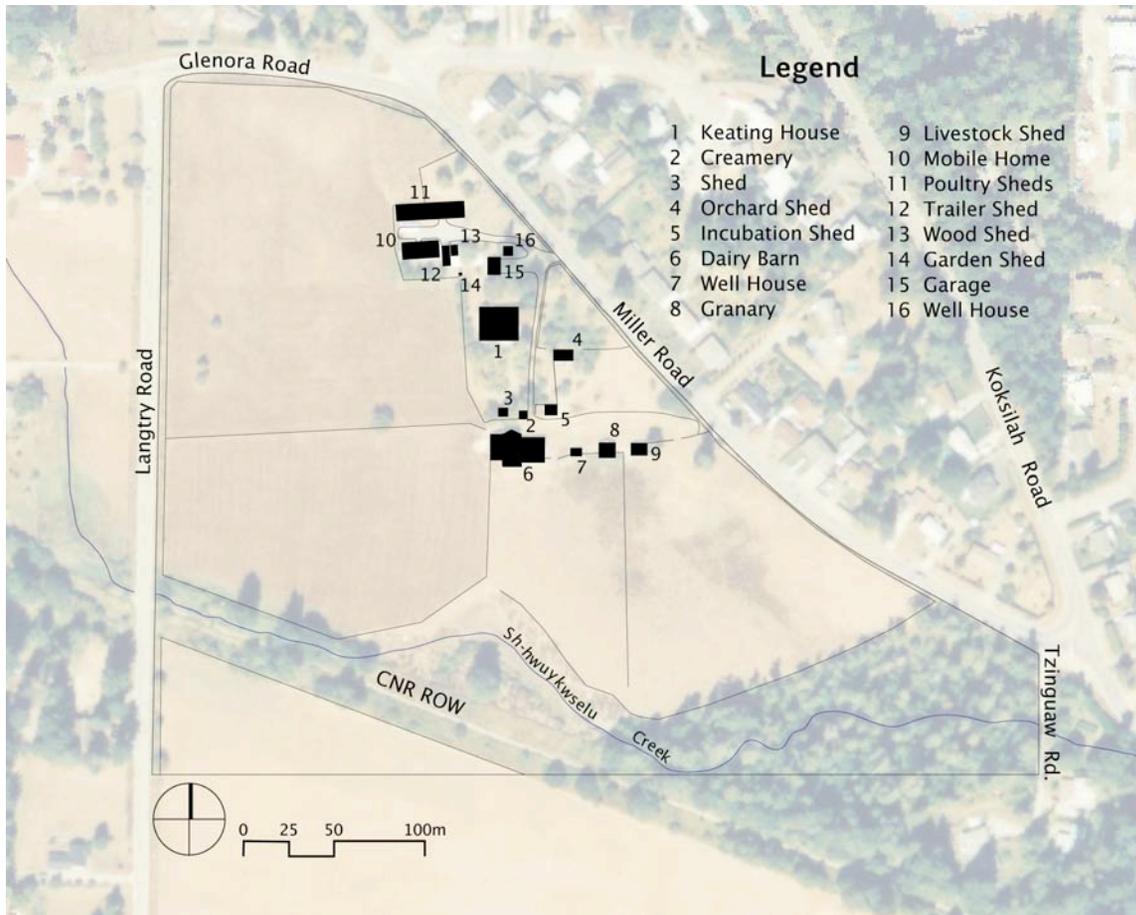
Keating Farm Estate is located 3 km south of Duncan in the older, rural residential community of Glenora. This area is composed of single-family dwellings, most located just north of the Farm, transitioning to small acreage holdings to the west and southeast. Further south of the Farm there is a further transition to larger, farm holdings. Due to its close proximity to Duncan and the Trans Canada Highway, coupled with its rural atmosphere the area is popular with the local population and visitors from Victoria.

The area is home to a significant First Nations population. First Nation culture and local history is reflected in many of the place and street names.

The Keating Farm Estate is a gradually sloped, south facing, 27.5-acre property. It is roughly triangular in shape, bounded by road frontages along the northeast (primary - Miller Road), north (secondary - Glenora Road), west (tertiary - Langtry Road) and east (dead-end - Tzinguaw Road) property lines. Most of the property is cleared and in pasture. A remnant second growth forest remains in the southeastern corner. The southern part of the property is bisected by an abandoned CNR railway right-of-way (ROW). Sh-hwuykwselu Creek, which originates west of Langtry Road, draining the properties northwest of the Farm, follows the rail grade east across the property feeding into a decommissioned irrigation holding pond eventually winding its way through the small forest before exiting along the Tzinguaw Road frontage. This creek receives much of the water that drains off of the Keating Farm Estate during the wet season.



Location of Keating Farm Estate.¹



Keating Farm Estate's infrastructure.

4.2 Building Infrastructure

There are a total of 16 buildings on Keating Farm Estate. An assessment of these facilities is beyond the scope of this report. Comments from the 2003 real estate appraisal are telling.

“The subject property is improved with an older-style, wood-frame dwelling reportedly constructed circa 1880. Although it has been somewhat renovated and updated, those programs were completed in the 1970’s, so that today the residence is rapidly nearing the end of its economic life. Considerable time and cost will be incurred in returning the residence to its former splendour.

The outbuildings are typical of those expected in a small-acreage,

dairy-farm operation. All are old but more or less functional. Although substantial in number, they have nominal contributory value. All are of wood frame or pole frame construction with board and batten siding, primarily dirt floors, and metal-clad gable and shed roofs.”²

Out of all 15 buildings, the mobile home appears to be in the best condition and could be used for on-site accommodation. Given their size, condition and/or historical importance, Keating House and the Dairy Barn are likely the best candidates for restoration.

Table 1 summarizes the current building inventory, provides a number of the recorded sizes and suggests possible issues and approaches to their management. A proper appraisal should be conducted to determine whether the remaining buildings are worth repairing. The outcome of this assessment will be used to inform the final land use plan, which should consider their utility and potential aesthetic and historic contribution to the Keating Farm Estate facility and its anticipated programs.

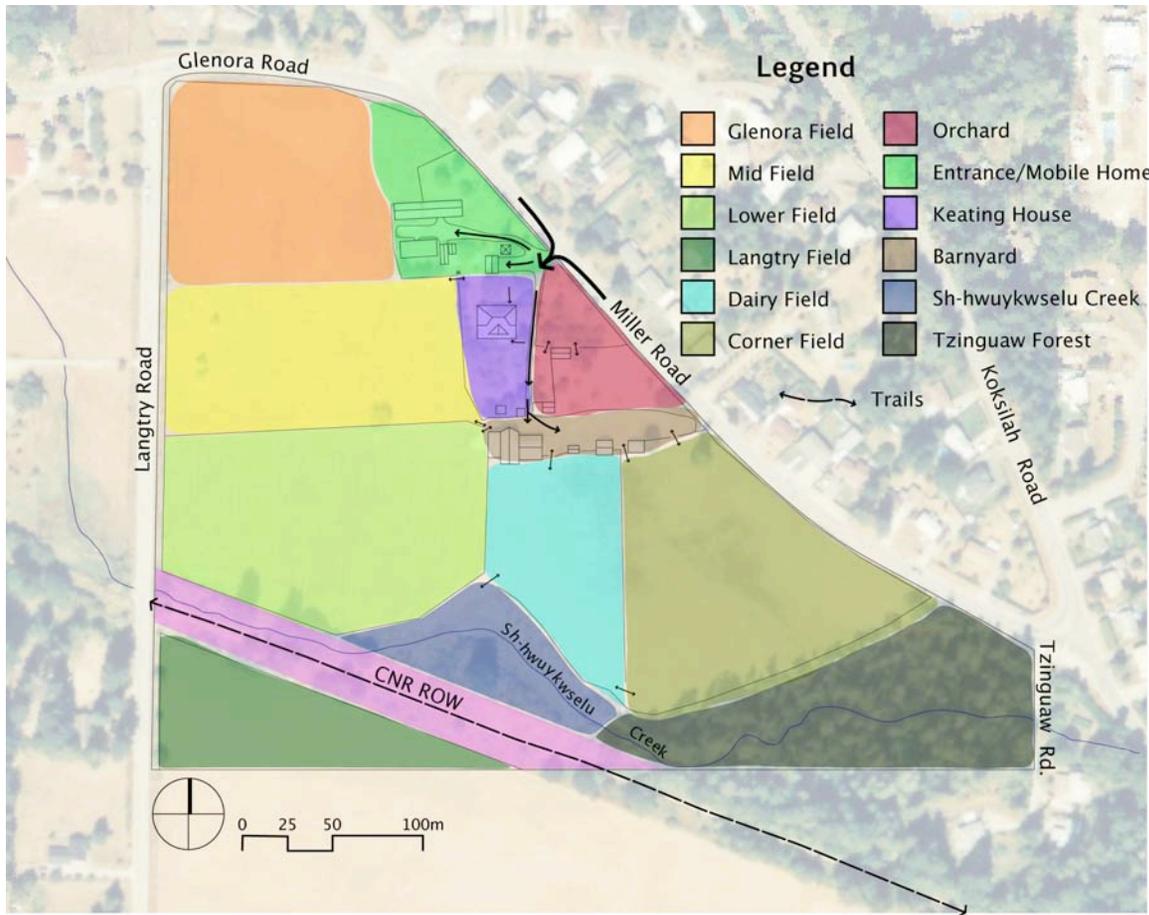
4.3 Access

Access onto the property is restricted to an entrance off Miller Road north of Keating House. The tree-lined driveway branches near the entrance. The main branch turns south at the old three-bay garage, travels along the east side of Keating House, and ends in the barnyard. The secondary branch continues west from the entrance and provides access to the mobile home and a number of associated outbuildings including the old poultry sheds. Running from the dairy barn through the barnyard east towards Miller Road is evidence of an old roadbed. The remnants of two old elms flanking either side of this roadbed at the Miller Road property line supports the belief that this may have been the main entrance to the Farm during Andrew Keating’s time.

All the cultivated areas have perimeter fencing that is in varying conditions. A number these areas have cross-fencing to restrict between-field passage. Most of these cultivated areas can be

Building	Square Footage	Comments
Keating House Area		
1. Keating House	3225	Historically significant structure.
2. Creamery	289	Awkward location - removal would improve surrounding area.
3. Shed	Not recorded	Awkward location - removal would improve surrounding area.
Orchard Area		
4. Orchard Shed	Not recorded	Poor condition/potential safety issue - consider removal.
5. Incubation Shed	180	Awkwardly located - condition may allow it to be moved to another location.
Barnyard		
6. Dairy Barn		Important/significant structure.
Dairy Barn	1554	
Hay Barn	1500	
Lean-to	840	
7. Dairy Well House	128	Building is in poor condition. If well is used may need to be replaced.
8. Granary	520	Historically significant? Requires assessment.
9. Livestock Shed	208	Poor condition/potential safety issue - consider removal.
Mobile Home Area		
10. Mobile Home	980	Appears to be located on the original kitchen garden. In good condition but "style" not in keeping with other historical structures. Use in the interim.
11. Poultry Sheds	Not recorded	Condition unknown - may be useful for storage - requires assessment.
12. Trailer Shed	544	Condition unknown - requires assessment
13. Wood Shed	512	Condition unknown - requires assessment
14. Garden Shed	Not recorded	Requires assessment.
15. Garage	Not recorded	Requires assessment.
16. Well House	Not recorded	Requires assessment - may need to be refurbished/rebuilt if well is put back into use.

Table 1. Building inventory.



Map showing Keating Farm Estate's core areas and points of access

accessed via the barnyard through wide livestock gates. Exceptions include gates to areas that are separated from the barnyard. These include Glenora Field at the northwest corner of Keating House, and Langtry Field south of the CNR ROW.

Access to the forested area in the southeast corner of the Keating Farm Estate is via the CNR ROW or Tzinguaw Road. Existing livestock fencing separates this area from the rest of Keating Farm Estates. The forest is also deeply bisected by Sh-hwuykweselu Creek, which further restricts passage from the upper portions of the Farm to the CNR ROW. The CNR ROW coupled with its inclusion within the fencing system of the adjacent Langtry Farm property effectively prevents access to Keating Farm Estate's Langtry Field.

4.4 Farm Areas

In an effort to better identify potential issues and opportunities we have broken the Farm up into a number of understandable areas. Each of these areas exhibits unique or particular geographical, biophysical or development characteristics necessary for differentiation and identification (Table 2).

For the purposes of this planning exercise these Farm areas have been organized under four broad categories: cultivated, built, wild and other areas. The “Other” category includes those waste, ditch or edge areas that are part of the Farm property but occur between existing Farm fences and the surrounding roads, and the CNR right-of-way (ROW) which was excluded from the Farm’s total acreage some years ago. The following summarizes the acreage associated with each category and identified Farm area.

Approximately 70% of Keating Farm Estate’s 27.5 acres (12.4 ha) is available for agriculture, 20% could be considered wild or undeveloped and 10% has some development – either roads or buildings - associated with it.

4.5 Summary Assessment

An effort has been made to provide a comprehensive preliminary assessment of the property. This assessment includes the identification of management opportunities and challenges. A number of possible approaches are provided to take advantage of the opportunities and address or mitigate the challenges. The following is a summary of this initial assessment. Please refer to Appendix 1 for more detail.

FARM AREAS	AREA (acres)	AREA (ha)
Cultivated	19.2	7.8
Glenora Field	3.1	1.25
Mid Field	3.1	1.25
Lower Field	4.2	1.7
Langtry Field	2.1	0.8
Dairy Field	1.9	0.8
Corner Field	3.8	1.6
Orchard	1	0.4
Built Areas	2.8	1.15
Entrance/Mobile Home	1.4	0.6
Keating House	0.8	0.3
Barnyard	0.6	0.25
Wild Areas	4.8	3.1
Sh-hwuykwselu Creek	1.4	0.6
Tzinguaw Forest	3.4	1.4
Other Areas	2.9	1.1
CNR ROW	2.1	.8
Waste Areas	0.7	0.3
Total Keating Farm Area	27.5	12.4

Table 2. Farm areas.

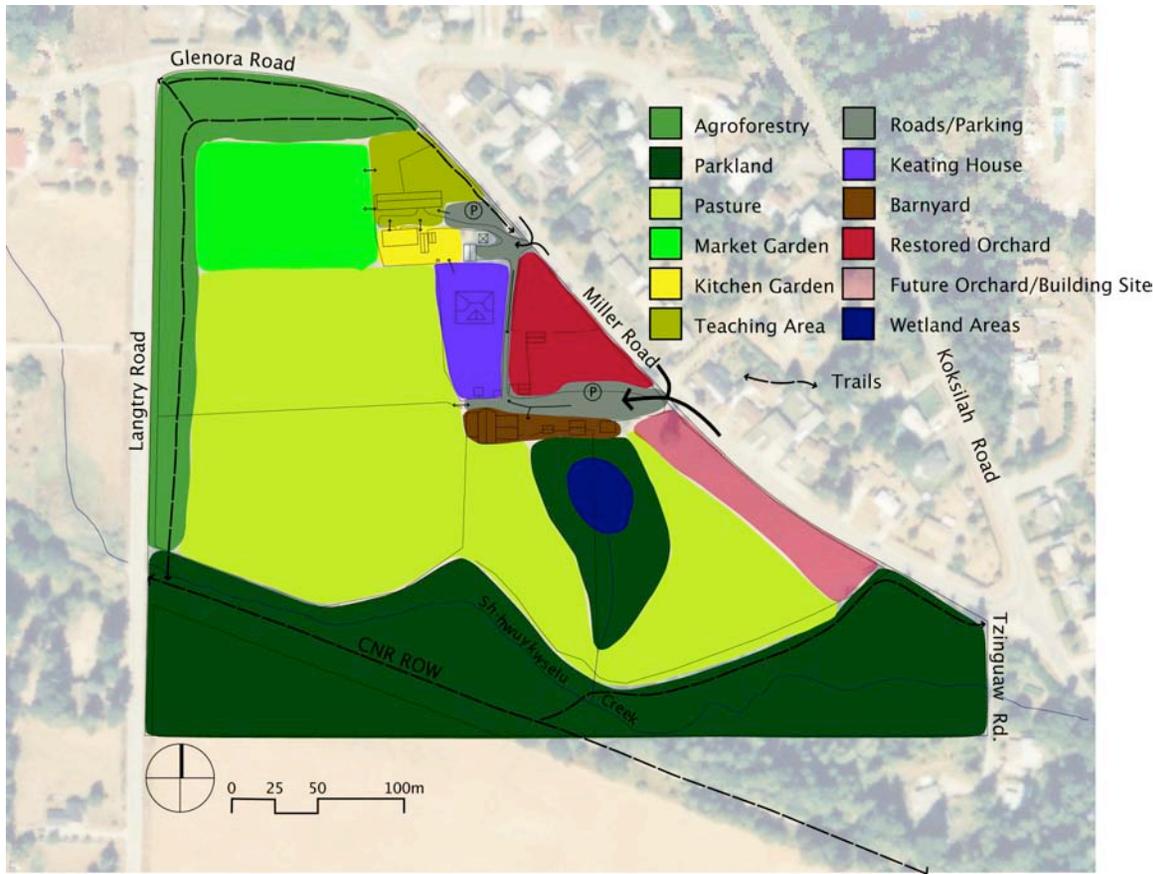
4.5.1 Key Opportunities

Accessibility

Keating Farm Estate's close proximity to downtown Duncan and the Island Highway make it very accessible for potential farm visitors. This coupled with its attractive, rural setting and historical characteristics make Keating Farm Estate an excellent TLC heritage agro-tourism site.

History

Keating Farm Estate has a rich and interesting history currently revealed by a number of the existing structures – most notably Keating House and the dairy barn. This history is a feature that could potentially be very attractive to Farm visitors. Currently there are very limited opportunities on Vancouver Island to see historically significant farm properties.



Map showing possible layout of Keating Farm Estate with revised points of access.

A historical approach could be used to not only to guide the renovation of the historically significant Farm buildings but also to guide the re-development and management of the Farm property and associated agricultural activities. An approach using such elements as heritage breeds and crops, and more sustainable historical agricultural practices (i.e. those not requiring fossil fuel inputs) could be demonstrated.

There may be an opportunity to connect with the local agricultural heritage society that apparently has an active membership in the Duncan area.³

Agriculture

Keating Farm Estate's southern aspect, fertile soils, and former development and management support the re-establishment of agricultural operations. The existence and expansion of nearby markets particularly in the area of organic or sustainable food production further support the establishment of sustainable agricultural enterprises at Keating Farm Estate.

Adjacent Development

While the presence of adjacent residential developments has come at the expense of local agricultural and forestlands, those residing in the neighbourhood could become the strongest supporters of Keating Farm Estate and its associated enterprises and activities. Keating Farm Estate could be developed so that it provides a number of local services currently limited or not available in the immediate area – thus becoming an important valued community institution. Depending on how Keating Farm Estate is managed these services may be limited to the provision of a beautiful, undeveloped agrarian view, but could be extended to include food, recreation, public events and celebrations, and education. In addition, the adjacent residential area may be able to provide conveniently located housing opportunities for those involved with the operation of the Farm.

Agro-forestry

The presence of forest and riparian areas on the property allows for the incorporation of agro-forestry practices – those practices that blend agriculture and forestry practices/crops with active management of the whole system.⁴ Both areas have been significantly impacted by human activities and would benefit from some active management attention particularly that which works to restore the natural condition of these areas. The restoration regime eventually prescribed for these areas may allow for some agro-forestry income.

There are a number of areas of the Farm that may benefit from the re-establishment of tree and shrub cover, particularly the narrow hedgerows adjacent to Langtry, Glenora and Miller roads. The re-establishment/expansion of these areas may allow for a number of unique agro-forestry opportunities.

Water

Water appears to be readily available at all times of the year at a number of locations on Keating Farm Estate. Sh-hwuykwselu Creek is the most noticeable expression of surface water on the property. Three abandoned wells located along the Qualicum/Fairbridge soil boundary also suggest the presence of a large, shallow, and currently unutilized groundwater supply. Given that water is a limiting factor in the summer, coupled with the expectation that the municipal water use will be metered and billed, the availability of on-site water is a very significant opportunity. Keating's groundwater supply could be re-utilized to supply the Farm with water for crop irrigation and development of wetland wildlife habitat.

First Nations

Keating Farm Estate's location within the traditional territory of the Cowichan First Nation, and situation between two areas of I.R. 1 along the CNR ROW, coupled with the anticipated renovation and redevelopment work provides potential opportunities to establish a meaningful and long-lasting connection with this important aboriginal community. Collaboration with Cowichan Tribes would undoubtedly achieve long-term benefits to the Keating Farm Estate enterprise and may allow for some unique partnership/program delivery opportunities. It may also help to re-open dialogue around the possibility of including the CNR ROW as part of a regional trail system.

Community Activities/Uses

Keating Farm Estate's location, size, situation and layout make it an ideal site for hosting of agriculturally oriented public events and celebrations. Currently

there are few local facilities that are able to comfortably host larger agrarian activities such as markets, fairs, exhibitions, and Feast of Fields. These events would help raise funds and the profile of TLC, Keating Farm Estate, associated programs, and agriculture in general.

4.5.2 Challenges

Condition of Built Infrastructure

Most of Keating Farm Estate's buildings are in serious need of repair and restoration. The significant resources required to restore and manage these historic buildings may hamper TLC's ability to properly manage the rest of the Farm. TLC has stated that it intends to restore Keating House and the dairy barn. While both buildings require restoration work, Keating House will require the most significant investment of resources.

The value of the remaining outbuildings remains to be determined. It is likely that their poor condition, limited value and awkward location will result in a number of these buildings being dismantled.

Other facilities that will likely require attention include the septic fields and abandoned well. The septic field currently located north of the Keating House and south of the mobile home should be inspected. Particular attention will have to be given to their common drain field, which unfortunately has been placed along the eastern edge of Mid Field. New ground water regulations require all three of the abandoned wells to be inspected and capped by qualified well drillers whether or not they are put in use again.

On-farm Housing

The OCP (Electoral Area E) indicates ALR zoning allows for only two on-farm residences, currently provided by Keating House and the mobile trailer. A number of the redevelopment proposals for Keating Farm Estate require the development of additional on-farm housing. This may be difficult and will require





approval from the Agricultural Land Commission and the Cowichan Valley Regional District.

Drainage

The silty clay Fairbridge and Cowichan soils that occur over much of Keating Farm Estate's fields are poorly drained and will likely require extensive drain tiling and possibly sub-soiling in order to accommodate a wider range of crops. While this is a costly initial expense (\$1500 - \$5000 per acre), amortized over its expected effective lifetime of 25+ years, it may be seen as a reasonable long-term investment.

Noise

Gravel truck and airport traffic along Miller, Glenora and Langtry Roads are constant throughout much of the day. The noise caused by this traffic, much of it caused by truck traffic, has a definite negative impact on the Farm. This is not an easily remedied problem. However, the establishment of wide, buffering hedgerow or forested areas adjacent to these roadways should help reduce this impact. In addition these forested strips would also reduce the impact of traffic dust and sightlines of passing traffic and the subdivision situated along the north side of Glenora Road.

Wildlife

The presence of black-tailed deer, eastern grey squirrel, and rabbits will require the implementation of protective measures if certain agricultural activities are to be pursued at Keating Farm Estate. Vegetable production will require the establishment of expensive fencing for deer and rabbits. Squirrels are much more difficult to deal with but they will be a problem for crops such as nuts and potentially grapes. Control measure for rabbits and squirrels may need to be taken.

Invasive Species

Besides Eastern grey squirrels there are a number of invasive species including Scotch broom and Himalayan blackberry. All three are persistent and pose long-term management challenges. Complete eradication is probably not possible. Instead, affordable, innovative solutions, geared towards reducing their presence on the Farm should be pursued. Funding may be possible through the “Invasive Alien Species Partnership Program”.⁵

¹ Map provided by MapQuest www.mapquest.com.

² Clark, D.J. 2003. *Real Estate Appraisal of 5250 Miller Road, Duncan, BC*. Unpublished.

³ D. Tattum. 2005. Personal communication.

⁴ Definition provided by the Federation of British Columbia Woodlot Associations www.woodlot.bc.ca/agroforestry/whatis.htm.

⁵ Funding information and application www.cbin.ec.gc.ca



5 SUGGESTED MANAGEMENT APPROACH

Keating is a very unique property for TLC because as an historic, working farm it is the first agricultural property that requires immediate and ongoing management attention. While this is a heavy responsibility, particularly with its large mortgage, it provides TLC with an opportunity to consider how it will address the transition from landowner to land manager, a process that will be required for its other owned and deeded agricultural properties.

Keating Farm Estate provides a valuable opportunity for TLC to both demonstrate and promote its core values and mandate to a broader community. In the process there is a real possibility to influence the manner in which agricultural land is utilized and valued in British Columbia. Keating Farm Estate could act as type of land based research 'laboratory' where TLC could develop and demonstrate a unique approach to the integration, use, and protection of agricultural land. Success will require an integral approach that is true to the core values on which the TLC organization has been built.

5.1 Review of TLC's Core Values

TLC is in the business of protecting important habitat for plants, animals and natural communities as well as properties with historical, cultural, scientific, scenic or compatible recreational value.

TLC is modeled after the National Trust of Great Britain. It is a democratic, charitable, non-profit organization, membership-based, and governed by a volunteer elected Board of Directors. TLC relies on a strong membership and volunteer base to help maintain its operations.

According to its constitution TLC's purpose is:

- (a) *To contribute to and improve the education, health and welfare of the general public and to benefit the community as a whole by the promotion and encouragement of the protection, preservation, restoration, beneficial use and management of primarily;*
 - (1) *Plants, animals and natural communities that represent diversity of life on Earth by protecting the lands and waters they need to survive, and secondarily;*
 - (2) *Areas of scientific, historical, cultural, scenic and compatible outdoor recreational value;*
- (b) *To promote such charitable activities or endeavours, including the acquisition, management and disposal of land and interests in land, as may in the opinion of the Society board of directors appear to contribute to the above objectives;*
- (c) *To encourage co-operation in, support for and research into, and education regarding all matters pertaining to the fulfillment of the above objectives;*
- (d) *To do all such other things as are incidental or ancillary to the attainment of the purposes and the exercise of the powers of the Society.*¹

In 2001 TLC initiated its Conservation Partners Program (CPP) aimed at bringing support and recognition to farmers and ranchers who contribute to conservation of biodiversity and natural habitat on their farms and ranches. TLC hopes that the CPP will help support the creation of:

"...a thriving community of ecologically sustainable and economically viable farms and ranches in BC, which steward a rich diversity of ecosystems, habitats and species.

Through the CPP, TLC works cooperatively to fulfill the unique role of bridging the public, conservation and agricultural domains, simultaneously supporting on-farm stewardship while fostering an informed public who value the contributions that local, working farmers and ranchers make to conservation.”²

Because Keating Farm Estate is such a highly visible site any activities undertaken or anticipated should underscore and promote TLC’s core values and the vision they have for their Conservation Partners Program. To do otherwise could reflect poorly on TLC and its associated programs and partners.

5.2 Areas of Consideration

Six critical areas for emphasis have been identified. They include:

- Education
- Ecology
- Economics
- Culture
- Integrity
- Promotion

These six areas should figure prominently in whatever programs are contemplated or implemented in TLC’s management of Keating Farm Estate.

Education

“If we are to have an accurate picture of the world, even in its present diseased condition, we must interpose between the unused landscape and the misused landscape a landscape that humans have used well.”³

Well-managed, sustainable farms provide an opportunity to demonstrate this philosophy. Ecologically managed mixed-farm systems are educational, providing a diverse array of learning opportunities and demonstrating how humans can collaborate with nature in a manner that is both healthy and productive.

Given the accessible and prominent location of Keating Farm Estate, there is an exceptional opportunity for education. This educational focus can either be explicit through the development and inclusion of educational programs, facilities or materials or implicitly expressed through the type, management of, and interconnection between, the onsite programs. Either way Keating Farm Estate offers an opportunity to demonstrate TLC's strong environmental and social values.

Ecology

Given the philosophy of TLC, Keating Farm Estate must be managed in a manner that promotes ecological health. TLC should make every attempt to take a deep ecological approach – one that goes beyond organic farming – that encourages and explores new ways of considering the environment, demonstrating how society might become active and supportive participants.

This might involve:

- Establishing and demonstrating on-farm systems that fully support the principles of sustainability and ultimately health;
- Demonstrating both the on-farm and community benefits of managing farm systems in an ecological manner; and
- Revealing how local natural systems can be successfully protected, enhanced and even integrated into farm systems in a manner that is beneficial and productive.

Given TLC's position on conservation and agriculture this approach is already being practiced.⁴ TLC should enshrine this approach in a common agricultural policy that could be broadly applied and shared.

Culture

Keating Farm Estate has a rich history. The farm has a reasonably evident past revealed by Keating House and its large specimen trees as well as in

photographs and community memories. Less known but as important is the historical use and importance of this site to First Nations. Keating Farm Estate provides TLC with a unique opportunity to give recognition to the history and culture of the aboriginal community in a manner that was not given in the past. Involvement by the local First Nation community would greatly strengthen and expand the cultural programming of the Farm.

In addition, TLC has an opportunity to reflect the broad and rich history of the Farm in all the programs and activities planned for the site. While there is an understandable commitment to restore a number of the important buildings to their former grandeur this commitment should also extend to the landscape. Any historical renovation will have to identify the elements that are worth preserving as well as the extent and prescriptiveness of that preservation. Should Keating Farm Estate become a static museum or should its buildings and grounds be renovated in a manner that allows for potentially new and modern uses that are in keeping with the historical character and values of the former farmstead?

Economics

Economic sustainability is necessary if TLC is to develop and manage Keating Farm Estate. A holistic economic approach underscores the importance of careful management of resources in a manner that is both restrained and respectful. Holistic economics requires careful measurement, analysis, response and an informed involvement that if done well considers systems as wholes and not parts and looks to the future, working with in timeframes that extend beyond conventional 5 or 10-year terms.

This definition recognizes that economics requires more than a dollars and cents approach. TLC cannot afford to manage Keating Farm Estate in a way that results in an annual deficit nor can it afford to manage the Farm in a manner that costs the Earth. To achieve this will require careful planning, and community participation and support. There are numerous examples of

community-linked farms that are able to generate the revenue necessary for their continued existence while providing tremendous social, ecological and in some cases, economic services to the local community. What is so interesting about these farm operations is that in most cases their management systems are guided by a set of principles that place health, education and leadership above profit. Conventional economic interests take a backseat to their values and principles.

Keating Farm Estate offers an opportunity to develop an economic management and purchase model that could be more broadly applied to conserve other threatened agricultural properties.

Integrity

This is a critical element that should permeate every aspect of Keating Farm Estate. Keating Farm Estate offers TLC the opportunity to demonstrate integrity and leadership in the area of sustainable agriculture and ecological land management. Gandhi taught, “Be the change that you want to see in the world.” Put another way, “Being less bad is not good enough.” To behave, to act out and to practice that which you believe and value is integrity made manifest. Integrity expressed through practice – through demonstration has a tremendous ability to connect and change entrenched and misguided beliefs and paradigms. TLC is an example of integrity-driven organization. As such all of its endeavors should express this underlying integrity.

An integrity-based approach could include the following:

- Demonstrate respect and humility in the use of Nature.
- Design with nature in a manner that supports or improves health and wellbeing.
- Reveal the benefits that local well-managed agro-ecological or sustainable farm systems provide for local environments and communities.

- Demonstrate leadership in the area of ecological design and land management.

Promotion

Promotion is implied in each of the previously mention areas of concentration. If Keating is to be used to demonstrate what is possible or draw attention to the good work of TLC and other ecologically or socially like-minded organizations, then promotion is a critical area for consideration.

Keating Farm Estate with its incredible setting, its situation on an increasingly known tourist route, and its close proximity to Duncan and the Island Highway, occupies a location that would allow it to become a destination facility. There is a demand for publicly accessible, ecologically focused, land based facilities. Based on the public's growing interest in organic gardening, local agriculture, and sustainable technologies coupled with the right partners and support, it will be possible to develop Keating Farm Estate into a economically viable facility that demonstrates sustainability and sustainable land management. Such a facility would undoubtedly bring more attention and support to the work of TLC.

5.3 Guiding Design Principles

In addition to the suggested six areas of emphasis it is useful to develop a set of operational principles that can further identify and guide anticipated activities. Operational principles are generally created following the development of some agreement regarding the direction, values and goals for the property – something that is yet to be done for Keating Farm Estate.

Given the clarity of TLC's purpose, it is possible to suggest a number of guiding principles that have been helpful in guiding and assessing site activities or proposed developments for other organizations. Those involved in the management of Keating Farm Estate are strongly encouraged, in collaboration

with the local supporting community, to develop their own set of operational principles.

Nothing does one thing

This principle of multi-functionality has an ecological basis. All programs and activities should be designed so that they support each other. Notions of resiliency and supportive redundancy are integral to this principle.

Everything educates

TLC's purpose and commitment to education suggests that all aspects of the farm enterprise should be designed to maximize the opportunity for education through demonstration and instruction.

Nature as model and mentor

Natural systems provide the best examples of sustainability in action. While conventional agricultural systems often highlight the struggle and conflict that can exist between natural and human-influenced systems, an ecological approach can demonstrate how natural systems are supportive - even influential.

Protect, reveal, enhance and integrate natural systems

This flows from the previous principle. There is an opportunity to manage the Keating Farm Estate in a manner that better considers and even incorporates adjacent natural systems. This is particularly relevant given the Farm's situation adjacent to Sh-hwuykwselu Creek and Tzinguaw Forest and how, over the past 100+ years, its use and cultivation have resulted in the removal of its forest along with much of the associated flora and fauna.

Use current solar income

Energy use is a growing societal concern and one that deserves much more focused attention. Just as natural systems are 'powered' by current solar energy, sustainable agricultural systems rely on sunlight to produce crops. The operation

of the Farm and its associated programs should try to take a zero emissions approach, deriving as much of their energy from sunlight that falls on the Farm.

Waste equals food

The principle of no waste is a challenge but is one that is demonstrated by healthy ecological systems. The challenge is to manage Keating Farm Estate as a whole system where the waste or products from one process or program becomes the food for another.

Respect diversity

There is a growing appreciation that the health and resiliency of natural systems depends on the diversity of its components. Whether it is diversity of opinion, programs, people, or participants, Keating Farm Estate, the local community and TLC would benefit ecologically, economically and socially from such an approach.

Emphasize health and beauty

All activities and programs related to Keating Farm Estate should contribute to the health of those individuals, communities and natural systems with which it connects. Another, more onerous way of putting it would be to create no ugliness, human or ecological, somewhere else or at some future time. Much of human endeavour these days seems to result in ugliness and diminished health. The challenge for human society is to practice behaviours that result in health and beauty. We need living examples of this kind of integrity.

Respect the past, consider the present, look to the future

The history of Keating Farm Estate is something precious but it should not shackle the consideration of new, creative, and potentially more appropriate actions on the site. According to Kim Wilkie, a landscape architect who regularly advises the UK National Trust, historic landscapes and their buildings should be evaluated based on the strength of their associated memories and meanings,

their use and relevance, and their overall design.⁵ The question remains: can a way be found to stay true to Keating's past without being unduly constrained by it?

Include community

All aspects of Keating Farm Estate should include the community. It is obvious that the local community values Keating Farm Estate. All opportunities should be made to invite and encourage their participation in its revival.

¹ TLC website www.conservancy.bc.ca.

² Scott, R. and Jonaki Bhattacharyya 2005. Draft *Strategic Plan, TLC Conservation Partners Program*.

³ Orr, D.W. *Transformation or Irrelevance: The Challenge of Academic Planning for Environmental Education in the 21st Century*. naaee.org/publications/symposium98.pdf.

⁴ R. Scott. 2005. Personal communication.

⁵ Wilkie, K. *Shackled or Inspired by our past*. www.kimwilkie.com/pages/issues/iss_sha_insp.html

6 LAND USE PROPOSALS

Since the purchase of Keating Farm Estate on June 30, 2005 TLC has made an effort to solicit ideas and interest from the local community about the kind of on-farm activities and uses that it would support. Three Open Houses were held at Keating Farm Estate this summer, drawing around 500 visitors and raising approximately \$5,000 in donations for the Farm.¹ These Open Houses generated a number of land use suggestions and encouraged a few local individuals and groups to submit proposals.

On August 11, 2005 an open planning session was held at the Farm. A total of twenty people attended the five-hour brainstorming session. The result of this session was a commitment by TLC to initiate a preliminary land use plan that would help guide its board and staff members as they began to consider the future use and management of the Farm. At this session all those interested in participating in the development and management of Keating Farm Estate were asked to submit informal proposals.

The following is a short summary and critical review of a number of those proposals in light of an improved understanding of the Farm and its biophysical and cultural properties. This is by no means a comprehensive list but it is illustrative of the kind and depth of thinking that will be required as Keating Farm Estate is developed. This preliminary review reveals some of the challenges that those involved with the governance and management of this historic farm property will have to grapple with.

For the purposes of this planning exercise the review is limited to eight land use ideas, five of which are written proposals submitted by outside groups and individuals. The remaining three ideas are based on internal TLC discussions and deliberations that were revealed during the course of the study.

6.1 Biodynamic Apprenticeship Program

Since the purchase of the Keating Farm Estate TLC has received a number of proposals from those involved with the biodynamic movement, an alternative farming approach of which there are a number of practitioners in the local Glenora area.

This proposal, which was submitted by Ernst von Bezold, a consultant from Ontario, on behalf of the Biodynamic Association of BC, would see Keating Farm Estate used as an educational facility for a formal on-farm apprenticeship program in biodynamic agriculture – the first of its kind in Canada. Currently there is only one other such facility in North America located in New York State.² von Bezold has indicated that it could be structured similar to the Garden for Research, Experiential Education and Nutrition (GREEN) in the UK.^{3,4}

The proposal does not provide exact details but suggests that a biodynamic apprenticeship program would be an ideal fit for Keating Farm Estate given the:

- Need for a farm program that can address the management needs of the farm while paying for itself;
- Concentration of biodynamic farms in the area;
- Presence of a two local Waldorf schools; and the
- Compatibility of the ecological-based, socially considerate, whole farm management approach of biodynamic agriculture with TLC’s philosophy.

Von Bezold suggests that even though a biodynamic approach is much more rigorous than that currently practiced by many organic farmers it could potentially be compatible with other non-bio-dynamically related on-farm programs. Specifically, the “on-farm research program and apprenticeship program would dovetail with and support diverse, mixed farm production.”⁵ This suggests that the apprenticeship program would not necessarily require the exclusive use of the Farm, which could accommodate additional unrelated activities.

There is no funding available to establish such a facility or program but Demeter International, the biodynamic certification body, has been approached. The Biodynamic Society of BC Board supports this proposal in principle but is currently unable to provide funding.

Preliminary Assessment

The biodynamic approach is committed to deep ecological principles and therefore is very much in keeping with TLC's integral management approach. There is growing local and public interest in bio-dynamics: in particular its holistic approach, which considers physical, mental and spiritual elements. The existence of a number of local biodynamic farms and bio-dynamically related organizations would support this proposal and may be able provide crucial support.

Concerns regarding this proposal include:

- Its undefined nature;
- The “fringe” reputation that the practice of biodynamics has;
- The lack of supporting funding; and
- The ability of such a rigorous, principled, philosophic farming discipline to work cooperatively with other onsite programs and user groups that may not share their beliefs.

6.2 Biodynamic Village

Another group interested and informed by the principles of bio-dynamics has suggested that Keating Farm Estate could be modeled after a small village that practices and demonstrates biodynamic agriculture, arts and crafts, and community education. Keating Farm Estate village and would be run by a core group of three families who propose entering into a land use agreement with TLC to manage the Farm. According to their proposal, “The three families have professional training in different skills that would enhance the running of the village and the community center in the main house.”⁶

These three families have a supporter who could invest \$300,000 in return for a long-term lease arrangement with TLC that would see them responsible for the management and development of the Farm. They would require assistance from TLC to cover the costs of the restoration of the Farm and the associated buildings.

Their vision includes redeveloping Keating House to a variety of uses, which would include:

- A bed and breakfast operation;
- Educational spaces for lectures, workshops, retreats, and indoor and outdoor performances;
- Reading room/library;
- Health food café; and
- Gallery.

Many of the surrounding outbuildings would be redeveloped in to bed and breakfast cottages. A workshop space would be established to support a craft program.

The farmland would be managed bio-dynamically with agriculture taking place on a variety of scales. Anticipated agricultural activities include:

- Kitchen and herb gardens;
- An expanded orchard that would include soft fruits;
- Meditative garden area;
- Livestock necessary to support the production of wool and cheese; and
- Apiculture.

They propose the establishment of three additional eco-homes, which would house the three families.

The village would be developed in three phases beginning with the restoration of Keating House, the establishment of gardens and hedgerows and the

renovations and expansion of the orchard. This would be followed by the development of the three homes, the opening of the B&B and café, establishment of a dairy, marketing of crops and crafts and hosting of events and biodynamic courses and seminars. The third and final phase would see the completion of all of the renovation and building projects and the implementation of all of the anticipated programs and activities.

Preliminary Assessment

Comments made previously regarding the compatibility of a biodynamic management approach and TLC would apply to this proposal.

This proposal is very ambitious and would see much of the management of Keating Farm Estate left to three couples. The proponent group appears to have the skills and experience necessary for the refurbishment of Keating Farm Estate.⁷ They are also willing to commit themselves financially through the provision of a substantial contribution towards a long-term lease with TLC.

Concerns related to this proposal include:

- Its exclusive nature – unlike the previous proposal there appears to be an inability to accommodate other site uses;
- No substantiation for the economic foundation on which this proposal is based;
- The broad scope of the proposal which on the surface appears to be beyond the economic ability of the proponents;
- The lack of long-term funding;
- The fragile nature of group arrangements which if disrupted could result in TLC being left to “clean up the mess”;
- The requirement for additional housing, which is not allowed under the current land use bylaw;⁸
- The “fringe” reputation that the practice of bio-dynamics has; and
- The Eurocentric nature of this proposal, which does not consider the possibility of including the important First Nations community.

6.3 Eco College

A suggestion has been made to develop Keating Farm Estate as an ecologically-focused education facility that provides accredited public education and training in the areas of organic horticulture and agriculture, alternative energy, appropriate technology, alternative building and environmental design. Heide Hermany, President of Gaia College and key proponent of this idea believes that there is a need and market for this service. There is no local or provincial institution providing this kind of comprehensive service, thereby providing a business opportunity.

Hermany believes that a properly managed ecological educational program could become the core enterprise of Keating Farm Estate and, in the process, provide much needed support to a number of other farm-related enterprises. This educational focus would not preclude other commercial or educational activities. Hermany states that the unique nature of such a program will sell itself in addition to drawing attention to the site and TLC. The unique nature may also be attractive to potential funders.

Student activities and curricula could be structured so as to support other economic enterprises on the farm such as a teahouse, restaurant, CSA, Schools program, etc. A larger educational program could be structured to offer training and apprenticeship opportunities in a variety of a specific fields or disciplines such as biodynamic agriculture, permaculture, alternative energy and building systems, etc.⁹

Preliminary Assessment

An overarching environmentally focused education program, while challenging and potentially expensive to implement, would fully support the mandate and interests of TLC. If properly developed it could bring a lot of positive attention to TLC and would allow for the inclusion and further development and provision of TLC's own educational programs.

Concerns about this proposal include the:

- Lack of economic evidence that would support such a development proposal;
- Requirement for TLC to participate in the re-development and potentially the management of the Farm enterprise; and the
- Size and scope of this proposal – is TLC in a position to commit itself to a project of this size and scope which will demand a great expenditure of effort and resources?

6.4 Aromatherapy Co-op

This proposal was submitted by a group of Vancouver Island residents involved in the aromatherapy industry. Their proposal involves the partnership of an aromatherapy co-op with TLC to transform Keating Farm Estate into an “eco-Hollyhock.” The idea is that while Hollyhock, an alternative education retreat centre located on Cortez Island, has a holistic-spiritual focus, Keating Farm Estate, which they propose renaming “Koksilah Eco-Farm,” would be “ecologically botanical” in nature. The Farm would consist of a number of revenue-generating enterprises such as a green education centre, organic café, commercial kitchen, gift shop and a number of farm-stay accommodations scattered around the property. These enterprises would be incorporated in a manner that maintains the beauty and integrity of the historic property.

The authors believe that this proposal supports a number of the issues identified during the open planning meeting including:

- Support for local history;
- Educational opportunities;
- Economic self sufficiency;
- Promotion of TLC; and the
- Demonstration of environmental ethics and sustainable farming.

The Co-op would be a partner in the redevelopment of Keating Farm Estate and would initially focus on the propagation of aromatic crops and wild crafting for the steam distillation of their products. During the brainstorming session, the group mentioned a land requirement of 10 acres for growing herbs and distillation.

The proposal states that the aromatherapy co-op would, “assist in the creation” of a number of commercial and educational enterprises. In addition, the required facilities, “could be a retrofit of one or more of the current structures, depending on their state of repair and projected costs – recycling as much of the rustic wood siding as possible” while these “durable, environmentally friendly and sustainable structure(s) would facilitate ongoing, revenue generating, projects while respecting the aesthetics and historic nature of the property.”¹⁰

This group believes that the combination of rustic, farm-stay accommodation (yurts, tents), commercial kitchen/café (casual dining, value-added farm products), a green education centre (socialization, seminars) and the organic farm (education and volunteer labour) is the perfect vision for this historic property. The location of the farm lends itself nicely as a market centre for the community and a destination for tourists.

Preliminary Assessment

This is very much a business-focused proposal that makes a concerted effort to address a number of TLC’s historical, environmental and educational goals for the management of Keating Farm Estate. This proposal would involve the development of a unique management partnership between the aromatherapy co-op and TLC to oversee the development and management of the land and related business activities. It appears that the co-op would initially be interested in using just over 50% of the available agricultural land on which to establish and grow their herbal crops. The strong business focus of the co-op and the presumed business experience of its members could help TLC convert Keating Farm Estate into an economically sustainable operation.

However, the business focus of this proposal may detract from the other important historic, environmental, agricultural and community agendas. A strict business partnership arrangement may not be the appropriate management vehicle as it could fetter TLC's ability to make management decisions necessary for protecting the cultural or environmental aspects of the Farm - decisions, which ultimately might affect the bottom line of the business operation. It may be more appropriate for TLC to establish a Keating Farm Estate corporation or co-op that would be responsible for the general management of the on-farm enterprises.

Additional concerns about this proposal include the:

- Lack of economic evidence that would support such a business proposal;
- Requirement for TLC to participate as a partner in the re-development and management of the Farm and its associated business enterprises;
- Suggestion for development of additional accommodation units for visitors, which under the current bylaw is not allowed;¹¹
- Seemingly exclusive nature of this proposal; and the
- Size and scope of this proposal – is TLC in a position to commit itself to a project of this size and scope, which potentially could require the expenditure of a significant amount of effort and resources?

6.5 Vineyard and Winery

Shortly after Keating Farm Estate was purchased there was discussion about the possibility of developing an organic vineyard and winery operation on a portion of the acreage. This was seen as a way to generate income and attention for Keating Farm Estate and TLC.

Preliminary Assessment

On the surface this would appear to be a good idea, particularly given the hospitable Cowichan climate and the close proximity and expansion of what appear to be successful local vineyard operations. However, after spending some

time investigating the local soils and discussions with reputable local, organic winemakers it appears that a vineyard may not be best use of this site – at least not on a scale necessary to support itself economically, much less be adequate to reliably supply an on-site winery.

Issues of concern that would work against the economic viability of a vineyard at Keating Farm Estate include the:

1. Limited amount of appropriate grape-growing soils. Approximately 19% or five acres of the Farm are Qualicum soils, which with limited improvement, may be suitable for grape production. The south-facing slope at the north and northwest boundary comprises Fairburn soils requiring drainage and sub-soiling to be suitable for grapes. Qualicum soils form a narrow band along the northeast boundary and most heavily developed area of the farm. Consequently, only a maximum of four acres of this area, which would include a good portion of the current orchard, would be available for viticulture. Historic values associated with the orchard area may take precedent over most modern cropping proposals, preventing it from being redeveloped as a vineyard, further reducing the potential acreage available for grape production.
2. Narrowness of the Qualicum soil area (on average 17m wide) will increase infrastructure (trellising, irrigation, etc.) and management costs.
3. A vineyard is a long-term investment without returns for 10 or more years, and only if accompanied by an on-site winery. After 10 years, a small (4-5acres) estate winery could realize annual gross sales of \$40,000.¹²
4. Startup costs for a vineyard can be as high as \$25,000/acre and annual upkeep costs may be \$3,000/acre.¹³
5. Climate in the Keating Farm Estate area is marginal for the production of good quality grapes, which are currently the long-season varieties.

They require 210-220 frost-free days. Intensive, and therefore expensive, management techniques would be required at Keating, which in a good year receives no more than 200 frost-free days.¹⁴ Vintners on Vancouver Island are most successful growing a number of cool weather varieties.

6. Protection from wildlife such as deer, rabbits, squirrels, raccoons and birds will be required, adding to already high startup and upkeep costs of the operation.
7. Increasing inability to receive an adequate price for local wines and harvested grapes as more and more reasonably priced and good tasting wines and grapes become available on the market.¹⁵
8. The high costs associated with the establishment of organic or conventionally managed vineyards require them to be developed and maintained as monocultures heavily reliant on external inputs, resources and attention. In spite of these costs and challenges more and more vineyards and wineries are becoming established in the Southern Vancouver Island area. There are 25 vineyards now. If demand for locally produced wines remains strong and there aren't any unforeseen market corrections, it is predicted that there will be 50 Island vineyards by 2009.¹⁶
9. Most Vancouver Island BC winemakers rely on imported grapes from the Okanagan region. There are few local estate wineries and these are struggling financially due to high input costs and very competitive prices of good quality wines made from Okanagan grapes.

The high costs, limited economic returns, questionable appropriateness and sustainability of grape growing in this region, coupled with the decreasing 'uniqueness' of this type of operation suggest that this type of agriculture activity should not be pursued at Keating Farm Estate.

However, there might be an opportunity to demonstrate appropriate, better integrated and more ecological and sustainable methods of producing grapes in

this region. This approach, though less economically viable, would be more in keeping with TLC's values and interests. Organic grapes grown on Keating Farm could be used by a local winery to produce a Keating Estate wine for use and sale at Keating (if permitted by government licensing authorities). There may be an opportunity at Keating Farm Estate to partner with Wine Islands Vintners Association (WIVA) in a 'tasting room' to showcase and promote Island grapes and wines. If an actual winery were built at Keating Farm Estate, perhaps wines from local fruits could be produced, as well.

6.6 Goat or Sheep Dairy

There has been some discussion about the possibility of refurbishing the former dairy facility so that it can be used again. Goats and sheep offer the possibility of generating a milk product that is in high demand by local consumers and cheese makers and is not covered by quota. Goats and sheep are smaller than cattle, and easier to handle. If managed properly they are not as hard on the land and do not demand the same kind of inputs that dairy cows do.

Preliminary Assessment

In order to generate enough milk to support an on-site dairy operation it is anticipated that a large herd of goats or sheep would be required. Maximum sustainable stocking densities have been estimated at around 70 goats if all the fields were available for grazing. Given the necessity of managing this operation in a manner that does not result in the further degradation of the field areas, it is highly doubtful that the Farm could accommodate the herd size required to sustain a viable dairy operation.

However, a smaller herd of 15-20 goats and sheep could provide 250-500 liters of milk per week to a local cheese maker to create a specialty-blended cheese for use and sale at Keating Farm Estate.¹⁷

6.7 Housing

There has been internal discussion about the possibility of establishing a private residence on the site of the mobile home. This would involve the establishment of a long-term lease, the price for which would allow TLC to pay off the sizeable mortgage. Those able to pay for such a privilege would most likely re-develop the mobile home site, replacing it with a large house.

Preliminary Assessment

Given the need for TLC to reduce or eliminate the prohibitively expensive monthly mortgage payment, it is understandable why this scenario might be given serious thought. The mobile home site, with its outstanding views and south-facing situation, provides the most attractive building site on the property. However, from a functional perspective the location of a private home on this part of Keating Farm Estate would seriously affect the historical integrity of Keating House and the Farm in general.

The location of a large, new house on this prominent, elevated site, would undoubtedly detract from the historically more important but potentially less prominent Keating House, which is situated at a lower position on the property under the shelter of large trees.

The presumed use of the mobile home area as Keating's kitchen garden, coupled with Hugo Tew's displeasure at it having been taken out of agricultural production in the first place, does not support its redevelopment for housing.¹⁸ From a historical perspective this area was very much connected to the original Keating household. Efforts should be made to return it to its former agricultural use. In the interim the most appropriate use for it would be to support and enhance the agricultural activities of the farm. This may include the provision of temporary housing.

An area of the Farm more suitable for the location of a new house is Corner Field. Corner Field, with its poorer, better-drained soils would provide a building

site, one that is adequately removed from Keating House. The limited views associated with this location would not be as attractive as that of the mobile home site and therefore would not command the same value. There might also be some difficulty developing an additional house site without first removing the mobile home, as current bylaws do not allow for the development of more than two houses on agriculturally zoned properties.¹⁹ There may be some advantage in referring to the example of Linnaea Farm on Cortez Island – a land trust, a society, an organic farming apprenticeship program, and a school – which has acquired special zoning and covenants.²⁰

¹ Scott, R. 2005. Personal communication.

² www.pfeiffercenter.org

³ R. Scott. 2005. Personal communication.

⁴ www.biodynamic.org.uk/Green.htm

⁵ Scott, R. 2005. Personal communication.

⁶ Ibid.

⁷ Lampson, L. 2005. Personal communication.

⁸ Cowichan Valley Regional District. 1994. *Cowichan-Koksilah Electoral Area E and Part of F Official Community Plan: Bylaw No. 1490*. CVRD, Duncan, BC.

⁹ Ecoversity (www.ecoversity.org) is cited as a possible example.

¹⁰ Scott, R. 2005. Personal communication.

¹¹ Cowichan Valley Regional District. 1994. *Cowichan-Koksilah Electoral Area E and Part of F Official Community Plan: Bylaw No. 1490*. CVRD, Duncan, BC.

¹² Winchester, K. 2005. Personal communication.

¹³ Ibid.

¹⁴ Venturi, G. and M.Venturi. 2005. Personal communication.

¹⁵ Ibid.

¹⁶ Winchester, K. 2005. Personal communication.

¹⁷ Abbott, Hilary. 2005. Personal communication.

¹⁸ Schmidt, A. 2005. Personal communication.

¹⁹ Cowichan Valley Regional District. 1994. *Cowichan-Koksilah Electoral Area E and Part of F Official Community Plan: Bylaw No. 1490*. CVRD, Duncan, BC.

²⁰ www.linnaeafarm.org/

7 POTENTIAL LAND MANAGEMENT SCENARIOS

There are a variety of options available to TLC that could be used to manage the Keating Farm Estate property and its associated activities. Given that land management is so closely tied to land use it was felt that it might be beneficial to provide a preliminary review of a number of these potential options highlighting a number of their key benefits and costs. This is merely an initial consideration of the potential management arrangements that could exist. A more thorough consideration of the issues and alternatives should be conducted.

7.1 TLC Ownership

This scenario would involve TLC maintaining ownership and management responsibility of Keating Farm Estate. As with all of their properties TLC would establish a land use covenant that protects the agricultural and historical aspects of the farm.

Benefits

Ownership would allow TLC to maintain total control of the management of Keating Farm Estate allowing for the pursuit of education and promotional opportunities much like TLC does with its Abkhazi Garden facility.

Fundraising activities necessary to pay for the Farm could raise local awareness about Keating Farm Estate, the work of TLC and the plight of agriculture in general, which could result in future benefits for the Farm, TLC and local agriculture.

Costs

Fundraising is a necessary but costly activity for a non-profit organization like TLC, which makes a point of limiting unnecessary costs. In an effort to reduce organizational stress there appears to be a desire within TLC to restrict onerous fund-raising activities to key property purchases, and for TLC properties to produce revenue.

A total ownership/management approach would be costly, as it would require TLC to pay for the property in addition to shouldering all the costs associated with its day-to-day management. The responsibility for owning and managing Keating Farm Estate would be onerous and may detract from the mission and focus of the organization.

Under this ownership scenario, Keating Farm Estate would be the first farm property that TLC would be fully responsible for day-to-day management decisions. As a consequence, it may not have the internal capacity or knowledge necessary to successfully run such an enterprise.

7.2 Land Use Covenant

This approach would involve the establishment of a land use covenant that protects the agricultural and historical aspects of the farm before putting the property up for sale.

Benefits

Such an approach could result in significant cost savings for TLC as it:

- Eliminates TLC's day-to-day management of the Farm enterprise; and the
- Re-sale may result in a positive economic return to TLC.

Costs

Apart from the establishment of a conservation-oriented land use covenant this arrangement doesn't allow for creative engagement of TLC in the management

of a farm operation. This would result in a loss demonstration and promotional opportunities for TLC and its Conservation Partners Program. It would also further delay TLC's active involvement in the day-to-day care and management of an agriculturally focused property – experience that would be beneficial to TLC given the number of agricultural properties they could potentially be responsible for in the near future.

7.3 Long-term Lease Arrangement

This approach would involve the establishment of a land use covenant that protects the agricultural and historical aspects of the Farm before establishing a long-term lease with an individual or organization. It is likely that the long-term lease would involve the development of an agreement that clearly identifies the responsibilities and needs of the land, TLC and the lessee. Such an agreement would allow TLC to maintain enough control to assure that the land is improved instead of degraded or left fallow while giving the lessee enough flexibility, independence and security to make good businesses decisions and farm or manage the land a sustainable manner.

Under this scenario the success of Keating depends on the strength of the partnership between TLC and the lessee. The establishment of an appropriate land-use plan is essential for the future ecological, social and economic success of the Farm. Such a plan helps establish a vision for the Farm and lays out how land should be managed. A farm land-use plan is not a farm plan, which should be left to the lessee and investors in the farm enterprise; rather it is a statement by TLC of the conditions under which the land may be used.¹

Benefits

Fundraising activities necessary to pay for the Farm property could help raise local awareness about Keating Farm Estate, the work of TLC and the plight of agriculture in general. This increased awareness and involvement may result in future benefits for the Farm, TLC and local agriculture.

While this approach does require the purchase of Keating Farm Estate by TLC it could result in management cost savings. Day-to-day management responsibilities and cost would be the responsibility of the lessee. TLC costs would be limited to the development of the lease arrangement and land use plan, and the occasional review and re-negotiation of the lease agreement. Additional involvement would be required during a sale of the lease, which would involve the assessment of the Farm's infrastructure.

This arrangement would allow TLC to continue to be directly involved in the management of Keating Farm Estate. Depending on the creativity of the lease arrangement, it could serve as a model, which may also bring attention to TLC. The process of developing an alternative management arrangement at Keating would help TLC address some of the management issues associated with their other agricultural properties.

Costs

Agricultural leases cannot pay for the cost of the land. For example, the lease payment for the two-acre Langtry Field parcel is \$150 per year for land with an approximate value of \$50,000.² In order to contemplate a long-term lease approach the land would have to be fully owned by TLC – thus requiring a costly fund-raising campaign.

This approach requires a greater level of involvement from TLC and therefore will require a greater investment of resources. In addition, the nature of the lease agreement will dictate the extent of the promotional and demonstration opportunities for TLC by those involved with the direct management of Keating Farm Estate.

A strict lease arrangement may limit the creativity of the participating individual or organization. Their ability to take on or develop a number of creative

enterprises as suggested in by a few of the proposals will be limited by the supporting resources they have at their disposal.

7.4 Mixed-use Arrangement

This approach would see TLC maintain ownership of Keating Farm Estate with the requisite application of a land use covenant that protects its agricultural and historical resources. This approach differs slightly from the ownership model (section 7.1) in that it would pursue co-management opportunities with local organizations, the community or individuals interested in developing an appropriate on-farm enterprise. TLC would maintain authority over the management of the whole Farm but those with on-farm interests, which could include on-farm businesses, the community, local government and First Nations, would guide the management of the operation. This approach would be more inclusive and participatory. It would also encourage community participation and support.

Benefits

This approach requires a greater involvement by the local community. Alternative community-based fund-raising approaches could be pursued, such as the establishment of a Keating Farm Estate Co-operative, Society, or Land Trust, which may reduce the fund-raising responsibility for TLC.

The involvement by the community in fundraising activities necessary to pay for the Farm could raise local awareness about Keating Farm Estate, the work of TLC and the plight of agriculture in general. This awareness may result in future benefits for the Farm, TLC and local agriculture. The community's involvement in the purchase and management of Keating Farm Estate could generate long-term support for the Farm and its future programs.

Involvement of a variety of participants in the purchase and management of the Farm may contribute to the development of synergistic collaborations and

creative on-farm enterprises and that could not be realized under a more traditional management regime.

Due to the community involvement, the possibility of novel funding approaches and the creation of a collaborative management model, this land use scenario provides the greatest opportunity for development of a model sustainable farm system that could showcase TLC's values, programs and commitment to agriculture.

Costs

This approach requires the commitment of a tremendous amount of intellectual, resource and social capital by TLC and the surrounding community. In addition to having the necessary supporting resources, which will likely include an on-site manager, TLC must be committed to the development of a model farm system, the development and running of which, requires the involvement in and support of the local community.

This is an ongoing commitment that while potentially very rewarding will demand a lot from TLC – much more than they are currently providing on most of their other publicly accessible properties. Is TLC prepared to do this? Does it support their current strategic plan?

¹ Masselink, D. 2005. *A New Lease for Farmland? Land Trusts and Working Farms on British Columbia's Gulf Islands*. Unpublished report.

² A. Schmidt. Personal communication.

8 RECOMMENDATIONS

This preliminary land use plan and its associated recommendations marks the first step in a process that will eventually see the implementation of a land use approach that improves and supports the continued health and well-being of the historic Keating Farm Estate property and its associated enterprises. This plan is a preliminary review and assessment of what may be possible at Keating Farm Estate. The main purpose of the plan is to help guide TLC's decision regarding the ownership and management of the property. Given the property's strategic location and the local community's obvious attachment to and interest in it, once TLC has made key decisions about the property an open master planning process should be initiated. This would ensure an open and public identification and consideration of potential land use and management scenarios before laying out an implementation plan.

The following recommendations are preliminary as they are based on an initial understanding of the Farm. Further consideration and consultation are required before they could be implemented.

8.1 Focus

TLC should focus its restoration and management efforts on the core area of Keating Farm Estate – those areas and facilities located north of Sh-hwuykwselu Creek. There has been some discussion of selling the Tzinguaw Forest to the Cowichan Valley Regional District (CVRD) to be included as part of a regional park system along the CNR ROW. If this is pursued TLC should consider including Langtry Field in this sale as it does not have a strong relationship to the Farm. Work could be done to restore the field to its natural condition

thereby improving the conservation and biodiversity values currently associated with the CNR corridor.

If Tzinguaw Forest and Langtry Field are sold to the CVRD, TLC should negotiate to retain management responsibilities. Tzinguaw Forest area adds a useful dimension to Keating Farm Estate. These areas offer an opportunity to pilot a “working regional park” arrangement that allows for the sustainable harvest of timber and other forest-botanical products in a manner that doesn’t unduly impact the health of the forest ecosystem. The Farm also offers an opportunity for education and agro-tourism for users of the regional park.

8.2 Demonstrate

Keating Farm Estate is a productive, beautiful, understandable, accessible, strategically located, historic farm that would make an excellent site for the establishment of a unique educational facility that could physically demonstrate and promote TLC’s commitment to the environment, local heritage and agriculture. Given Keating’s ideal situation, remarkable virtues and the presence of a diverse number of supportive, local, like-minded groups, TLC would be remiss to pass up this opportunity.

Concern about the economic viability of an educationally focused facility is real and understandable. Strong community support coupled with the attractive nature and accessible location of the Farm may allow for the development of a number of revenue generating enterprises, which initially could carry the expected financial burden of developing an educational program.

8.3 Restore

TLC should restore Keating Farm Estate’s natural and agricultural landscapes, in addition to its heritage buildings. As Hugo Tews approached the end of his life he was unable to provide the care and attention that Keating Farm Estate

required. TLC has an opportunity to restore the Farm buildings to their original condition while improving the health and vitality of the associated natural and cultivated landscape. In this way TLC might be able to demonstrate the promise that lies in overworked, neglected, unappreciated, and underutilized agricultural landscapes.

There are number of possibilities that could be pursued in order to restore Keating's natural and cultivated landscapes.

Natural Areas

Establish adequate buffers and hedgerow areas (10-20m wide) along Langtry Road and Glenora Road. The hedgerow along Miller could also be increased but in a way that doesn't impact the current orchard or the opportunity to establish future perennial crops in this area with its well drained Qualicum soils. If an agro-forestry approach is used there is an opportunity to design these areas in a manner that provides additional conservation, economic, recreation and education opportunities. These buffer areas could be planted with productive fiber, medicinal, aromatic or food producing species, which would eventually provide a return to the Farm. A public path could be established through this area providing a connection to the CNR R-O-W and local pedestrians with a more enjoyable, safer walking experience through the Farm. Funding may be available through the Agro-Forestry Industry Development Initiative.¹



Restore the impacted riparian area along Sh-hwuykwselu Creek. This will involve repairing the fencing to prevent livestock from entering the riparian area and creek bed, the removal of invasive species and replanting appropriate native species. Given the condition of the creek bottom in this area additional work might be needed to re-establish a more natural creek channel. Funding for this work should be available through the Environmental Farm Plan Program.²

TLC should consider developing a riparian area in the field below the granary. The establishment of a wetland is probably the most appropriate use for this continually wet area. Funding for this work may be available through the Environmental Farm Plan Program.³

The health of Tzinguaw Forest should be evaluated. Based on this assessment appropriate reforestation measures may be needed. It is expected that the re-establishment of Douglas fir would be part of a reforestation process.

Cultivated Areas

TLC should assess and consider renovating the aging orchard. Many of the fruit and nut trees are dying or in need of attention. This evaluation should be conducted with an eye to the future use and economic value of existing and potential plantings. The assessment and final land use plan will guide the redevelopment of this area.

Most of the field areas appear to be in fairly good condition. Consideration should be given to improving the drainage of these areas through the installation of field drains coupled with sub-soiling measures, both of which would improve the range and condition of the crops that could be grown. Soil samples should be taken before any improvements or cultivation decisions are made in order to determine the appropriate application of required inputs.

8.4 Cultivate

Keating Farm Estate should be put back into active cultivation. The Farm is situated on some the best agricultural soils on Vancouver Island which, if managed properly, can produce a wide variety of crops.

Keating Farm Estate's original expression as a mixed farm system should serve as the model for the future agricultural system particularly if the Farm is to act as an educational facility. Mixed farm systems are generally more sustainable

and less susceptible to environmental or market perturbations. They are also more interesting than single crop systems.

Potential agricultural elements could include a:

- Large market garden that supplies a box program, farm stand or on-farm store;
- Kitchen garden which complements the restored Keating House and supplies the commercial kitchen of the teahouse or restaurant;
- Mixed assortment of livestock that provide a variety of on-farm goods and services - traction, fertility, pest control, food (eggs, meat, milk, cheese, honey), fibre, pollination, interest – which help power the Farm;
- Fields that produce the hay and grain crops necessary to fully support the livestock and provide a surplus for sale or human use;
- Orchard – renovated with additional plantings of heritage fruit and nut trees and berries; and
- Nursery that propagates plant material necessary for the development of the agro-forestry and riparian areas.

A more intensive system of cultivation will require improvements to the existing infrastructure such as the installation of irrigation systems, additional fencing (including deer fencing) and gates, equipment, and processing and staff facilities.

8.5 Manage

While this falls outside the scope of the preliminary land use plan, careful consideration should be given to the management arrangement for Keating Farm Estate. The nature of this arrangement will ultimately determine how the Farm develops.

If Tzinguaw Forest and Langtry Field are sold to the CVRD, TLC should retain responsibility for the management of these areas. Given Keating Farm Estate's

strategic location, position along a potentially important regional trail system, scenic beauty and conservation values, the CVRD may be interested in the Farm beyond the creek and CNR corridor. TLC should investigate with the possibility of CVRD regional park status for the entire Farm, managed by TLC, a Society or a Co-op.

Whatever the outcome of these discussions TLC should make every effort to manage Keating Farm Estate as a sustainable system. This approach should concentrate on limiting off-farm inputs such as nutrients, water, energy, fibre and food, while encouraging the input of intellectual and social capital. It is understood that this approach will not always be possible, particularly during the resource demanding restoration phase.

8.6 Involve

TLC should involve the local community in the purchase, development and management of Keating Farm Estate. Special efforts should be made to include the Cowichan First Nation, a group with a significant population and historical connection to the land on which Keating Farm Estate resides. Opportunities for participation should be meaningful.

Building on the success of the summer Open Houses TLC should consider inviting the community to participate in the development and consideration of a land use plan and management arrangement. Other opportunities include the development of an advisory board that allows for local community and First Nations representation and a community-based fundraising or community share scheme. Participation and support from the local community is critical to the success and scope of the Keating Farm Estate enterprise.

8.7 Gather

TLC should begin collecting a number of key pieces of information, which would greatly benefit the management and potential redevelopment of Keating Farm Estate. These include:

- Topographic information necessary for the development of a digital terrain model for the Farm - very useful for any grading, drainage of site development work;
- Comprehensive building inventory;
- Tree inventory, particularly around Keating House;
- Forest health assessment;
- Well assessment; and
- Sewerage assessment.

In addition TLC should complete an Environmental Farm Plan for Keating Farm Estate, which may allow it to qualify for a number of funding sources to address a number of environmental issues.

8.8 Assess

An effort should be made to document existing site resources and features, including flora and fauna. This information will provide a better understanding of the condition and ecology of Keating Farm Estate. It would also act as a baseline inventory, against which the effects of restoration could be measured.

A baseline inventory would allow TLC to monitor the relative health of the Farm and see whether its management decisions are having the desired result. This qualitative and quantitative evidence could then be used to modify to future or proposed farm restoration work. The results, if beneficial could be used to promote Keating Farm Estate and the conservation efforts of TLC.

8.9 Evaluate

One of the areas that generally gets short shrift during the development and implementation of a project is the evaluation process. Once a project has been implemented the commitment to conduct what is known as a post-occupancy evaluation (POE) is often forgotten. In those rare cases where POEs are conducted there is generally no interest or even ability to continually re-evaluate the performance or behaviour of the project as it matures and evolves. This is unfortunate because continued monitoring and appraisal can produce information that can be used to enhance or improve the performance of the overall project. Given the potential educational focus of Keating Farm Estate the information and understanding gained from this process of re-evaluation could also be revealed to a larger audience. Project precedents for this approach include the Adam Joseph Lewis Center for Environmental Studies at Oberlin College and the John T. Lyle Center for Regenerative Studies at Cal Poly in Pomona, California.^{4, 5}

8.10 Apply

The valuable hands-on experience gained at Keating could be used to help inform TLC's overall approach to the management of their current and future agricultural and forested properties. For example, TLC could use this experience to guide the development of an over-arching agricultural policy for their organization - one that establishes a standard approach to the management of their agricultural properties.

¹ www.woodlot.bc.ca/agroforestry/index.html#ini

² www.bcac.bc.ca/efp_programs.htm

³ www.bcac.bc.ca/efp_programs.htm

⁴ www.oberlin.edu/ajlc/ajlcHome.html

⁵ www.csupomona.edu/~crs/

9 CONCLUSION

Keating Farm Estate is a gem in the rough but a gem of great potential. If and how that potential is revealed and realized depends largely on the level of commitment that TLC is willing to make. Keating Farm Estate provides TLC with an incredible opportunity to demonstrate its commitment to the environment and its interest in revealing the value that agriculture, if practiced with consideration, holds for the land and local community. This is a difficult proposal to put forward in our rapidly urbanizing communities with their skyrocketing real estate values and growing disconnection from the land that ultimately sustains them. Yet, this is why it is so necessary.

Keating Farm Estate presents an incredible learning opportunity for TLC – an opportunity to gain some valuable hands-on experience with the management of an agricultural property – experience that could inform their approach to the management of their current and future agricultural properties – properties that they have limited day-to-day responsibility for.

Keating Farm Estate would allow TLC to trial a number of creative management, programmatic and promotional approaches that could be applied to their other agricultural holdings. In addition the experience would assist or at least encourage the development of an innovative over-arching agricultural policy for their organization and potentially provide them with a platform from which to further advocate for the protection, support and integration of farms and ranches with conservation and sustainable agriculture practices.

This project is not without risk – like all worthy projects it carries a significant element of risk. However, the opportunity that Keating Farm Estate presents for TLC outweighs any possible risk.

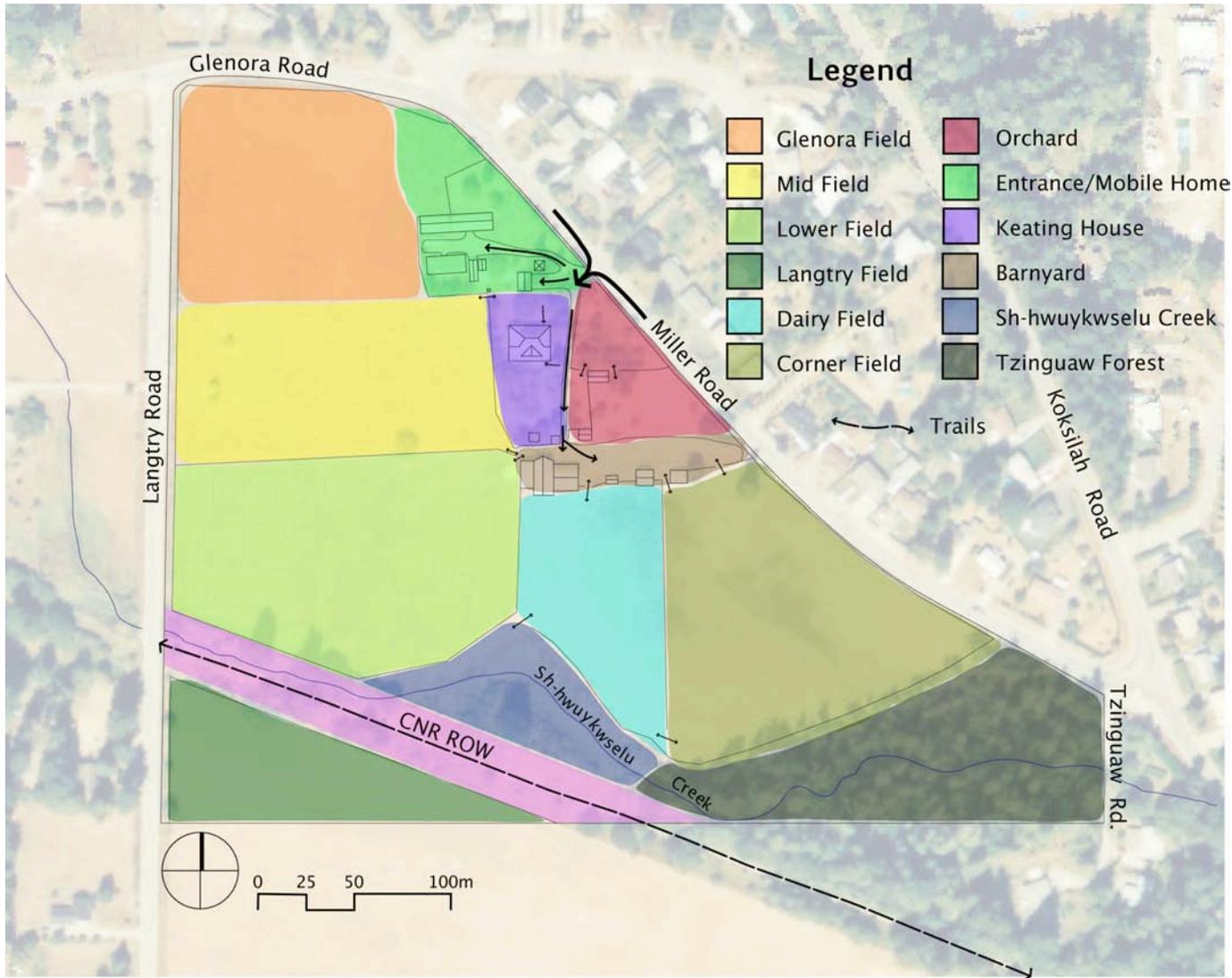
Given the challenge that lies before TLC it is fitting to conclude with a challenging quote from Wendell Berry, which speaks to the opportunity that Keating Farm Estate provides – particularly if it is developed and managed in a manner that is in keeping with TLC’s social and environmental ethic.

“The standards of our behaviour must be derived, not from the capability of technology, but from the nature of places and communities. We must shift the priority from production to local adaptation, from innovation to familiarity, from power to elegance, from costliness to thrift. We must learn to think about propriety in scale and design as determined by human and ecological health. By such challenges we might again make our work an answer to despair.”¹

Keating Farm Estate provides TLC with the framework for such a pursuit.

¹ Berry, W. 2000. *Life is a Miracle*. Counterpoint, Washington, DC.

APPENDIX 1 - FARM AREA ASSESSMENT



CULTIVATED AREAS

Glenora Field - 3.1 acres (1.25 ha)

Location Northwest corner of the farm adjacent to the intersection of Langtry and Glenora Roads.

Description

An irregularly shaped 3-acre field bounded by Glenora Road on the north and Langtry Road on the West. It contains the highest point on the farm, which is located toward the northeast corner of the field. From the high point the slope is approximately 7 – 8% running predominantly in a southwest to west direction¹. Soils in this field area are of the Fairbridge classification. They have a silt loam texture and are moderately well drained particularly further up the knoll². This field area currently produces a moderate to poor quantity of hay with the steeper slopes of the rise or knoll providing the poorest returns³, which indicates a seasonal moisture deficit presumably influenced by the greater slope.

Opportunities

- Elevation change > 6m across field unit allows for a number of design elements such as gravity water storage or viewpoint location.
- Increased slope improves the drainage of both water and cold air
- Southern aspect coupled with slope makes this one of the warmest areas on the farm.
- Area is cleared and has an established pasture/hay crop.
- Soil quality is good – the Fairbridge series is generally able to grow a wide range of crops⁴.

Challenges

- Compact subsoil, which likely requires subsoiling and additions of organic matter to improve drainage and allow for the development of a better root zone.



- Moderate sloped areas (7-8%) impose some cultivation limitations (tractor safety, greater risk of soil erosion). Bare soils should be avoided in during the wet season.
- Noise – this area is heavily impacted by noise generated by local development work and traffic to and from the gravel quarry and Duncan Airport.
- Exposure – the lack of an adequate hedgerow buffer and no infield trees coupled with its south-facing aspect located down slope of a residential development increase the exposure of this area to both the public and inclement weather systems.

Potential Approaches

- Enlarge the buffer or hedgerow area between the field and Langtry and Glenora Roads. Given the steep slope associated with the upper portion of this field this buffer area could be quite large along Glenora Road without really impacting the current productivity of this field. This will result in a loss of field acreage but will reduce the impact that current traffic has on this area and the Farm in general. The enlarged hedgerow space could be designed in such away as to increase existing conservation values, and create potential economic and social opportunities such as agroforestry, perennial herb production, and the accommodation of a public footpath, which could be linked to the CNR ROW.
- The flatter lower portions of this field could be kept in pasture/hay production or they could be set aside for more intensive cultivation practices such as those associated with a market garden operation. The adjacent Entrance/ Mobile Home Area could accommodate all additional non-field-based activities associated with a market garden operation – activities such as product preparation, marketing, and shipping, administration, and staff and training facilities.

Mid Field - 3.1 acres (1.25 ha)

Location Located between Langtry Road and Keating House.

Description

A rectangular shaped 3-acre field. Its west, east and southern boundaries follow existing fence lines. Its gradual 2% slope runs south toward the creek. The Soils in this field area are predominantly of the Cowichan classification. The one area of exception is the upper northwest corner, which is a mixture of both Fairbridge and Cowichan soils.

Cowichan soils have a high incidence of clay and are considered to be imperfectly to poorly drained, particularly during the wet season. The western margin of the field consists of a narrow hedgerow while the eastern boundary abuts the grounds of Keating House. Three pear trees are located in field close to the western margin. A mature walnut is located along the southern fence line approximately 60m from the barn.

Opportunities

- Area is cleared and has an established pasture/hay crop.
- Location:
 - Adjacent to Keating House with two entry gates allows for the hosting of public events.
 - Kitty-corner to barn allows for easy access by livestock.
- Southern aspect, though not as warm as the Upper Field.
- Soil quality is good – with careful management both Fairbridge and Cowichan soils can grow a wide range of crops.

Challenges

- Poor drainage due to heavy soil textures and compaction requires careful management particularly during the wet season. Without soil improvements crops types would be limited to those that can deal with periods of anaerobic conditions due soil water logging. This are requires



drainage to maximize use and crop varieties. In addition, subsoiling and additions of organic matter would further improve drainage and allow for the development of a better rooting zone.

- Poor air drainage resulting in cooler temperatures in spring and fall than Glenora Field.
- Noise – this area is heavily impacted by noise generated by local development work and traffic to and from the gravel quarry and Duncan Airport.
- Exposure – the lack of an adequate hedgerow buffer and limited infield trees coupled with its south-facing aspect located down slope of a residential development increase the exposure of this area to both the public and inclement weather systems.

Potential Approaches

- Maintain this area in grass for grazing and hay production. Under this management regime it can be used to support a variety of uses including livestock grazing and forage production and field-based community events such as fairs and exhibitions.
- Enlarge the buffer or hedgerow area between the field and Langtry Road. While this will reduce the field's acreage it will help reduce the impact that current traffic has on this area and the Farm in general. The enlarged hedgerow space can be designed in such way as to increase existing conservation values, and create potential economic and social opportunities.



Lower Field - 4.2 acres (1.7 ha)

Location Located along Langtry Road, north of Sh-hwuykwselu Creek.

Description

A rectangular shaped 4-acre field. Its boundaries follow existing fence lines. Its very gradual 1-2% slope runs south toward the creek. The soils in this field area are predominantly Cowichan classification. Soils in this field have a high

incidence of clay and are poorly drained, particularly during the wet season. The like the Glenora and Mid Field areas the western margin of the field consists of a narrow hedgerow. The Barn is located at the gated northeast corner of the field.

Opportunities

- Area is cleared and has an established pasture/hay crop.
- Location adjacent to barn and near Keating House with two entry gates allows for the hosting of public events.
- Southern aspect though not as warm as the Glenora Field
- Soil quality is good – with careful management Cowichan soils can grow a wide range of crops⁵.

Challenges

- Poor drainage due to heavy soil textures and compaction requires careful management particularly during the wet season. Without soil improvements crops types would be limited to those that can deal with periods of anaerobic conditions due soil water logging. This are requires drainage to maximize use and crop varieties. In addition, subsoiling and additions of organic matter would further improve drainage and allow for the development of a better rooting zone.
- Poor air drainage due to location at bottom of slope will result in cooler temperatures in spring and fall than both Glenora and Mid Field areas.
- Noise – this area is heavily impacted by noise generated by local development work and traffic to and from the gravel quarry and Duncan Airport.
- Exposure – the lack of an adequate hedgerow buffer coupled with its south-facing aspect located down slope of a residential development increase the exposure of this area to both the public and inclement weather systems.

Potential Approaches

- Maintain this area in grass for grazing and hay production. Under this management regime it can be used to support a variety of uses including livestock grazing and forage production and field-based community events such as fairs and exhibitions.
- Enlarge the buffer or hedgerow area between the field and Langtry Road. While this will reduce the field's acreage it will help reduce the impact that current traffic has on this area and the Farm in general. The enlarged hedgerow space can be designed in such away as to increase existing conservation values, and create potential economic and social opportunities.



Langtry Field - 2.1 acres (0.8 ha)

Location Located along east side of Langtry Road, south and adjacent to CNR Right-of-Way.

Description

A thin triangular shaped field currently leased to Donny Ellison for \$150 per year⁶. Separated from the main part of the Keating Farm Estate by the CNR this field appears to belong to the adjacent farm, which currently farms it as part of their pasture/hay system. The field has a very gradual slope of 1-2% that runs north towards the CNR ROW. This area was not sampled during the soil survey. Information from a previous survey indicates that it contains silty loam, imperfectly drained Fairbridge soils.⁷

Opportunities

- Area is cleared and has an established pasture/hay crop.
- Separation from the main part of Keating Farm Estate would allow it to be removed without much impact on the farm.
- Location adjacent to CNR ROW may allow for its inclusion as part of an anticipated regional trail system.

Challenges

- Separation – the CNR ROW prevents this field from functioning as an integral or understandable part of the Keating Farm Estate.
- Its small size, affordable lease rate and relatively high property value (>\$10,000/acre⁸) make it highly unlikely that the current lessee or adjacent landowner would want to purchase the property.
- The open condition of the field may not interest the Cowichan Valley Regional District which has expressed interest in purchasing forested properties along the CNR ROW as part of an anticipated regional trail system⁹.
- Noise – this area is heavily impacted by noise generated by local development work, and traffic to and from the gravel quarry and the Duncan Airport.

Potential Approaches

- Maintain this area as part of the Farm under the current lease arrangement – problem with this is that it doesn't provide a fair return (approx. \$150 per year) for the market value of the land. In addition the current conventional management regime for this field is not entirely in agreement with TLC's environmental ethic.
- Retain this area but take it out of grazing and hay production using it instead to demonstrate the potential for restoration practices and sustainably managed agroforestry uses and activities.
- Sell this area to the CVRD as part of their regional park system to add to the development of a linear trail along the abandoned CNR railway. This arrangement may allow for the participation and co-management by those responsible Keating Farm Estate.



Dairy Field - 1.9 acres (0.8 ha)

Location Below barn, north of creek and CNR ROW.

Description

An irregularly shaped, gradually sloped 2-acre parcel that abuts the south side of the barn. Its boundaries follow existing fence lines. Drainage appears to be an issue as evidenced by heavily pugged soils and the presence of *Juncus effusus* a moisture-loving field rush. Cattle allowed to graze during wet periods have presumably caused the pugging of these silty clay loam soils. There are indications that the abandoned well located adjacent to the barn along the north margin of this field becomes spring-like during the wet season and overflows into this field. This field appears to have also received the liquid waste draining from the dairy facility.

Opportunities

- Area is cleared and fenced.
- Location adjacent to the barn allows for the easy pasturing of livestock.
- Southern aspect though not as warm as other areas.
- Soil quality is good – with careful management Cowichan soils can grow a wide range of crops¹⁰.
- Eastern boundary may be a good location for a wetland thus returning it to its original state prior to being developed as part of the Keating Farm Estate.

Challenges

- Poor drainage due to heavy soil textures and compaction requires very careful management particularly during the wet season. A portion of this area could be maintained as pasture. However, the abundance of water along the eastern boundary suggests that a portion should be set aside for the development of a wetland.

- Drainage upgrades to the barn and dairy facility will be required if they are to be used for the housing and management of livestock – particularly those that generate liquid waste.

Potential Approaches

- Maintain the better-drained portion of this field located immediately below the barn area as pasture.
- Consider setting aside and redeveloping the continually wet, poorly drained eastern portion of this field as a wetland area that receives water draining off of the northern portions of the Farm and springing from the wells during the wet season. This would be a more appropriate use of this continually wet area and would greatly increase the local habitat values. The availability and location of standing water close to the barn may benefit the local bat colony.

Corner Field - 3.8 acres (1.6 ha)

Location Located along Miller Road, north of Sh-hwuykwselu Creek.

Description

A triangular shaped field, its boundaries defined by existing fence lines. It has a very gradual 1-2% slope that runs south toward the creek. Two soil types define this field. The higher portion of the field - a strip approximately 17m wide and just over 1 acre in area – located along Miller Road appears to be made up of well-drained Qualicum soils. The area of the field located below the granary appears to be mainly composed of poorer drained Cowichan soils. Drainage in this lower, wetter area is an issue and is evidenced by areas of standing water, heavily pugged soils, and the presence of *Juncus effuses*, a moisture-loving field rush. Cattle allowed to graze during wet periods have caused the pugging of these silty clay loam soils. The presence of standing water in early October around the site of an abandoned well (that provided water to a number of homes across Miller Road prior to the provision of city water to this area) suggests that the well is artesian qualities.



Opportunities

- Area is cleared and fenced with gate openings to the Barnyard and the Dairy Field.
- Location adjacent to the Barnyard allows for relatively easy access by livestock.
- Southern aspect though not as warm as the Orchard area above.
- Situation adjacent to Miller Road and below the Barn area allows for good viewing/overlook opportunities.
- The well-drained soils of this area allow for the inclusion of an additional compliment of crops (fruit and berry) and activities that cannot currently be entertained on many of the poorer drained, more fertile Farm soils.

Challenges

- The poor drainage qualities of these Cowichan soils due to their heavy soil textures and compaction coupled with the apparent location of an infield spring severely limits cultivation opportunities. Realistically the Cowichan soil area should not be cultivated.
- The narrow band of well drained Qualicum soils located along Miller Road are very limited and therefore restricts the extent and potential economic contribution of perennial crops such as grapes, berries and herbs.

Potential Approaches

- Upper, well-drained Qualicum soils may allow for an expansion of the orchard area or the inclusion of perennial crop varieties that do not require extremely fertile soils.
- If the mobile home area is redeveloped to support the development of an adjacent market garden facility this area may provide the most appropriate receiving location to situate an additional residence as it is removed from the core area of the Farm.
- The lower, wetter portions of this field area, particularly those areas with standing water would be better utilized as a wetland which would improve

local habitat values while acting as a buffer if a house was situated on the upland area.

Orchard - 1 acre (0.4 ha)

Location Located along Miller Road, adjacent to Keating House.

Description

A triangular shaped 1-acre area. Its boundaries defined by internal farm roadways. It is gradually sloped (2-4%) towards the south and contains some of the most well drained soils on the property. The soils appear for the most part to be Qualicum, which is defined by gravelly, sandy loam soils. Given the well-drained properties of these soils it is understandable why the orchard was situated here.

Opportunities

- Heritage orchard still intact.
- Location adjacent to Miller Road and Keating House allows for potential opportunities to connect with and even attract the public.
- The well-drained soils of this area allow for the inclusion of an additional compliment of crops (fruit and berry) and activities that cannot currently be entertained on the other more poorly drained soils of the farm.
- Southern aspect and upslope location suggest that this may be one of the warmer locations on the farm.

Challenges

- Orchard plantings are in poor condition with a number of trees obviously dying or dead.
- There are no records of the current varieties.
- Cattle are allowed into this area and are negatively affecting the health of the trees.
- Fences and two outbuildings in this area are in a state of disrepair and need to be significantly improved or dismantled.





Potential Approaches

- Maintain and renovate the current orchard site.
- Undertake an assessment of the orchard to aid in the determination of an appropriate management response. This would include the development of a fruit tree inventory.

BUILT AREAS

Entrance/Mobile Home - 1.4 acres (0.6 ha)

Location Along Miller Road, north of Keating House and the Orchard.

Description

A triangular shaped area that includes all of the “outbuildings” located north of Keating House (including the mobile home) in addition to the current Farm entrance and waste areas along Miller and Glenora Road. It is gradually sloped toward the south. The outbuildings include two connected poultry sheds, one large woodshed, a three bay garage, well house, small garden tool shed, a trailer shed, and a mobile home.

The soils in area appear to be a mix of Qualicum and Fairbridge with Qualicum predominating. The mobile home site may have been one of the most fertile areas of the Farm. The original arrangement of Keating House, with its kitchen located at the northwest corner, suggests that this adjacent area may have been the site of the original kitchen garden. Its awkward connection with adjacent field areas coupled with photographic evidence from the 1950’s and 60’s, which clearly indicate the presence of a grape trellis, associated garden shed-like buildings and unique cultivation patterns, further suggests that this former small field site was home to a productive garden. In addition, Hugo

Tews' strong objections to the location of the mobile home on this site – objections that he apparently took to his deathbed¹¹ also suggest that this was a very fertile area – the kind of fertility associated with a vegetable garden. Apart from the mobile home site this area is generally considered to be the least fertile part of the Farm. Preliminary soil testing indicates that it is composed mainly of Qualicum soils with some Fairbridge occurring along the north and west portions. Qualicum soils are generally gravelly, well drained and therefore less fertile and less susceptible to subsidence and compression – in short they are better for building roads and situating buildings on. This is perhaps why all of the northern outbuildings are located in this area.

The abandoned well in the well house, located adjacent to the north end of the garage, apparently becomes spring-like in the winter. Even during the driest time of the year water can be found within 3 m of the surface.

In addition to the buildings, access roads and current entrance to the farm this area contains a number of notable specimen trees.

The current main entrance to the Farm likely did not exist prior to the 1920's and if it did it was a back or secondary entrance with the main entrance most likely occurring further southeast down Miller Road.

Opportunities

- Area is cleared.
- It has an established entrance onto Miller Road established roadbeds and building sites.
- Existing mobile home provides an additional farm residence.
- Good area for non-cultivation related activities – wouldn't have to sacrifice arable land.
- Mobile home site provides the best view of the fields and has adequate separation from Miller and Glenora Roads.

- Well situated for ancillary farm-related activities such as that required for teaching, storage or propagation of plant material, composting, staff parking, etc.

Challenges

- Existing outbuildings in poor condition.
- Mobile home not in keeping with the historic character of Farm. In addition it appears to cover the historic vegetable garden area. Unfortunately, the cost of moving it and the associated septic field would likely be prohibitive.
- Existing main entrance to the Farm should be relocated for historical accuracy.
- Noise – this area is heavily impacted by noise generated by local development work and traffic to and from the gravel quarry and Duncan Airport.

Potential Approaches

- Demote current primary entrance to a secondary entrance for staff access and parking.
- Utilize mobile home and adjacent waste area for activities associated with the management and development of the Farm. These might include:
 - Teaching facility
 - Farm maintenance
 - Nursery site to support on-farm restoration work
 - Caretaker housing
 - Staff parking immediately adjacent to entrance



Keating Farm Estate house - 0.8 acres (0.3 ha)

Location Located near the center of the Farm property.

Description

A rectangular shaped parcel bounded by the Barnyard to the south, a magnificent tree lined approach on the east side, the Entrance/Mobile Home area to the north and Mid Field on the west. The historically important farmhouse is in poor condition. It appears to have suffered a number of “re-modelings” that did not respect its original character. The house is oriented north-south and prior to the 1940’s faced south, presumably with a great lawn stretching out in front of it. The original location of the kitchen on the northwest side of the house suggests that the supporting kitchen garden would have been located close by. It has been suggested that the original vehicle entrance to the farm and the house was through what is now the barnyard, up and north along the tree-lined approach on the east side. At the time of this report no photographic records were available to support this notion. However, the remains of two large elms were found flanking either side of what may have been the original Miller Road entrance, located east of the Barnyard.

During the 1930’s it appears that the original front of the house was switched to the north side and the kitchen moved to the southeast corner. At this time the garden may also have been moved from what is believed to be its original location (where the mobile home currently rests) to the former front yard. Remnant plantings of this “new” kitchen garden – hazelnuts, grape vines, and fruit trees - are found between the house and the barn.

The house is connected to city water but not the city sewer line which runs along Miller Road. Both Keating House and the mobile home have a septic system that is located in the lawn area just north of the entrance to the Great Hall. An overflow area for the septic systems is located in Mid Field along the western fence line¹

Opportunities

- Keating House and Farm is a historically significant site that is well known by the local community.





- Keating House' situation, size and unique, historic character would make a natural host for a number of agriculturally related business activities and events. These might include a teahouse, restaurant, gift shop, small museum, wedding parties, etc.
- Keating house has ample grounds to accommodate these associated types of activities.

Challenges

- The rearrangement of Keating House, including the grounds around the house and the Farm itself, by the Tews family will require careful consideration. The current arrangement detracts heavily from the original design of the house and grounds. For example, the location of the creamery and a woodshed coupled with the presence of the remnants of Tews' kitchen garden is visually distracting and not appropriate for Keating House. The most appropriate solution may be the removal of these more recent additions to the house site.
- The poor condition of Keating House will require immediate and costly upgrades.
- Any attempt to utilize Keating House for business or tourism will require further upgrades. The historic nature of the house will impose limitations to any these upgrades, which may ultimately hinder their utility.

Potential Approaches

- A thorough historical assessment of both the house and grounds must be made before contemplating any changes.
- This assessment should seriously consider the reestablishment of the original layout of the house and grounds. This approach allows for the contemplation of the revival of the original entranceway and the reestablishment of a supporting garden to the northwest of the house site.

Barnyard - 0.6 acres (0.25 ha)

Location Located below Keating House and extending between the Orchard, Dairy and Corner Fields to Miller Road.

Description

A narrow, centrally located area that covers the facilities dedicated to the care and management of large livestock. This area has been leveled. There are indications that it served as the original main entrance to the property prior to it being developed as a dairy operation. Notable buildings in this area include the dairy barn, well and pump house, granary, incubation shed, and cattle shed. The soils in this area have been altered by development but are thought to a mixture of Qualicum and Fairbridge soils¹².

Opportunities

- Area has significant built infrastructure.
- Linked to Keating house via internal roadway.
- Direct access to all cultivated areas with the exception of Glenora and Langtry Fields.
- Soils are relatively poor and well drained. Composed largely of gravelly Qualicum soils they are good for situating built infrastructure such as a visitor parking lot.
- Original entrance to the Farm from Miller Road was through this area.
- Area provides a nice overlook on the lower portions of the Farm.
- The dairy facility looks to be in good condition.
- Location of a known nursing colony of Townsend's Big-eared Bats in the attic of the former milking area of the barn.

Challenges

- The poor condition of many of the outbuildings.
- Structural condition of the hay area of the barn needs to be determined. There are obvious signs of powder-post beetle activity.





- The indiscriminant use of concrete around the barn may need to be dealt with if the original entrance to the Farm is to be revived.
- The siting of the barn and the maturity of the trees prevent a good view of Keating House. This will challenge those involved with the upgrade of the grounds to re-establish and enhance the presence and prominence of Keating House on the site.

Potential Approaches

- Maintain the barn/dairy facility, adapting it to meet current farming needs. This should be done in a manner that does not impact the bat colony or exclude its use for agricultural purposes
- An assessment should be made of the remaining outbuildings such as the well house, granary, poultry house and cattle shed. Given their condition and potentially limited historic value it may not be worth saving them. This area would benefit from a clean up which would include the removal of many of these ancillary structures.
- If the original entrance to the Farm via this area is revived this is probably the best area to situate visitor parking. A moderately sized parking area could be developed along both sides of the entrance road near the granary and cattle shed with a minimal impact on the Farm, its heritage features or its productive soils.



WILD AREAS

Sh-hwuykwselu Creek - 1.4 acres (0.6 ha)

Location Located along the north side of the CNR ROW.

Description

An irregularly shaped parcel that covers the riparian portion of the stream located outside of the CNR ROW and Tzinguaw Road Forest. This area was illegally altered by the previous owner¹³. This involved a widening and damming of the stream channel for irrigation. The dam has long since been removed.

Cattle are allowed to graze in this area and much of the disturbed banks have been colonized by invasive weed species such as Scotch broom and Himalayan blackberry.

Opportunities

- Reclamation and reestablishment of the riparian area. Outside funds may be available for this.

Challenges

- Exclusion of cattle from this riparian area, an illegal practice under the Federal Fisheries legislation.
- Reclamation of this riparian area, which will require the removal or displacement of invasives and replacement with native species and restoration of the creek bottom.

Potential Approaches

- Maintain this area as part of the farm managing it primarily for its conservation values but investigating the possibility for demonstrating restoration practices and eventually supporting some sustainably managed agroforestry uses and activities.
- Consider selling this area to the CVRD as part of their regional park system to add to the development of a linear trail along the abandoned CNR ROW. This option may allow for the participation and co-management by those responsible Keating Farm Estate.

Tzinguaw Road Forest - 3.4 acres (1.4 ha)

Location Located west of Tzinguaw Road, north of the CNR ROW.

Description

An irregularly shaped forested area, sandwiched between Keating's fields, the CNR ROW, and Tzinguaw Rd. and I.R. No. 1. Sh-hwuykwselu Creek cuts deeply through this attractive second growth forest area as it exits the Farm. The forest is made up of a mix of Alder, maple, red cedar, grand fir and Douglas fir.





Sword fern and salal are found in along the creek gully while Oregon grape and salmon berry occur in the higher, drier areas. All of merchantable Douglas fir trees have been selectively removed. Logging road and slash piles are still visible; however, alder has colonized much of the disturbed areas. Soils in this area are a mix of Cowichan and Fairbridge. Access to this area is currently via Tzinguaw Road or the CNR ROW.

Opportunities

- Area is an attractive mix of upland and creek-side forest habitats.
- Location adjacent to CNR ROW might allow for its inclusion as part of the anticipated regional trail system.
- Potential opportunities for agro-forestry, recreation and conservation.
- Improves local biodiversity with the provision of streamside and forested habitat.
- Acts as an excellent buffer area between the Farm and adjacent landowners.
- Apart from alder re-growth, the existing logging roadbed is in good condition and could be easily improved to allow for road or trail access to the south side of the forest.

Challenges

- Access directly from Keating Farm Estate is currently a problem due to fencing. Most of the forested area is located on the south side of the creek which either requires a bridge for direct access or access via Tzinguaw Road.
- Most of the mature Douglas fir has been removed altering the natural makeup of the forest.

Potential Approaches

- Maintain this area as part of the farm, managing it primarily for its conservation values but investigating the possibility for demonstrating restoration practices and supporting sustainable agro-forestry uses and activities.

- Consider selling this area to the CVRD as part of their regional park system to add to the development of a linear trail along the abandoned CNR railway. This option may allow for the participation and co-management by those responsible for Keating Farm Estate.

¹ Maxwell, R. 2005. *Keating Farm Estate Soils Report*.

² Ibid.

³ Schmidt, A. 2005. Personal communication.

⁴ R. Maxwell, R. 2005. *Keating Farm Estate Soils Report*.

⁵ R. Maxwell, R. 2005. *Keating Farm Estate Soils Report*.

⁶ Schmidt, A. 2005. Personal communication.

⁷ Jungen, J.R., P. Sanborn and P.J. Cristie. 1985. *Soils of southeast Vancouver Island: Duncan-Naniamo Area*. Ministry of Environment, Lands and Parks. Victoria, BC. 188 pages.

⁸ Clark, D.J. 2005. *Real estate appraisal of 5250 Millar Road, Duncan, BC*. Unpublished, Duncan BC.

⁹ Scott, R. 2005. Personal communication.

¹⁰ R. Maxwell 2005. *Keating Farm Estate Soils Report*.

¹¹ Schmidt, A. 2005. Personal communication.

¹² Maxwell, R. 2005. *Keating Farm Estate Soils Report*.

¹³ Schmidt, A. 2005. Personal communication.