
FINAL REPORT Island Coastal Economic Trust January 2013

ÉCONOMUSÉE British Columbia Artisans at
Work

January 15, 2013

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The BC Économusée project team has completed the lifecycle of the project as was developed in the context of its agreement with Island Coastal Economic Trust. The project was a success and this final report will outline some of the key project highlights based on the project performance indicators.

1. Marketing

Highlights

- Économusée British Columbia Artisans at Work distributed 20,000 rack cards in 2012 at Tourism Victoria, on BC Ferries, in Visitor Centers in Nanaimo, Cowichan, and the Comox Valley, in addition to be in key agritourism destinations on the Island;
- Économusée British Columbia Artisans at Work was present in the Wine Islands Publication, as well as in the French language Western provinces travel guide, and purchased a half page in the VanDop Arts and Culture Guide 2013 edition, a guide that is distributed in Western Canada and North Western USA to 100,000 copies.
- Économusée British Columbia garnered 85 likes on Facebook, and 162 followers on Twitter and 158 people have viewed our videos on Youtube;
-
- Économusée British Columbia Artisans at Work was featured in the Times Colonist, the Ladysmith Chronicle, the Herbal Collective Industry magazine, and on French CBC radio, on the airwaves of SunFM. As well, Hazelwood's Économusée site was featured on Shaw Television and the segment spoke specifically about the Économusée experience found on site;

- The Économusée site launches counted 85 participants;
- The press kits prepared were distributed to over 100 partners, prospective artisans, media and sector representatives.

2. Developing Skill and Expertise in Economuseology

An important project goal was to develop, locally, the expertise required to establish Économusée sites in British Columbia. Our team was indeed able to meet this goal through ongoing team training at the sites under development, and in Quebec, through two opportunities for our interpretation, design and research team, as well as for our operators to connect the model to a broader and more mature context.

Highlights:

- A first training session took place in Quebec city for the working team in February 2012. 3 new professionals were trained from BC during that session;
- A second training opportunity took place in Quebec City in May 2012 for our operators. This event enabled them to connect with the International Network, visit Économusée sites, and further their understanding of the Brand. 2 entrepreneurs were trained through this seminar.
- 13 representatives from the 4 Western Provinces attended a training event that aimed to introduce the Économusée model to economic development officers and tourism staff and CEO from Okanagan and Cariboo Chilcotin Coast Tourism Association. The event was facilitated by both SDECB and the Société du Réseau Économusée.

3. Supporting Agritourism Infrastructure Development with small scale operators in the Cowichan Valley



Économusée Welcome Sign at the entrance of Hazelwood Herb Farm, the Herbalism Économusée: 1st Économusée component on site.



Économusée Banner at Merridale Ciderworks, the Cider Économusée.

Économusée site development is about improving the quality of experiences provided to visitors on the grounds of traditional processing artisan businesses, whether it be in the craft of agriculture sector.

Highlights

The first phase of Économusée British Columbia Artisans at Work consisted in developing BC's very first 2 Économusée sites in the Cowichan Valley. Our team certified with the International Économusée Brand both Merridale Ciderworks and Hazelwood Herb Farm. The work of transforming both of these sites focused on ensuring that the 6 fundamental Économusée components were observed while necessary improvements to visitor flow, as well as upgrades to the site infrastructure to satisfy the Économusée certification were made.

Merridale Ciderworks is an agritourism business that receives, on average, 30,000 visitors, annually, on its site. The focus of Merridale is to provide the best experience to those visiting their site while ensuring that there is something for everyone to access at the cidery. At Merridale, one can familiarize himself with the traditional and contemporary techniques employed on site to fabricate authentic traditional cider and distilled products. Visitors can see and circulate around the production area, and learn in the workshop about the unique aspects of cider apples, fermentation and bottling to name just a few of the topics discussed throughout. The Économusée transformation at Merridale involved the following activities on the hands of the owners as well as the hands of the Économusée project team:

- Research
- Text Writing
- Complete signage re-do and upgrade on site
- Re-do of the welcoming area
- Additional exhibit elements introduced in the cidery (workshop) and the boutique and tasting area.

The strategic partnership between Merridale Ciderworks and the Économusée project team facilitated the creation of a stronger visitor experience based on an analysis of visitor flow and visitor needs as they travel through the farm. The partnership also enabled strengthening core messages and learning elements throughout the site by bringing museological and design expertise as core to experiential learning design.

Hazelwood Herb Farm is an agritourism business that receives, on average, 2500 to 3000 visitors annually. The focus of Hazelwood Herb Farm is to maintain high quality traditional herbalist gardens while creating authentic high quality products ranging from beauty, health and culinary herbal products made with ingredients grown on site. Over its 25 years of operation, Hazelwood Herb Farm has been recognized for the quality of its products, and won awards for its medicinal cream to treat the symptoms arthritis. There, one can learn about the types of gardens and their relevance to the trade of herbalism, as well as the different techniques involved with infusions and the production of natural cosmetics. Summers provide an idyllic environment for visitors to linger into the gardens. The Économusée transformation at Hazelwood Herb Farm involved:

- Research
- Text Writing
- Production of all interpretive and exhibit elements on site to satisfy the 6 components
- Complete renovation of the boutique
- Many site improvements and repairs, including gazebo and greenhouse repairs.

The strategic partnership between Hazelwood Herb Farm and the Économusée project team facilitated the creation of a stronger visitor experience on site and increased tourism infrastructure by developing a site specific story, outlining unique characteristics of artisans at work, and by also developing an experience that in-situ demonstrates to the public the typical herbalist kitchen and gardens as authentic practice of herbalism as a trade today.

4. Evaluation and Surveys



Between July and September, 2012, 118 visitors from Hazelwood Herb Farm and Merridale Ciderworks responded to an online survey about their experience visiting the two Économusée sites. As well, our team proceeded to extract economic impact data from the two participating operators during the same period. This data is enabling us to report on the early impacts of this project on jobs, visitation and revenues. It is important to remember, when looking at Economic Impact data, the important limitations involved with the limited data obtained over such a short period of time (one quarter only has been measured thus far), and the importance of collecting and analyzing data of this nature on Économusée operators over a much longer period of time (ideally 5 years) to draw appropriate conclusions. That said, this information is key to get a good understanding of the various operator's profile, and some potentially early indicators of success. It is also important to note that we now have developed and tested an appropriate measurement tool that will aid in measuring impact over the long run.

Highlights visitor survey (extract from Impact Assessment Report produced by Vancouver Island University):

Survey respondents tended to be female (81%) over age 50 (60%) travelling in groups of two to five (81%) from British Columbia (73%), and mainly Vancouver Island (62%). Both sites showed high levels of repeat visitors. Hazelwood Herb Farm had more repeat visitors (70%) than first time visitors (30%). There were an equal number of repeat (50%) and first time visitors to Merridale Ciderworks. Purchasing products was the main motivating factor for visitors to both sites, and other popular motivators were exploring the area, supporting local producers, and spending time with family and friends. All visitors said that they were able to find products easily and most did not require assistance in finding products.

Most people did not know what an Économusée was before they visited either site (94%) nor did they have prior knowledge that the sites were part of the Économusée network (91%).

Despite the lack of recognition of the Économusée model, visitors evaluated the components of the sites very highly. The majority of visitors had high levels of satisfaction with the welcoming area, historical and heritage interpretation content, exhibit interactive displays, directional signage onsite, as well as with the boutique area and merchandising. Many visitors to both sites had no opinion on the educational video, site map, and site tour brochure.

Over 70% of visitors to both Hazelwood Herb Farm and Merridale Ciderworks heard about the sites through word of mouth. Most visitors to Hazelwood Herb Farm spent \$26-50 (55%) on purchases. Most visitors to Merridale Ciderworks spent either \$26-50 (31%) or \$51-100 (39%) on purchases. Among visitors to both sites, 88% described their onsite experience as either very good or excellent and over 95% of visitors to both sites would recommend the experience to family and friends.

Highlights from Economic Impact Assessment Analysis (Summary from Impact Assessment report produced for the project by Vancouver Island University):

Merridale Ciderworks has experienced a 7.7% decrease in visitors in the 2012 quarter (July-September 2012), however, the location has experienced a 7% increase in sales. Their total operating expenses have decreased by 0.7% in the 2012 quarter while the amount of Salary/Wages have increased by 7%. Merridale has experienced an 11% increase in profits to the business in the 2012 quarter.

Not all of the financial data is available from Hazelwood Herb Farm at this time; therefore, conclusions on the impact of the model are limited. Hazelwood Herb Farm received 7% more visitors in the 2012 quarter (July-September 2012), however, the sales have decreased by 8.5% compared to the previous quarter.

When the data generated are used in calculating the economic impact of visitation to Merridale Ciderworks for the 2012 year and a regional economic multiplier for the Ladysmith/Duncan area of 1.21, the resulting economic impact for the region is \$2,484,254.00. When applied to visitation and spending for Hazelwood with the same multiplier, the resulting economic impact for the region is \$193,757.00.

5. Man months of work represented in outlined work

Our calculations indicate that ÉCONOMUSÉE British Columbia Artisans at Work has provided 11.8 man months of work between October 1st, 2011 and November 30th, 2012.

6. Final Project Notes

We are very grateful for Island Coastal Economic Trust's financial support for Phase 1 of Économusée British Columbia Artisans at Work. The organization's contribution enabled our team to test all of the tools that are required to ensure the success of such an initiative in the long run. We have been able to solidify and forge very important partnerships with a variety of actors, which have all contributed to project success. We have also been able to gather data that is indicating that we are on the right track in terms of generating positive impact on the regional economy.

It is now our sincere wish to further this initiative on Vancouver Island, but also, in other regions of the province!

FINANCIAL STATEMENT

ÉCONOMUSÉE British Columbia Artisans at Work Pilot Project

Period: Oct 1st 2011 to December 31st, 2012

Project Expenditures

Equipment and Materials	\$ 28,308
Travel	\$ 11,624*
Consultants and Experts	\$ 107,926
Total Expenditures	\$147,858

Project Income (Sources of Funding)

Artisans & SDECB	\$ 33,422
Ministry of Jobs Tourism and Skills Training	\$ 30,898
Quebec Government	\$ 15,000
In-kind Donations	\$ 23,885
ICET	\$ 44,653**

Total Income (Sources of Funding) \$147,858

Balance \$0*

*This amount is higher than expected as the impact assessment work required a lot of travels to the ÉCONOMUSÉE sites. Additionally, there was an additional training opportunity for participating artisans in Quebec in May 2012.

** We totaled all expenditures as stated in the claims forms, and are coming short by 5442 dollars, and have reduced the ICET contribution by the proportional 30.2 % or \$1643.84 as a result already in our calculation. We did have additional donations by André and Associates in February of 2012. Hence, we would be able to complete the consultants and experts budget by the required amount to balance at 153,300 dollars, or our original budget if ICET considers this approach acceptable. Total received to date from ICET = \$37,040. Still to received = \$7613

I hereby certify that this statement accurately represents all project expenditures and all sources of project funding

J. Desaulniers JAN 25, 2013 JOHANNÉ DESAULNIERS
Financial officer Date 604-315-0538

October-December 2011

Man months calculation	Hours	Month= 150 hours for a 37.5 hour week
Graphic designer	95 hours	0.633333333
Interpretation & Design	111 hours	0.74
Expertise and training	109 hours	0.726666667
Research	66.6 hours	0.444
Support Expertise	26 hours	0.173333333
Total man months		2.717333333

January - March 2012

	Hours	Month = 150 Hours for a 37.5 hour week
Ladybird Communications	52.5	0.35
André & Associates	297.62	1.984133333
Pascal Bouchard	37	0.246666667
Horn of Plenty	150	1
Hey You Media	49	0.326666667

Société du Réseau

ÉCONOMUSÉE	131.28	0.8752
Total hours	717.4	4.782666667
Total man months	4.78266667	

July - December 2012

		Month = 150 Hours for a 37.5 hour week
Vancouver Island University	200	1.333333333
Merridale Ciderworks	231.666667	1.544444444
Hazelwood Herb Farm	218	1.453333333
Total Man Months		4.331111111

**Total man months for
Project**

11.83111111



ÉCONOMUSÉE

Pilot Initiative Evaluation Report

AN EVALUATION
OF THE
INTRODUCTION
OF THE
ÉCONOMUSÉE
MODEL TO
BRITISH
COLUMBIA:

First Quarter Report

December 2012

Report prepared by:

Dr. Nicole L. Vaugeois (BC Regional Innovation Chair in Tourism and Sustainable Rural Development), Marie-Pier Courbron, Luis Paulo Alves and Nichola Evernden

ÉCONOMUSÉE Pilot Initiative Evaluation Model

First Quarter Report

December, 2012

Prepared for:



La Société de développement économique de la Colombie-Britannique

220 - 1555, 7th Avenue West

Vancouver, British Columbia V6J 1S1

Prepared by:

Dr. Nicole L. Vaugeois, BC Regional Innovation Chair in Tourism and Sustainable Rural Development, Vancouver Island University

Marie-Pier Courbron (La Société de développement économique de la Colombie-Britannique), Luis Paulo Alves and Nichola Evernden, Research Assistants, World Leisure Center of Excellence in Sustainability and Innovation, VIU



Funding Support provided by:



ÉCONOMUSÉE PILOT INITIATIVE EVALUATION MODEL

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EXECUTIVE SUMMARY

INTRODUCTION

The purpose of this study was to assess the impact of the ÉCONOMUSÉE model for the first two pilot sites in British Columbia, Merridale Ciderworks and Hazelwood Herb Farm. The study was conducted to provide baseline data for the 2012 year and to report on impacts resulting after the first business quarter post implementation of the model (July – September 2012).

The two key guiding questions for the study were:

1. What is the economic impact or change in the economic performance at EACH of the pilot sites using the ÉCONOMUSÉE model?
2. How do visitors to EACH of the pilot sites evaluate their overall experience?

METHODS

Multiple methods were used to measure the impacts of the model on the firms and for visitor experience including in depth interviews with operators, analysis of secondary data, an online survey of visitors, and observation of site usage by visitors.

The Economic Impact portion of the study was done using a combination of secondary data analysis from the financial documents of the businesses by the owners. A spreadsheet was developed that identified and described the variables that the team needed to have measured to develop a baseline, the investment in the transition, and the initial impact.

The visitor experience portion of the study was done using an online survey that was completed by 118 participants. Visitors at each site were asked to enter their name onto a ballot for a chance to win a basket of goods from the business and, in exchange, they were allowing researchers to contact them by email to participate in the short survey. Additional observation was conducted at each site when researchers were present to watch for peoples' movement through the sites.

FINDINGS - ECONOMIC IMPACT

Merridale Ciderworks has experienced a 7.7% decrease in visitors in the 2012 quarter, however, the location has experienced a 7% increase in sales. Their total operating expenses have decreased by 0.7% in the 2012 quarter while the amount of Salary/Wages have increased by 7%. Merridale has experienced an 11% increase in profits to the business in the 2012 quarter.

Not all of the financial data is available from Hazelwood Herb Farm as this time; therefore, conclusions on the impact of the model are limited. Hazelwood Herb Farm received more visitors in the 2012 quarter, however, the sales have decreased by 8.5% compared to the previous quarter.

When the data generated are used in calculating the economic impact of visitation to Merridale Cidery for the 2012 year and a regional economic multiplier for the Ladysmith/Duncan area of 1.21, the resulting economic impact for the region is \$2,484,254.00. When applied to visitation and spending for Hazelwood with the same multiplier, the resulting economic impact for the region is \$193,757.00.

FINDINGS – VISITOR EXPERIENCE

Survey respondents tended to be female (81%) over age 50 (60%) travelling in groups of two to five (81%) from British Columbia (73%), and mainly Vancouver Island (62%). Both sites showed high levels of repeat visitors. Hazelwood Herb Farm had more repeat visitors (70%) than first time visitors (30%). There were an equal number of repeat (50%) and first time visitors to Merridale Ciderworks. Purchasing products was the main motivating factor for visitors to both sites, and other popular motivators were exploring the area, supporting local producers, and spending time with family and friends. All visitors said that they were able to find products easily and most did not require assistance in finding products.

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DISCUSSION

The study revealed positive first indicators of success with the operators' indicating that they felt the model added value to their businesses and that they were appreciative of funding support. Visitor experience is very positive overall which if maintained, is a strong indicator of increased visitation. At this point there is limited brand recognition for Économusée so it is necessary to elevate recognition of the brand among local markets. Visitor experience issues, such as signage, should also be addressed. Early trends in revenue increases from one operator indicate that revenues should increase in the first year of operation as ÉCONOMUSÉE. The evaluation model was found to be time consuming for the businesses and should be fine-tuned for ease of use for the next phase. The visitor experience model should have a longer, ongoing data collection period with a random sample intercepted on site as a complement to the voluntary ballot system used this period.

ÉCONOMUSÉE PILOT INITIATIVE EVALUATION MODEL

1. INTRODUCTION AND BACKGROUND

ÉCONOMUSÉE British Columbia Artisans Concept is trademarked and recognized by UNESCO as a model for the preservation of intangible heritage. There are currently 53 ÉCONOMUSÉES in Canada (Atlantic Provinces and Quebec). In 2012, British Columbia joined the ÉCONOMUSÉE network by opening its first two pilot sites at Merridale Ciderworks in Cobble Hill, and at Hazelwood Herb Farm in Yellowpoint. The purpose of this report is to report out on the initial impact of this model on the businesses and on the experience of their visitors in the first quarter post transition.

ÉCONOMUSÉE British Columbia Artisans at Work took hold in British Columbia as a result of a research and inventory project, conducted in 2009 and 2010 by the Société de développement économique de la Colombie-Britannique (SDECB) whose primary intent was to look at the fit of the ÉCONOMUSÉE model for the BC region as an economic development tool mainly in the rural context.



WHAT IS AN ÉCONOMUSÉE?

An ÉCONOMUSÉE® is a for-profit craft or agrifood business that uses authentic, traditional production techniques or know-how. It is a living environment that showcases artisans by opening their studios or workshops to the public and providing visitors with a unique and genuine learning experience. Each ÉCONOMUSÉE® also operates a boutique where it sells quality products representative of the business and its region.

The test region was first determined to be Vancouver Island for the following reasons:

1. The assumption that Vancouver Island is rich with high quality artisanal businesses;
2. The presence of SDECB lead staff in the region with the capability to undertake this process and travel at reduced costs in the region;
3. The assumption that projects such as Citta Slow (a slow food movement offspring), a clear taste for local terroir products demonstrated through various farm gate initiatives, the presence of the Island Chefs Collaborative, as well as an established wine route were all indications that a certification of excellence in traditional and authentic trades would find a suitable niche within the region.

The inventory of strong Island artisanal businesses, as well as the interest voiced by many emerging partners in the cultural tourism and agrifoods sectors substantiated a “raison d’être” for this approach to economic and tourism experience development.

In the spring of 2010, an advisory committee was formed to support the development of an ÉCONOMUSÉE Network, and it acknowledged the benefits of starting with a pilot project which would be funded by a variety of funding partners from Vancouver Island regions, the Province of British Columbia, the Quebec Government, as well as by Human Resources and Skills Development Canada as well as through private sector enterprises who would be participating in the pilot.

PILOT PROJECT SCOPE

The Pilot Project's objective was to provide a platform through which 2 test ÉCONOMUSÉE sites would be developed to showcase the model to the BC public as well as to visitors from different regions of Canada and the globe. By doing so, we postulated that we would create brand awareness, a greater understanding, regionally, of the ÉCONOMUSÉE model, as well as develop the tools, locally, to be able to undertake projects of this scope. In short, developing ÉCONOMUSÉE sites requires the following keys to succeed:

1. Artisan businesses that are committed to creating an authentic experience to visitors centered around their craft, processes, and unique story elements that define what makes them unique producers of high quality craft products.
2. A qualified team composed of the following key personnel: Project Manager, Communications and Marketing Officer, Interpretation planning and Design of Interpretation and Exhibits elements Experts, Research and Content development Experts, and Video and media producers.
3. The support of local partners and agencies able to provide contacts, know-how and expertise to the betterment of the initiative.

With these key success factors in mind, the pilot project enabled our team to test the model for the following benefits, as outlined and documented by the ÉCONOMUSÉE Network Society, founder organization of the ÉCONOMUSÉE trademark:

- A. Visitation levels should increase as of first year of operation as ÉCONOMUSÉE for the artisans
- B. Revenues should increase as of first year of operation as ÉCONOMUSÉE for the artisans
- C. Employment opportunities should increase over time within participating artisanal businesses.

IMPACT ASSESSMENT STUDY

This report's most important objective is to summarize the economic impact that the ÉCONOMUSÉE model has had for the 2 participating artisanal businesses (see figures 1 and 2) in the pilot project and on the region, with particular focus on the variables listed above. Also, it will present the impact that the model has had on visitors that were able to experience the ÉCONOMUSÉE promise for the first time on site in the summer of 2012.



THE SITES: MERRIDALE CIDERWORKS THE CIDER ÉCONOMUSÉE

Merridale is a Heritage cider apple orchard located in the Cowichan valley where climate conditions are suitable for the growth of world class cider apples. From harvesting, to pressing, to fermentation and bottling, visitors will discover each step required in the crafting of a great cider product.

The BC ÉCONOMUSÉE® Network Pilot project team has worked with the owners of Merridale to increase the focus and consistency of the visitor experience, providing expertise in museology, including design, research, interpretive text writing, graphic design, exhibitry and interactivity through games and technology.



THE SITES: HAZELWOOD HERB FARM THE HERBOLOGY ÉCONOMUSÉE

Hazelwood herb farm is also located in the Cowichan Valley, just North of Ladysmith. The farm is known for the incredible varieties of herbs grown and processed on site. Over 450 herbs are grown there, and their product line includes beauty, health, and culinary products. While the farm has been in operation for 25 years, a recent change in ownership, and a strong interest in increasing the visitor experience on site have created the right conditions for an ÉCONOMUSÉE® conversion to occur.

The BC ÉCONOMUSÉE® Pilot Project team worked to create a complete ÉCONOMUSÉE® experience on site, including site design, interpretive planning, research, guidance on capital investments in the boutique and outdoors infrastructure to the owners all constituted pieces of the work that were essential to meet the ÉCONOMUSÉE® criteria.

Figures 1 and 2: The Sites in the Pilot Study

BEYOND BC: SHIFTING EXPECTATIONS OF VISITORS AND THE FUSION OF EDUCATION AND CONSUMPTION

The ÉCONOMUSÉE model attempts to design a visitor experience that fuses education and consumption of products from artisans. This model aligns with research in a variety of fields including tourism, museology and consumer behavior¹. In essence, research studies are providing evidence that providing consistent, high quality visitor experiences is a complex challenge². Visitors are becoming more interested in authenticity where they evaluate the quality of their experience by how “real” they perceive it to be³. This sense of reality is heightened when visitors are able to learn about and interact with the environment they are visiting⁴. And, in order to provide learning experiences, many artisans are adopting practices from the museum world to provide visitors with a sense of knowledge about the places they are interacting with⁵. The addition of this learning component by businesses is believed to impact financial performance as well⁶. By observing the creation or manufacturing of a product provides evidence to the visitor that the products are “real” which creates more perceived value and also incents the visitor to take away a part of the onsite experience by purchasing products from the business⁷. As well, the perceived high quality of the products helps to create a customer base that has strong loyalty to products and businesses and as such, incents repeat visitation for additional purchases. When the experience and products are shared with others, a strong word of mouth or local marketing presence is established for the business⁸. Beyond the economic benefits that these trends have on artisans, others are also recognizing the important role that these businesses are playing to educate society on important issues of heritage and of the equally important role in heritage preservation.⁹ At a time when visitation to traditional heritage venues such as museums is on the decrease among Canadians¹⁰, the emergence of new venues that educate during the visitor experience are needed.

2. METHODOLOGY

The purpose of this study was to assess the impact of the ÉCONOMUSÉE model for the first two sites in British Columbia in terms of a) economic impact to the operation and b) visitor experience at the operation. The study was conducted to provide baseline data for the 2012 year and to report on impacts resulting after the first business quarter post implementation of the model (July – September 2012). The model, once developed, will be used to continue evaluation to monitor changes in all ÉCONOMUSÉE sites.

¹ Cameron, (2007).

² Chronis, (2012); Mehmetoglu et al (2011); Reussner (2003).

³ Davallon et al (2000); Lopez-Sintas et al (2012).

⁴ Grenier (2010); Macdonald (2007); McKay, (2007).

⁵ Bannon et al, (2005).

⁶ Hume (2011).

⁷ Geissler et al (2006).

⁸ Bonn et al, (2007).

⁹ Bryan et al, (2012). Corsane et al (2007)

¹⁰ Cheney, (2002).

The two key guiding questions for the study were:

3. What is the economic impact or change in the economic performance at EACH of the pilot sites using the ÉCONOMUSÉE model?
4. How do visitors to EACH of the pilot sites evaluate their overall experience?

The study was conducted by the ÉCONOMUSÉE project team at the Société de développement économique de la Colombie-Britannique with guidance and analysis support from Nicole Vaugeois and two research assistants, Luis Paulo Alves and Nichola Evernden from Vancouver Island University. The model was also developed collaboratively with the owners of the two sites who helped to construct the instruments for ongoing data collection.

In order to measure the impact of the model on the firm and for visitor experience, the study employed multiple methods including in depth interviews with operators, analysis of secondary data, an online survey of visitors, and observation of site usage by visitors.

The Economic Impact portion of the study was done using a combination of secondary data analysis from the financial documents of the businesses by the owners. A spreadsheet was developed that identified and described the variables that the team needed to have measured to develop a baseline, the investment in the transition, and the initial impact. Staff from the Société de développement économique de la Colombie-Britannique met with the business owners a few times throughout the summer to gather the data and when the spreadsheet data was complete, it was passed along to the Researchers at Vancouver Island University to analyze and report out.

The visitor experience portion of the study was done using an online survey by the staff of Société de développement économique de la Colombie-Britannique. Participants were recruited at each of the business sites where they were asked to enter their name onto a ballot for a chance to win a basket of goods from the business. In exchange, they were allowing researchers to contact them by email to participate in the short survey. Staff set up the ballot systems, monitored the ballots and sent requests to participate out weekly during the data collection period (6 weeks ending mid-September). Data were then provided to researchers at Vancouver Island University to analyze and report. Additional observation was conducted at each site when researchers were present to watch for peoples' movement through the sites.

The definitions and measurement of each of the key variables is listed below:

Economic Impact of the Model

Transition:

The transition refers to the total capital and operation investment by the business to incorporate the ÉCONOMUSÉE model.

Baseline:

In order to determine impact, the study had to determine baseline measurements for key economic variables such as visitation, revenue, expenses, and employment. The baselines are gathered for the 2011 Business year and also for each quarter. All baseline data provided by businesses was

done in confidence therefore baseline data is not reported here but measured as a 0. Subsequent changes in quarters are then presented as a positive or negative percent change to the baseline.

This report will compare the impact in the July to September period in 2012 against the same quarter in 2011. Consecutive reports will continue to monitor impact and when annual results are available, report out on annual comparisons will be possible.

- **Revenue Baseline:** The revenue from total operations in 2011 and for the July – September 2011 quarter.
- **Impact:** The percent change in revenue after transition to the ÉCONOMUSÉE model.
- **Jobs Baseline:** The total number employed in the business (could express in person years) including salaried employees and entrepreneurs
- **Impact:** The change in the number of jobs post ÉCONOMUSÉE expressed in part and full time jobs/ seasonal and non-seasonal.
- **Spin offs from investment** Additional spin offs or new economic activity that has not been captured above including new partnerships, opportunities, products, expansion
- **Economic Impact of visitor spending:** Annual visitation data X Average visitor spending X Regional Economic Multiplier

Visitor Experience

- **Motivation for the visit**
- **Satisfaction** with overall experience, products and with specific design components introduced in the ÉCONOMUSÉE model (see figure 3).
- **Spending** on products during the visit
- **Return visit** : Average number of times repeat visitors have visited, change in experience for return visitors
- **Demographics** including age, gender, group size, origin.



Figure 3: Six Components in the ÉCONOMUSÉE Artisans at Work Model

LIMITATIONS

The findings of this study are limited in that:

1. They express the impact of the model in the first quarter post transition to the ÉCONOMUSÉE Artisans at Work Model. Consecutive assessments will provide a better indication of the impact of the model at the business level.
2. The external environment that performance is being based upon is important to note. In the 2012 year, BC has received less tourism from the US¹¹, and that the number of tourism businesses/establishments has decreased 1.1% in Vancouver Island in 2011¹². Also, BC Stats indicate that in 2011, the tourism sector GDP was lower in relation to the provincial economy and has decreased when compared to 2010 and 2009. In addition, BC Stats indicate that even though the service industry outperformed BC's economy, tourism was still lower than both. And also, if compared to 2010 (the year of the Olympic Games), the tourism industry in BC only grew 1.2% as opposed to 3.4% in 2010. These trends in tourism visitation should be taken into account when reviewing the visitation data for the two businesses studied.
3. The assessment measures are being employed for the first time and as such, the data collection work at the business level was time consuming and required collaboration and communication with the team. Each business keeps records of data differently and as such, efforts to report the variables out in a consistent manner was difficult. As well, some data

¹¹ Canadian Tourism Commission: 2011 Year in Review: Tourism Snapshot.

¹² BC Stats: Tourism Indicators, October 2012 Issue 12-01.

was not yet available to the businesses for the time period needed, so the report out on impact is only provided for one business in the model. Updates will be provided when data is available for analysis.

4. The response from the visitor experience survey was low and based only on six weeks of collection. The overall response limits the ability to make generalizations about overall visitors to the sites. Similarly, the data is not a random sample so this should not be used to identify profiles of the visitors to these sites.
5. The ÉCONOMUSÉE Artisans at Work Model is new in the marketplace and time for the impact of the brand to realize has not yet occurred. Therefore, the low recognition of the brand in the visitor survey should not be attributed to the marketing efforts that have taken place. Subsequent monitoring should produce more reliable measures of the effect of the brand in the marketplace.

3. FINDINGS

4.1 EARLY INDICATORS OF SUCCESS

Early observations and evidence from the qualitative interviews with operators identify some of the key benefits of the ÉCONOMUSÉE development approach for participating artisan businesses.

- a. Belonging to an international standard such as the ÉCONOMUSÉE trademark provides value to businesses that wish to differentiate themselves within their market. The reputation and reliability of the network reflects a high standard of quality in a competitive international market, a clear value for the members.
- b. The shared marketing opportunities that are created through partnering with the ÉCONOMUSÉE marketing program benefits participating artisan businesses. It allows businesses to tap into new markets while providing input into the marketing development process. For instance, the accessibility of the signage in both official languages has opened the market to a Francophone clientele that was previously not accessible to businesses.
- c. The implementation of the six components of the model has increased the overall value of businesses and their infrastructures. The various renovations capital improvements undertaken during the course of the ÉCONOMUSÉE site development process in the boutique have created a more favorable environment for potential customers. The shop area provides a better access to the general public and the signage improves navigation onsite. As well, the interpretive material provides a tangible learning experience for the visitors.
- d. The diversity of partnerships & networking opportunities has created added value for businesses as it enlarged the spectrum of promotional opportunities across the globe. As the model relates to current trends in the market, artisans are able to connect and identify with many organizations through areas such as tourism, Environmental Self-Sustainability, Education, Heritage, Culture, etc.

- e. The further development of the network within British Columbia could benefit artisans in strengthening partnerships and therefore increasing the impact of brand recognition in key regions across the province BC.

4.2 IMPACT ON ECONOMIC PERFORMANCE

The impact on economic performance at the business level was determined using a range of variables. Table 1 provides a summary of the change at the business level on the key economic indicators for both of the sites.

Table1: **Change at the Business Level on Key Economic Indicators**

Economic indicator studied	2011 Baseline for Year	2011 Baseline for First Quarter (% of baseline)	Investment in ÉCONOMUSÉE Model	First Quarter Impact (% change)	Recovery on Investment to date (profit to investment)
Merridale Ciderworks					
Number of Visitors	30,000	65%		-7.7%	
Employment	15-20 FT and 20-22 PT				
Sales	Data protected	61.2%		7%	
Operation Expenses	Data protected	55%	\$ 18,002.00	-0.7%	189%
Salary/Wage expenses	Data protected	62.8		7%	
Profit	Data protected	65.30%		11%	
Hazelwood Herb Farm					
Number of Visitors	3144	26.2		7%	
Employment	3 FT Seasonal 2 PT Seasonal				
Sales	Data protected	26.3		-8.5%	Cannot determine at this time
Operation Expenses	Data protected	27.7	\$ 20,289.66	Not available	
Salary/Wage expenses	Data protected	36.9		1%	
Profit	Data protected	15.3		Not available	

MERRIDALE CIDERWORKS

Merridale has experienced a 7.7% decrease in visitors in the 2012 quarter when compared to visitation in the 2011 baseline year; however, the location has experienced a 7% increase in sales. Total operating expenses has decreased by 0.7% in the 2012 quarter while the amount of Salary/Wages has increased by 7%. The site has experienced an 11% increase in profits to the business in the 2012 quarter. While the cause effect relationship cannot be directly attributed to the

ÉCONOMUSÉE model, it is possible to say that the location has received a fairly good return on the investment made (189%) as the increased profits in this quarter alone cover the costs of investing in the model.

Additional qualitative data suggests that the owner believes that there has been an added value to the location after adopting the ÉCONOMUSÉE model. She also believes that the French component of the model can contribute in expanding her business to a potential French Canadian and International Francophone clientele.

The owner did not hire any extra staff to launch the project; however, she mentioned that it was necessary to spend many hours over six months in order to make the appropriate adjustments to the location. In addition, the owner at Merridale stressed that without the external financial support provided, she would not have participated in the project.

HAZELWOOD HERB FARM

At this point in time, not all of the financial data is available from the Hazelwood Herb Farm therefore conclusions on the impact of the model are limited. Opposite to the Merridale Ciderworks location, even though the location has received more visitors in the 2012 quarter, the sales have decreased by 8.5% compared to the previous quarter.

The qualitative data suggested that the owner agrees that the investments made added value to the location. Moreover, the owner believes that tourists (people coming from outside of the community) do not buy products at the same level as locals or repeat visitors. The owner also highlighted that the time constraints of being a producer limits the time available for marketing. As a consequence, the owner feels that small businesses may depend on ÉCONOMUSÉE to market the products in order to position the model in the marketplace and hopefully increase sales by visitors. Similar to Merridale Ciderworks, the owner stressed that she would not have undertaken the project without the external financial support provided.

4.3 ECONOMIC IMPACT OF VISITOR SPENDING IN THE REGION

While not a direct measure of the change in economic performance of the sites, the data obtained allow for another baseline estimate to be generated and monitored as well. Tourism Economic Impact analysis uses visitor numbers and visitor spending to produce an estimate of the greater impact that tourism spending can have in a regional economy. This figure is worth monitoring as the ÉCONOMUSÉE¹³ model is incorporated into the Central Island region. In order to obtain an estimate of the visitor spending in the region, data were inserted into the following formula¹⁴:

¹³ It is worth noting that this formula is used to measure impact of visitors and as such, estimates new money entering the regional economy. The customer base for the sites is comprised of regional visitors, many who can be considered local. The estimates have been generated using conservative figures for spending based on the survey data obtained which should balance out any over-estimate due to locals in the data.

¹⁴ Dan Stynes, Michigan State University. Economic Impact Calculator for Tourism

$$\text{NUMBER OF VISITORS X AVERAGE SPENDING PER VISITOR} \\ \text{X REGIONAL ECONOMIC MULTIPLIER} =$$


ECONOMIC IMPACT OF VISITOR SPENDING

When the data generated are used in calculating the economic impact of visitation to Merridale Cidery for the 2012 year and a regional economic multiplier for the Ladysmith/Duncan area of 1.21¹⁵, the resulting economic impact for the region is \$2,484,254.00. When applied to visitation and spending for Hazelwood with the same multiplier, the resulting economic impact for the region is \$193,757.00.

4.4 VISITOR EXPERIENCE

A BIT ABOUT THE RESPONDENTS

The visitor experience online questionnaire included a sample of 118 people who had either visited Hazelwood Herb Farm (56%) or Merridale Ciderworks (44%). The respondents to the survey tended to be female (81%) over age 50 (60%) travelling in groups of two to five (81%) from British Columbia (73%), and mainly Vancouver Island (62%).

Hazelwood Herb Farm had more solo visitors (18%) than Merridale Ciderworks (4%). The majority of visitor groups were pairs, a partner/spouse, friend, or family member, or groups of 3-5 people. First time visitors were less likely to be visiting the site alone and more likely to be in a larger group of people.

FIRST TIME VS. REPEAT VISITORS

Both sites showed high levels of repeat visitors. Hazelwood Herb Farm had more repeat visitors (70%) than first time visitors (30%). There were an equal number of repeat (50%) and first time visitors to Merridale Ciderworks. The majority of visitors to Hazelwood Herb Farm had visited the site either 1-5 times (56%) or 6-10 times (34%) in the past three years. The majority of Merridale Ciderworks' visitors had visited the site 1-5 times (80%) in the past three years, (see Figure 4).

¹⁵ Regional Economic Analysis: Vancouver Island and Central/Sunshine Coasts: Final Report, 2009 (p-95).

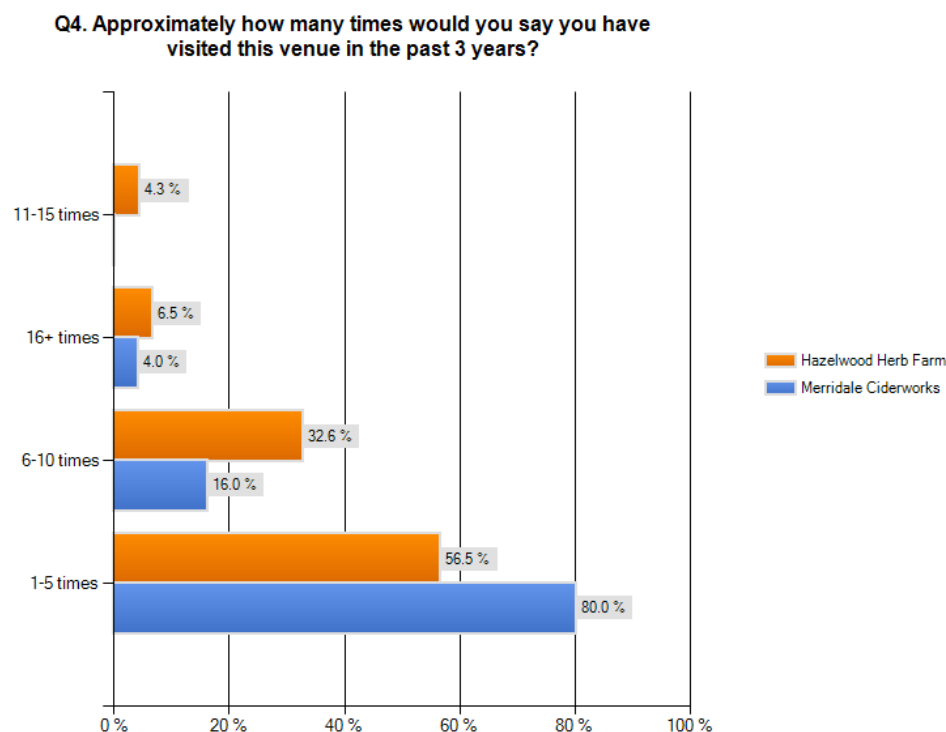


Figure 4: Past visitation at the Sites

MOTIVATIONS FOR VISITING

The majority of visitors to Hazelwood Herb Farm visited the site for the purpose of purchasing products (82%) and supporting local producers. Visitors to Merridale Ciderworks appear to be motivated by a range of factors including visiting for the purposes of spending time with family and friends or to enjoy a meal (see figure 5). The survey found that for both sites, purchasing products was the main motivator for repeat visitors. For first time visitors the top motivators were purchasing products, exploring the area, supporting local producers, and spending time with family and friends. Many of the open-ended response also stated spending time with family and/or friends influenced their visit; for example, some comments included “to introduce a friend to the herb farm” and “to bring family to a tasting and see Merridale.” Other visitors stated that they were motivated specifically for the purpose of purchasing products; for example “I wanted to purchase a specific hard to find plant” and “really love the apple cider from Merridale Ciderworks.” Other visitors mentioned they were at the site because they were “exploring the countryside” and “to learn about herbs and flowers that have uses other than ornamental.”

Q2. What brought you to visit this site? Choose all that apply

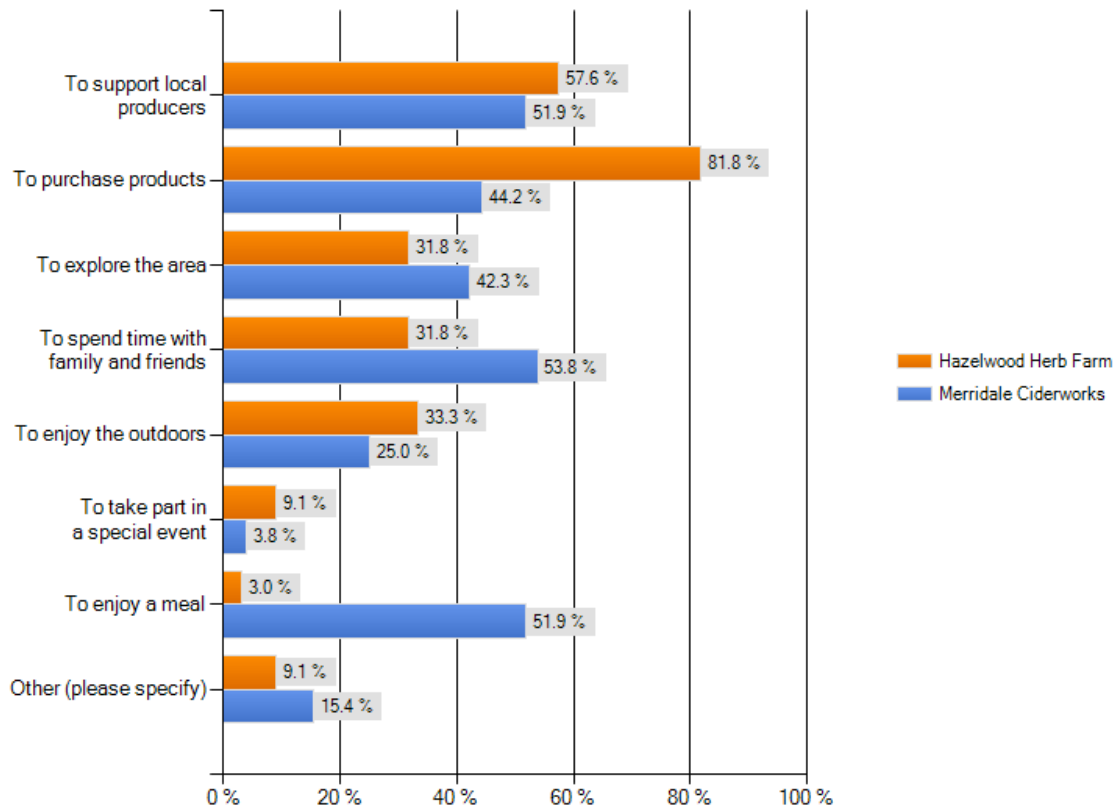


Figure 5: Motivations to visit the Sites

RECOGNITION OF ÉCONOMUSÉE SITE

Most people did not know what an Économusée was before they visited either site (94%) nor did they have prior knowledge that the sites were part of the Économusée network (91%). The open-ended responses found that several people indicated Économusée made no difference to their visits; some of these comments were “it didn’t, I was there to make a specific purchase” and “I still don’t know what it is.” However, others indicated that it enhanced their experience and commented “loved the information that made my last visit seem like a brand new experience to Hazelwood Herb Farm” and “improved experience – very educational” (See Appendix A).

MARKETING INFLUENCE

Over 70% of visitors to both Hazelwood Herb Farm and Merridale Ciderworks heard about the sites through word of mouth, see Figure 6. While a small number of visitors mentioned hearing about the sites through the operator’s website, tourism brochures, and educational signage. The open ended responses indicated that they discovered the sight on the Internet by an “Internet search for places to eat between Victoria and Ladysmith” and “Internet tourism search (hellobc) and friends. “It is notable that nobody attributed social media as their source of information.

Q7. How did you hear about the site?

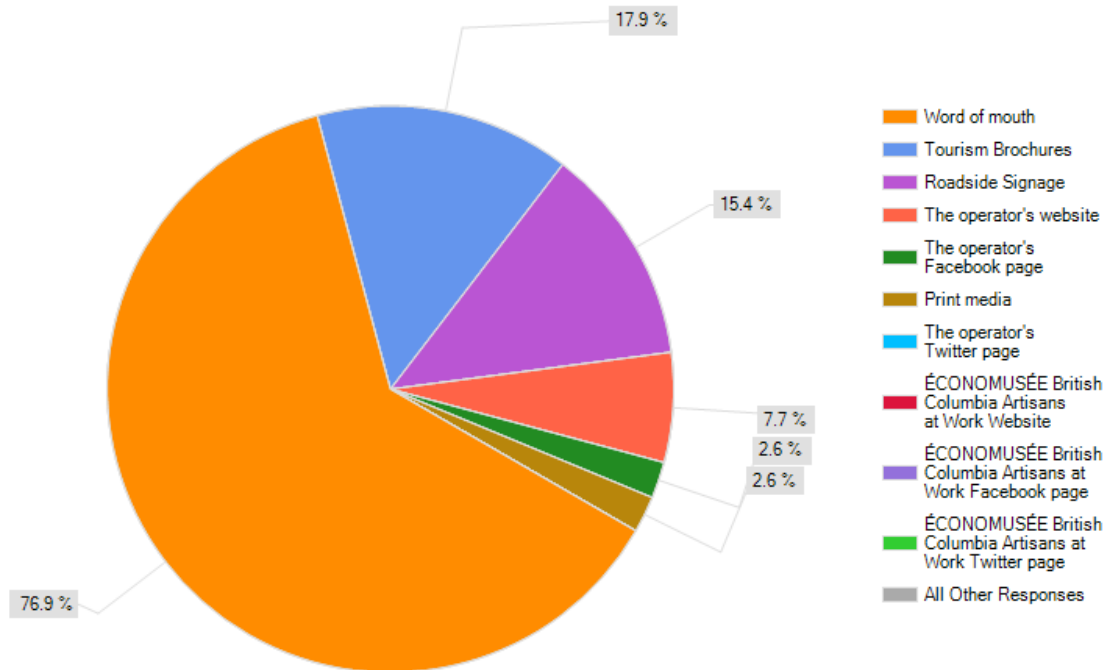


Figure 6: How visitors heard about the Sites

THE ON SITE EXPERIENCE

Among visitors to both sites, 88% described their onsite experience as either very good or excellent. Over 95% of visitors to both sites would recommend the experience to family and friends. In response to why they would recommend the site, the most popular answers were related to the quality of the products, such as “excellent products, good displays, helpful information”, and the enjoyment of the experience, for example “an interesting and unique experiences – very enjoyable” (see Appendix A).

THE ÉCONOMUSÉE COMPONENTS

The majority of visitors to both sites felt that the effectiveness of the welcoming area (86%), historical and heritage interpretation content (68%), exhibit interactive displays (63%), and directional signage onsite (75%) were adequate or excellent. In regards to the effectiveness of the ÉCONOMUSÉE onsite design experience, a couple of visitors mentioned that they were at the site for a specific purpose, either purchasing product or having lunch, so they did not experience the ÉCONOMUSÉE onsite design.

Many visitors to both sites had no opinion on the educational video, site map, or tour brochure. Over 73% of visitors to both sites felt that the boutique area and merchandising were excellent. Over 95% of visitors to both sites would recommend the experience to family and friends. All visitors said that they were able to find products easily and most did not require assistance in finding products. For people that did require assistance indicated that they either required information, clarification, or a recommendation or needed help in locating a product.

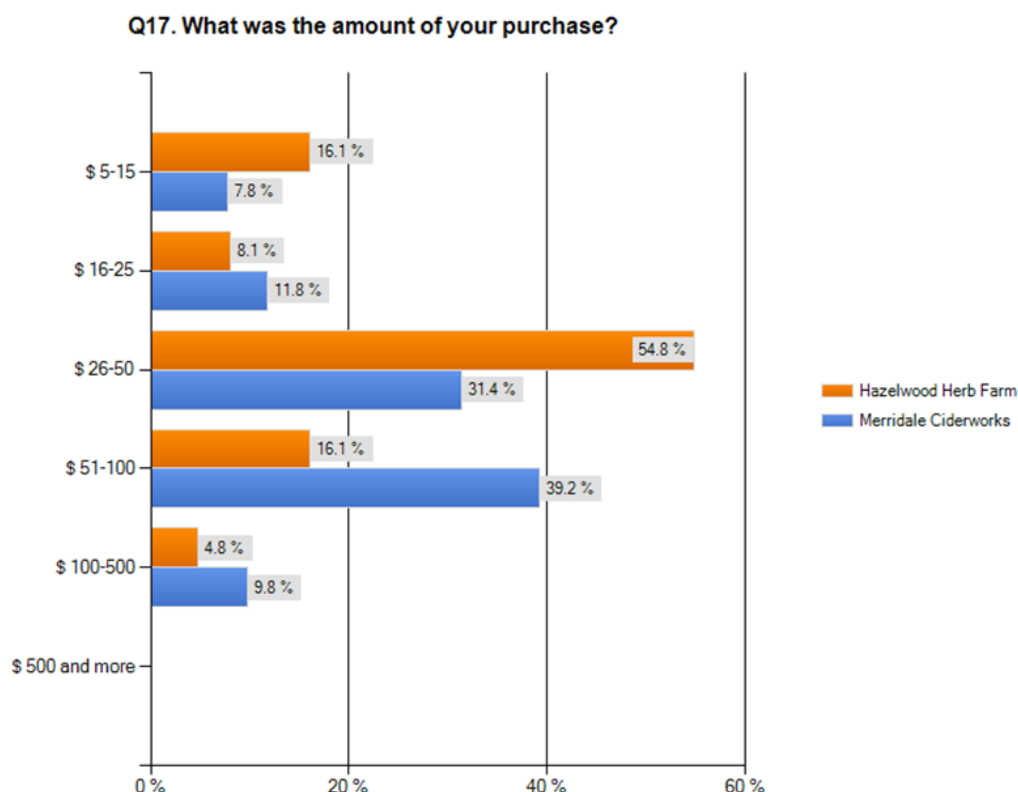


Figure 7: Visitor Spending at the Sites

Most visitors to Hazelwood Herb Farm spent \$26-50 (55%) on purchases. Most visitors to Merridale Ciderworks spent either \$26-50 (31%) or \$51-100 (39%) on purchases, see Figure 7. There was no difference in the amount of purchases among first time and repeat visitors.

4. DISCUSSION

This report has highlighted specific economic impact and visitor satisfaction results for both of the initial ÉCONOMUSÉE sites. However, as this is only the first quarter in which this evaluation model has been applied, it is still too early to draw strong conclusions on the impact of the model in the province. The value of this report is to communicate the baseline on the indicators and report out on initial indications of success. It is still necessary to keep tracking the progress of the operations each quarter in order to provide more evidence on the performance of the model in BC.

At this point in time, it appears that there are several positive indicators of success for the ÉCONOMUSÉE model as discussed below:

The MOTIVATIONS OF THE OPERATORS align with the documented benefits of ÉCONOMUSÉE in other contexts. During interviews in the first quarter, both businesses expressed that the changes made after adopting the model have added value to their business. Moreover, the opportunity to expand into different target markets (Canadian and international francophone markets) was also identified by one of the operators. The take up of the model was enabled by the funding support provided and both businesses indicated that this was appreciated, but furthermore, it was critical to their decision to engage in the pilot. In order to expand the model into other artisan sites in the region (i.e. cluster approach), additional support for future operators may be required.

It has been identified that VISITATION LEVELS should increase in the first year of operation as an ÉCONOMUSÉE site. One site experienced higher levels of visitation, but lower spending, and the other one has lower visits but higher spending. This could be due to a variety of externalities, beyond the scope of this study.

Overall, VISITOR EXPERIENCE was very positive. This could be an indicator of potential for increased visitation, particularly due to the dominance of local traffic and reliance on word of mouth marketing. As long as visitors are satisfied with their experience and the products provided, the numbers should increase.

As long as visitors are satisfied with their experience and the products provided, the numbers should increase.

There was also HIGH REPEAT VISITATION at both sites which appears to be highly LINKED TO THE PRODUCTS. However, it is unclear to what extent visitors are viewing the education or interpretive elements as core to their experience. As the ÉCONOMUSÉE model becomes more familiar in the region, the recognition and value of the interpretive aspects of the business should increase. There may be an ability to elevate the recognition of this component for each of the sites involved to differentiate them from other producers and to add value to existing visitors. There is limited brand recognition of the ÉCONOMUSÉE concept at this point. Further efforts to elevate the brand among locals is needed and perhaps targeted efforts to inform first time visitors and tourists of the unique attributes of these businesses will motivate increased visitation.

Moreover, issues with visitor experience such as signage should be addressed. Enhancing the awareness of the components on site would provide a better indication of visitor satisfaction with these elements in further evaluation. This could be done in advance of visitation, via marketing efforts and also on site strategies to “renew” repeat customers interest and knowledge in the sites could be considered.

Revenues should increase as of first year of operation with the ÉCONOMUSÉE model. Data from the first quarter indicate that this is likely to occur as one operator not only recuperated the investment in the model in the first quarter, but also outperformed the revenues from the previous quarter. Once final data is available for the second site, this trend may be replicated and as such, would provide strong initial evidence of the impact of the model on business performance.

Employment opportunities should increase over time within participating artisanal businesses. Even though employment numbers were held constant for the operators, spending on salaries and wages increased in both businesses, indicating that the demand for work exists, and the ability to pay for the additional labor is also present. While the first quarter data is provided as number of full and part time seasonal workers, the second quarter data should be gathered in a way as to allow for person hours of employment which would allow for better observation of impact on employment.

Further efforts to elevate the brand among locals is needed and perhaps targeted efforts to inform first time visitors and tourists of the unique attributes of these businesses will motivate increased visitation.

Discussion on the evaluation model

The evaluation model put in place has shown to be time consuming for the businesses. Therefore, recommendations to improve the model in the next phase would be to fine tune the excel spreadsheets for simple data entry and also the need to establish set deadlines that are feasible and in line with business financial recording schedules. This way it could be easier for the operators to input their data, and make analysis more efficient.

In regards to the visitor experience model, it is recommended to put in place longer data collection periods (8-12 weeks) and to have it ongoing in each season. This would provide for greater numbers of visitors to be incorporated and changes in seasons and the development of visitor profiles to emerge. The data collection process, done by a voluntary ballot system, is useful. But the data are not from a random sample of visitors and as such, generalizations cannot be made as some people may be more inclined to participate than others. This model was chosen as on site researchers were not available due to budget. Should resources exist, efforts should be made to complement the data with a random sample of visitors who are intercepted on site at the venues when they are leaving. This process would allow for the development of ÉCONOMUSÉE visitor profiles and allow operators the chance to implement marketing strategies that will reach out to desired markets.

Finally, Social Media is also being considered for marketing the ÉCONOMUSÉE model on Vancouver Island. There is already some online presence established, however, it still has not been used as a potential data source. The next phase can include an assessment of online presence and include questions on the visitor survey to also measure if visitors are using the social media to learn about the sites or model.

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APPENDIX A: RESPONSES TO OPEN-ENDED QUESTIONS FROM THE VISITOR SURVEY

Q2. WHAT BROUGHT YOU TO VISIT THIS SITE?

FAMILY/FRIENDS

- "To introduce a friend to the herb farm."*
- "Visiting friends who lived close to your Farm."*
- "Special day out with my sister-in-law."*
- "To bring family to a tasting and see Merridale."*
- "Friends introduced us to this place."*

PRODUCT

- "I love the product!"*
- "I wanted to purchase a specific hard to find plant."*
- "We always shop at Hazelwood when visiting family in the area."*
- "Really love the apple cider from Merridale Ciderworks."*
- "To see where the great cider is made."*

OTHER

- "Exploring the countryside."*
- "Future wedding site."*
- "Wine tour."*

EDUCATION

- "To learn about herbs and flowers that have uses other than ornamental."*

Q5. DID YOU KNOW WHAT AN ÉCONOMUSÉE WAS BEFORE YOUR VISIT? - HOW DID IT AFFECT YOUR EXPERIENCE?

POSITIVE

"Improved experience - very educational."

"It was very pleasant."

"Loved the information that made my last visit seem like a brand new experience to Hazelwood Herb Farm."

"Mild interest."

"For the better."

NEUTRAL

"? I still don't know what it is...."

"It didn't!"

"It didn't affect my experience."

"Not at all."

"No different."

"It didn't."

"It didn't -- I was there to make a specific purchase."

"Not at all."

"Being from Quebec I thought Ecomusée meant the same thing. This could be clarified, if different."

"Liked to have the posting seen better. I'm not so sure it was displayed well."

Q7. HOW DID YOU HEAR ABOUT THE SITE? - OTHER

INTERNET

"And via Google"

"Internet search for places to eat between Victoria and Ladysmith."

"Internet tourism search (hellobc) and friends."

PERSONAL RECOMMENDATION

"A friend"

"Friend, who lived near you, wanted to see it."

"Local people told me."

"Friends had been before and wanted to show us."

OTHER

"Day trip from Kent Street Seniors."

"Wine tour."

Q10. HOW WOULD YOU RATE THE EFFECTIVENESS OF THE ÉCONOMUSÉE EXPERIENCE DESIGN
ONSITE? - OTHER

SUGGESTIONS

"Need better ID signs for individual plants in the gardens."

"Need more shade for outdoor events?"

"You need a category between adequate and excellent - good perhaps?"

OTHER

"Bakery."

"Completely unaware of the ÉCONOMUSÉE - just thought it was Merridale."

"I really didn't experience the ÉCONOMUSÉE Experience this time. I was there for a specific purchase and left immediately."

"Quickly went to lunch then shopped so didn't get to tour this time."

"I didn't see the other areas."

"I have no idea what this means."

Q11. HOW WOULD YOU RATE EACH OF THE FOLLOWING? - OTHER

HAZELWOOD HERB FARM

"Didn't see a site map or brochure."

"I've been to HHF so many times; I simply don't notice these types of things."

"More signage leading to the property would be helpful to those who are unfamiliar with the area"

MERRIDALE CIDERWORKS

"Paper maps/brochures unavailable and signage was confusing. We were unsure if we were allowed into the cider house part, did not really show from the outside of the building."

"We did not have a map or site tour brochure. It would be helpful if the road signs were bigger."

Q12. WOULD YOU RECOMMEND THE SITE EXPERIENCE TO FAMILY AND FRIENDS? - WHY?

HAZELWOOD HERB FARM

"Unique shopping experience in a great setting."

"An interesting and unique experience/very enjoyable."

"It added a new positive dimension to our visit."

"It was a great experience."

"It was fun."

"It's pleasant and interesting and they have nice things."

"Unique experience."

"Enjoyed information about the various plants."

"Relaxing, informative."

"Gardens were weedy and unkempt looking. No welcome from staff. Looked very untended--as if someone had once cared but no longer does..."

"Excellent products, good displays, helpful information."

"Excellent products."

"Excellent products."

"Excellent products."

"Excellent products to buy."

"For the products, welcoming atmosphere, and gardens."

"I love the product and its local."

"It's a lovely place, and we love the products. Especially the chai tea."

"Local products."

"Lot's to see and learn lots of well-priced high quality gifts and personal items."

"Love the products."

"Wonderful products."

"Wonderful relaxing organic place with lovely products."

"Good little store."

"I always take guests to Hazelwood."

MERRIDALE CIDERWORKS

"We enjoyed our visit and meal so will pass it on to others."

"Went for lunch."

"Fabulous."

"Fun and interesting place to visit where you get to sip yummy drinks before exploring."

"Interesting, family friendly."

"It is very interesting and easy to follow."

"It's local, it's lovely, it's not too big or too small, it's a one stop for more than one purpose if that's what you choose.. I love it!"

"Pleasant atmosphere and interesting once we were in the building."

"Simply a lovely place."

"It's a pretty site, the food is quite good, and it's educational."

"I learned a lot of new and interesting information about Cider."

"Amazing food, beautiful surrounding, and local products."

"Tasty food, beautiful site, interesting "story" about cider, unique local products."

"I would definitely recommend others to visit."

"Food not good at Merridale Farms."

Q16. DID YOU NEED ASSISTANCE TO LOOK FOR PRODUCTS? WHY?

REQUIRED INFORMATION, CLARIFICATION, OR RECOMMENDATIONS FROM STAFF

"Associate answered questions I had regarding the products."

"Clarity."

"Unfamiliar with herbs."

"I wanted some opinions on what to purchase."

"I was uncertain as to the "flavour" of cider to choose...the staff was very helpful."

"I needed to ensure that the products I was purchasing are gluten free."

"Information."

"Products were available in various sizes and I needed assistance to determine the most economical size."

REQUIRED ASSISTANCE IN LOCATING A PRODUCT

"Soap I wanted was out of stock on the shelf."

"They were no longer packaged the way I had found them before."

"They were out of one product that we were interested in but had more in the storeroom."

"Couldn't find some things."

"I didn't see the plant in the display so I asked."

"Not sure where the desired products were."

Just needed a different size of product."

"I wanted lavender oil in a larger amount than what was on display."

"Packaging was changed since last visit."

HERBOLOGY, HUMANS AND HAZELWOOD HERB FARM



Written by Jenny Horn PhD
and Susan Wells BA

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History of Herbs and Humans

Folk medicine and folk lore worldwide provide evidence of the long use of herbs by humans; the study of herbs and how their unique characteristics can serve humans is an ancient craft. “Herbology” has been practiced since early humankind made note of a plant’s distinct characteristics or observed how plant was used by other species that lived in the region. Locally, aboriginal peoples continue to use native plants for many purposes, respectfully cultivating some and wildcrafting others. Worldwide, botanical gardens and seed repositories collect, identify, document, exhibit and propagate plant species for preservation, research, and for the enhancement and survival of humankind.



1 Woodcut of Woman Gathering Herbs

Studies of folklore from early Europe to the 20th century show that distinctions between schooled medical professionals, ecclesiastical healers, and illiterate “wise-women” herbalists are very hard to make. In fact, the existence of folk medicine is accepted by scholars even though there are no references to the healers themselves throughout the history of folk medicine ¹. Once associated by Western society with witchcraft, herbs remain powerful allies for assuring the health of humans, as well as that of pets and livestock. Contemporary society has rediscovered the ancient fascination with herbs, and many traditional healing claims are now being confirmed by science.

As the Herbalism site for the BC ECONOMUSEE Network, Hazelwood Herb Farm celebrates traditional and modern techniques to propagate herbal plants and transform them into a wide range of herbal products. Local lore, ancient wisdom and the vision of the founders of Hazelwood Herb Farm all inspire the current owners, Barbara Stevens and Mark Warrior, to carry on an age-old tradition as Herbalists. Unique to Hazelwood Herb Farm is the collection of over 450 herbs that are cultivated on site.

As objects of human transformation, herbs are living artefacts that are cultivated or gathered from the wild and then crafted by skilled artisans into high-quality products for health, utility, and pure enjoyment.

When is an herb not a spice?

Herbs are not spices but are aromatic plants whose leaves, fruit, flowers or stems are used to flavour food or give potency to health and beauty products (think of rosemary or chamomile). The term Herb is also used when any plant parts are prepared for medicinal or other use ⁴.

Spices are typically tropical plants whose bark, roots, seeds, buds or berries add zest to food with their aromatic and pungent properties (think of cinnamon or nutmeg). The term Spice is not used when the plants are prepared for medicinal or cosmetic use ⁴.

“Herbology” refers to the study of the production and use of plant-based products for culinary, medical, spiritual and cosmetic purposes. The plant components used could include leaves, stalks, bark, roots, seeds, fruit or flowers⁴. The use of plants for healing the body is also called botanical medicine, naturopathy and more recently, phytotherapy.

The preparation of food has historically included herbs for flavour, aroma, colour and shelf life. Herbs and herb-based preparations are likewise a large component of traditional medicine as well as being used for modern treatments. Traditional sacred herbs such as sage, cedar, tobacco and sweet grass continue to be offered in Amerindian healing ceremonies. Cosmetics and body care products have relied on herbal ingredients that may cleanse, enhance and perfume the body.



2 Cumin and Dill listed in Dioscorides' *Materia Medica*, c. 1334

Herbs: Magic, Medicine or Myth ?

The ancient knowledge that herbalists pass on about their craft is time honoured and still respected in cultures throughout the world. Today, the World Health Organization acknowledges global herbal use, recognizes the importance of herbs to large populations in the world, and they are strongly supportive of the preservation of indigenous pools of knowledge³. To many impoverished people, wild and free sources of herbal remedies are still the only treatments available.

In order for oral traditional knowledge to be preserved, many herbalists rely on the passing down of knowledge and experience to decide upon the most appropriate herb or herbal preparation for an intended use. This shared knowledge base is truly an “open source” of information. At the same time, years of rigorous research and education is imperative for any herbalist to become proficient in their practice. Deeper understanding can also be built on the sturdy foundation of mentorship and empirical or experiential knowledge.

Herbal Artisans at Hazelwood Herb Farm

Preserving knowledge, sharing that knowledge and bringing more exposure to the use of herbs is the shared vision of Barbara Stevens and Mark Warrior, who purchased Hazelwood Herb Farm in 2010. They now cultivate over 450 varieties of herbs and forage for others to flavour or preserve food, to keep people and livestock healthy, and to make beauty and household products.

The original owners of the Hazelwood Herb Farm were Jacynthe Dugas and Richard White, the husband and wife team who created the farm. They transformed a love of helpful plants in their Nanaimo backyard into a business when they relocated to this site in 1986. Their successful business initially provided nursery stock of unusual or important herbs but this evolved into the production of a wide range of health, beauty, culinary and botanical plants and products.



3 Entrance to Hazelwood Herb Farm

When Barbara and Mark bought Hazelwood Herb Farm from Jacynthe and Richard in 2010, it was inevitable that the production methods and recipes that attracted a loyal customer base would be shared. As Barb and her skilled staff enhance the farm with their personal style and product line, the tradition of herbal production and processing continues.

Barbara, Mark and the staff are studying together to continuously increase their knowledge as they follow in Jacynthe and Richard's footsteps. Indeed, one of the founding families of the North Oyster district (where

Hazelwood Herb Farm is located) practiced healing themselves, and they would be pleased to watch the next generation of herbalists advance their knowledge of the traditional craft.

Healing History in the District

The town of Cassidy in the North Oyster district of south eastern Vancouver Island was named for an Irish farmer who was the descendant of hereditary physicians, so it seems fitting that Hazelwood Herb Farm was established nearby.

The original settlement in the Cassidy area, also known as Granby, was a planned industrial town established by the Granby Consolidated Mining, Smelting and Power Company in 1918. The model town included 50 residential houses with modern water, sewer and power systems. The town was connected to the E&N Railway by a 3 mi (4.8 km) spur line, but in 1932 it closed, and in March 1936 most of the buildings were auctioned off and removed.



4 Cassidy, BC 1918

The town of Cassidy was named for Thomas Cassidy, who farmed in the Oyster district after arriving from Iowa in 1878 (Irish: Ó Caiside / Ó Casaide) Ironically, the Caiside's were originally a medical family who were hereditary physicians to the Maguires and they would surely have held extensive knowledge about herbs and how to extract and apply their healing properties ².

Nurturing a Nursery

Extensive knowledge of herbology is still being applied in the North Oyster district, where Richard White and Jacynthe Dugas developed Hazelwood Herb Farm as an authentic herbalist's garden. For over 25 years, they lovingly nurtured over 450 traditional and standard herbs, carefully tended patches of wild plants and formally-designed spaces, and gradually incorporated pathways for wandering and resting places for quiet enjoyment.

What made their farm unique was that they propagated or grew from seed a selection of unusual and exotic varieties of traditional herbs as well as the full range of more standard herbs. This unique catalogue soon made the farm a favourite among Vancouver Island gardening enthusiasts.

Jacynthe loved the healing herbs and began experimenting with making healing creams and salves as well as soaps in small batches in the farm kitchen. This gave birth to the Herbal Heaven Gift Shop, which combined Richard's love of cooking with herbs and Jacynthe's passion for healing and cosmetic herbs.

In 2010, the farm and all of its living treasures were passed on to Barbara Stevens and Mark Warrior, who are keen on inspiring the next generation of herbalists! They are continuing the Herbalist tradition and are building on Hazelwood's reputation for producing unique, high-quality herbal plants and finely-crafted herbal preparations for home and personal use.

EconoMusée Network



ÉCONOMUSÉE
BRITISH COLUMBIA

Hazelwood Herb Farm is the BC Herbalism site for the EconoMusée Network, which celebrates artisans at work who use both traditional and contemporary techniques to produce exceptional craft or and agricultural-food products. The knowledge and passion found within high-quality agri-food and craft producers is a collective treasure that is a form of heritage capital. The intention of the EconoMusée Network is to add value to this cultural capital in order to increase the economic success and sustainability of the artisans who create the ancient crafts and of the surrounding region as well.

As a BC ECONOMUSEE Network site, Hazelwood Herb Farm welcomes people to tour the gardens, which are designed to teach visitors about the transformation of raw herbal materials into hand-crafted artisanal products.

Visitors to the farm are invited to indulge their senses as they stroll through the Formal Gardens, which include an interpretive area, a small water garden, a lavender field, and rows of tender herbs for



**5 Formal Gardens at
Hazelwood Herb Farm**

processing. Visitors can rest a while under the hops or in the nook by the pond and watch the comings and goings of the birds and the bees. Once the visitor's curiosity is piqued, they can browse the documents in the Gazebo, which contain traditional and contemporary knowledge about the 450 varieties of herbs that are seasonally available from the walk-through Nursery.

There is also exploring to be done in the Production Garden, or the curious can peer over the fence at the Processing Sheds as the seasonal rounds cycle through. Visitors can learn about the hand crafting of a wide range of culinary, beauty, health or household products in the Kitchen and Boutique. By providing interpretive experiences for the visitor, EconoMusée Networks link customers and students to quality artisans and producers, which can create a lasting (and valuable) bond that is beneficial to all.

Excited about Agriculture and Agri-tourism

Knowledge of the crafted products and their history can add value in the mind of the consumer because it brings them closer to the artisan/producer and to the traditional practices used to craft modern products. As such, an EconoMuseum Network site is part of an economically-viable market model for small-scale artisans or agri-food producers.

Small acreages that are farmed and managed by local entrepreneurs constitute an important portion of small business on Vancouver Island. Regionally, the economies stimulated by market gardens, plant nurseries, livestock, eggs and hay sales (among other products) support local farmers and local communities. The sale of goods at the farm gate or the promotion of farm visits in the district are important components of strategies that are aimed at increasing agri-tourism.

The EconoMuseum Network encourages agri-tourism by increasing the visitation rates of tourists as well as local customers. Hazelwood Herb Farm has successfully integrated agri-tourism into their marketing strategy by providing interpretive spaces throughout their nursery, gardens and production facilities. The Farm also provides tours and workshops on the propagation of herbs or the crafting of high-quality, handmade herbal products.

It is anticipated that a visit to Hazelwood Herb Farm will bring a greater appreciation for the historical importance of herbs in diverse cultures as well as for the many ways in which herbs continue to enrich our lives in the modern world.

Herbs as Artefacts of the Human Experience



6 Arabic Herbalist

Herbs are steeped in mystery and yet are commonplace at the same time. Wild herb plants have been manipulated by human hands for eons, so that many herbs have been transformed into commonly - cultivated plants. These plants are further crafted into products that have great practical, mythological and spiritual importance to us.

As objects of human transformation, herbal plants are living artefacts of the human experience.

Hazelwood Herb Farm practices the ancient, transformative craft of Herbology, which is the preparation of plants for use by humans and animals. Hazelwood Herb Farm is home to over 450 living artefacts that speak to the depth and breadth of the knowledge held and passed on by practicing herbalists.

Herbs are interwoven with the human experience and we transfer our knowledge or embed their mystery through the evocative names that we call them: Belladonna, Woolly Lambs Ear, Horsetail, Skullcap, Coltsfoot, Angelica and Foxglove. Humans have likewise been transformed by herbs, which

have been with us at our birthing beds and on our deathbeds. Herbs have anointed our kings and overcome the scourge of plagues and pestilence to become true artefacts of the human journey.

One herb that has been a long-time companion on the human journey are hops, whose flower is used to flavour beer. This member of the family *Cannabinaceae* is native to temperate zones and is grown worldwide ⁴. Hops were introduced to southern Vancouver Island, and its presence changed the economic, social, and cultural landscape of British Columbia forever.

Hops

“Little man, may all your life be full of sunshine and may the snow rest lightly on your head as it does on Mount Tuam when you grow older.”

This was the blessing pronounced over Nicholas Stevens, born on a September day in 1891. His Coast Salish (*Lekwungen* or *Songhees*) mother, Emma delivered him in a tent while picking hops with her family in Saanich. Over a century later, his granddaughter Barbara grows hops at Hazelwood Herb Farm.

Hops (*Humulus lupulus*) are an herbaceous hardy perennial vine that can reach a height of 30 feet each year. They were one of the first commercially-grown crops on Vancouver Island, being established in 1862 to supply the fledgling beer breweries in Victoria ³.



7 Hops pickers in Washington State

At the peak of the industry in the 1940s, over 4,000 people worked in the hop fields and drying sheds, including First Nations people, Mennonites, Japanese, Chinese and Euro-Canadians.

For over 100 years, Coast Salish families moved freely between Saanich, Washington and the Fraser Valley to tend and harvest the hops. Employment in the hop season meant much-needed pay and provided an opportunity to maintain bonds between scattered families, especially after the banning of the traditional potlatch (gifting and honouring ceremony), which lasted from 1884 to 1951.

This annual event was a time for visiting, trading, matchmaking, or playing *slahal* – the traditional 'bone game'. After long hot days in the hop fields, families and friends would gather on warm evenings in the bunkhouses and dancehalls that were sometimes provided for the workers.

It is well known that hops are important in brewing beer and the recent flourishing of microbreweries on the Island has revived interest in this ancient herb. At Hazelwood, they carry on other traditional uses of this herb by using them in teas, breads, pillows, soaps and lotions.

Until the introduction of modern chemistry and pharmaceuticals, Western Civilization depended on specialized herbalists to heal wounds and cure ailments, as do many people around the world today. Planting, caring for, harvesting, preparing, packaging and assisting others in the use of herbs and herbal products are all considered to be an herbalist's activities.

Traditional Formal Gardens

Knots and Wheels and Plants that Heal

Throughout history, herbalists have gathered herbs from their favourite patch of wild plants, or they have cultivated the herbs closer to home in informal gardens. Many cottagers had “grandmother” gardens out the back door that typically contained over 70 herbs and were often chaotic and boisterous. Others have incorporated herbs into classical designs for formal gardens.

An ideal garden contains plants for both pleasure and function. Some gardens are surrounded by tall hedges for shade and shelter from the wind. Many formal gardens have a water feature as a central focus, while others frame a long, sweeping vista or are meant to be viewed from a high window.

Both the Celtic Knot and the Garden Wheel are classic herb garden designs. The Celtic Knot garden has a series of knotted pathways, while the wheel design has pathways that form spokes extending out from a raised centre bed.

Contemporarily, the Chateau de Versailles in France boasts the Star Grove labyrinth, and some ancient universities still cultivate Physic Gardens for teaching herbal medicine.



8 Celtic Knot Garden

Whether formal or half-wild, most kitchen gardens had herb collections, with many herbs filling multiple roles in the household and barnyard. For example, fennel, rosemary, sage and thyme all have culinary, medicinal, cosmetic and practical applications.

Culinary Herb Gardens

Culinary herbs were originally added to food as a way to take in their healing properties, but they soon came to fulfill many roles, including adding flavour to make food more palatable and digestible, or preserving the food from spoiling.

Many culinary gardens incorporated multi-purpose herbs and plants into their design. For example, a “potager” is an old term for a French garden that contained a combination of herbs, vegetables, fruit trees and salad plants ¹⁴. Typical kitchen herbs listed by the epicurean Apicius in the 1st Century AD

include: anise, basil, bay, capers, caraway, celery seed, coriander, cumin, dill, garlic, mustard, myrtle, oregano, parsley, pennyroyal, rue, safflower, saffron and Welsh onion ¹⁴.

Functional Herbs in Gardens

In addition to their culinary applications, many herbs are grown for purposes of function, form or to increase the visitor's enjoyment. Whether tumbling wildly or tidily arranged, fragrant herbs fit naturally into any garden design. At Hazelwood for instance, creeping thymes are planted between the paving stones, or mints are set into garden borders to release their fresh smell as visitors brush past.

Herbal hedgerows of myrtlewood, roses or juniper can be grown to both enhance the landscape and to define the borders or screen a property or garden. Other herbal trees or shrubs such as boxwood or germander can be carefully shaped into living topiary sculptures that are ornamental or whimsical in nature. Hedges can also be formed into mazes, whose intricate patterns are trod by folks seeking both fun and contemplation.

Herbs in Spiritual Gardens

Some gardens were designed to encourage contemplative thought and to focus the mind on the matter under consideration. Both labyrinths and mazes are examples of meditation gardens that incorporate



symbolism, and they are suggestive of danger and redemption, blindness and light, satisfaction and serenity, as well as temptation and chaos ¹⁴. "Unicursal" labyrinths have a path that twists and turns but never comes to an abrupt halt, while mazes do contain dead end paths. The contemplative and the daring can both get lost in a maze, while a labyrinth will always lead them forward. Mazes also have a rich history of enhancing spiritual experiences; the word "amaze" means to bewilder, while "maze" means "delusional" ⁵.

9 Medieval Labyrinth

Traditional Botanical Gardens

Other herb gardens were specifically designed to provide botanical or medicinal sources for health and healing. Ancient monasteries were some of the first to cultivate gardens and orchards. Monastic gardens were designed for self-sufficiency and so produced a wide variety of herbs for distilling into balms, crèmes and elixirs (medicinal potions). The monks also infused herbs into distilled spirits to enhance the digestive process; herbs infused in spirits would include angelica, anise, caraway, coriander, elecampane, hyssop, speedwell, sweet cicely, sweet woodruff and violets ⁴.

Traditional medicinal gardens also include the Physic gardens that were attached to the teaching universities in late Medieval Europe. Here, student physicians and apothecaries (early pharmacists) were trained in the growing, identification, purification, and preparation of herbs and herbal products. Many Physic gardens were laid out in classic patterns such as the Knot, Wheel or Spiral shape.

Botanical Gardens

Today, some older universities still tend their historic Physic gardens, while others have incorporated them into more modern facilities. The collection of plants in the Harold and Francis Holt Physic garden (established in 1976 at Botanical Gardens at the University of British Columbia UBC) is mostly derived from Britain's Chelsea Garden, which was established in 1673. UBC has also incorporated a section to introduce medicinal plants that have been documented from wild origins⁶.

Many formal gardens are established in public spaces or in commercial settings rather than being hidden



10 Chelsea Physic Garden

behind the walls of the manorhouse as in days of old. Two examples of formal gardens that exist today are the UNESCO World Heritage sites of the Chateau de Versailles in France and the Kirstenbosch National Botanical Garden in South Africa.

Formal gardens can be designed to incorporate a rich diversity of plant life, or they can be designed as monoculture gardens, which feature only one plant or plant species at a time. Monoculture cultivation is one of the first forms of ecosystem management by humans, and early examples include managed woodlands, moorlands and grasslands.

Monocultures: Natural and Cultivated

The advantages to cultivating a monoculture crop include reduced plant competition, control of unwanted species, and simplifying the need for diverse machinery to produce, harvest or process the plant materials. The disadvantages of monoculture cropping include lack of biodiversity, increased demand for pest management and the higher risk of depleting the soils.

The uptake of monoculture cropping by the industrial agriculture industry has given this style of crop management a bad name, but it is not necessarily an unsound practice. At Versailles, and throughout France, the expansive lavender gardens are fine examples of a managed monoculture crop.

Lavender Gardens



The lavender gardens at Hazelwood Herb Farm is a monoculture garden that was designed to complement the existing formal garden. The lavender garden is planted with primarily French and English lavender for harvesting and processing, as well as to provide a relaxing place for human visitors and an active attraction for beneficial insects and honeybees!

11 Lavender Fields

Lavender was first introduced to Britain by the Romans, and the monks soon adopted it into their monastic gardens. It has a wide range of uses, including flavouring and preserving food, as an essential addition to a medicine cabinet, as a useful addition to floral arrangements, and even as decorative candy on cakes. Lavender has strong anti-bacterial, anti-fungal, anti-inflammatory, anti-convulsive and anti-depressant properties. Its features are so versatile that it has been harvested for centuries to create everything from potent insect repellants to stimulating perfumes and relaxing bath products ⁷.

Rest and Rise Refreshed and Renewed

Aesthetic beauty, quiet corners and the right selection of plants not only attract wildlife, birds and bees to the herb garden, but they also soothe the soul. A favourite feature in many traditional and contemporary gardens is a water fountain, pond, cascade or even birdbath. The presence of a water feature can create quiet places for contemplation whilst supporting backyard wildlife.

The pond at Hazelwood Herb Farm offers a sanctuary to frogs and insects along its shady fringes, which are lined with Corsican mint and liquorice flag. A variety of pond plants provide shelter and help to balance the chemistry of the water. For a good mix, be sure to include oxygenators for clearing the water, floaters to provide surface cover, marginals along the soggy banks to provide protection and deep water aquatics to keep the pond and its residents cool ⁸.

Designing a pond for diversity of life can bring great pleasure to humans and creatures alike. Flowers along the banks will attract insects, as will the water itself, and the pond will act as a drinking bowl for birds and small animals. Be sure to create a shallow pebble slope for them to enter and exit the pond.

Build the pond with different depths to ensure a variety of environments for plants or animals. Having a thriving pond may mean leaving out the goldfish or Koi! Fish tend to eat the eggs of the frogs and other creatures, and will definitely make an impact on who else decides to make the pond their home.

Manifesting Micro-Habitats

Ponds, fountains and waterfalls create moist or humid micro- habitats that can take on a life of their own. The micro climates and micro environments on any property will vary depending on wind and sun exposure, health and type of the soil, and the slope of the land.



At Hazelwood, herbs are chosen and placed carefully because of their contribution to the micro environment in that location. There are a number of micro-climates for a range of preferences, such as full sun, partial shade, water side or arid spaces, which will create a healthy balance of insects, plants and animals. For example, pendulous flowering sages provide habitat for many insects and their nectar attracts the Rufous hummingbird. In late summer, the flowering lavender, marjoram and oregano come alive with butterflies and the soft humming of pollinating bees.

12 Water fountain at Hazelwood Herb Farm

Bee-Friendly Gardens

Barbara and Mark are committed to creating a bee-friendly garden at Hazelwood Herb Farm and they do all that they can to encourage birds, bees and butterflies to make the farm their home.

For maximum attraction to bees, the garden should be in full sun and have a windbreak to help protect the bees. Herbs that will overlap in season will provide nectar and pollen for a long period of time – the most important nectar plants for bees include clovers, fruit trees, mustard, willow herb and dandelion¹⁴. Other choice herbs for bees are borage, catnip, chives, comfrey, mints, thyme and lavender⁹.



Vancouver Island is home to at least 10 bumblebee species, as well as Mason bees, Leafcutter and Carpenter bees, and other indigenous pollinators. Pollination is a key activity that transfers the pollen from one flower to another and assures the plant will bear fruit and produce the next generation. Pollination greatly increases the success of field crops, orchards, commercial or backyard gardens, and the production of food for livestock¹⁰.

Some species of pollinators appear to be diminishing at an alarming rate, with both wild and managed populations (such as European honeybees) being impacted by “colony collapse syndrome.” There is much speculation as to why this is occurring and theories include the impact of pesticides and other chemicals, loss of habitat, and the spread of diseases and pests such as the varroa mite¹⁰. Other sources associate the decline with electropollution or electrical disturbances in the environment¹¹.

No matter what the cause for their demise, Hazelwood Herb Farm is doing its utmost to try to encourage and sustain healthy bee and insect populations in their neighbourhood. Barbara and Mark make sure that there are lots of friendly habitats for the bees (dead wood, leaves and undisturbed soil), they employ environmentally-friendly gardening methods, and they plant herbs, shrubs and trees to attract bees and other pollinators.

The formal display, production gardens and fruit trees at Hazelwood depend upon busy pollinators to keep the cycle of life moving forward and to improve the productivity of the farm. With the rising pressures of a modernized, globalized economy, the importance of maintaining healthy local food and botanical sources is fuelling the growing interest in herbs and their natural properties.

Understanding Herbs in the Modern World

The use of herbal remedies and folk medicine is still a large part of many health systems around the globe. Although there are a vast number of medicinal plants known and used by humans, relatively few are cultivated commercially on a large scale. Recently, a new market is emerging for herbal components, health foods and preventative medicines, and these products are marketed under terms such as functional foods, nutraceuticals and natural health products. The return to traditional ways of knowing and being in Western culture is being driven by changing cultural, spiritual, and religious needs; increasing interest in returning to a more natural lifestyle; growing public willingness to take responsibility for their own health; and increased acceptance that food has therapeutic value.

Scientific Assessment of Ancient Herbal Wisdom

The consumer shift away from manufactured medicines and foods and towards more natural ingredients and production processes is driving the scientific community to rigorously evaluate many aspects of ancient herbal wisdom and its application. For example, science now recognizes that herbal plants contain numerous phytochemicals beneficial to human health.

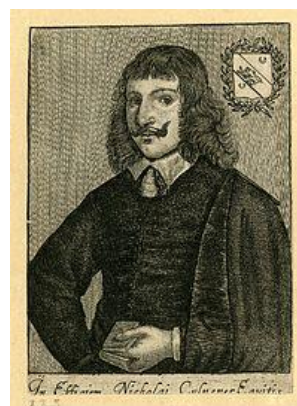
Other recent scientific studies have shown profound differences in the chemical composition of some plants according to the time of harvest and to whether specimens were gathered from wild or cultivated sources. It is now becoming widely accepted that plants readily adapt to the environment, lunar cycles, time of year and weather patterns⁴. Many traditional herbalists are guided by the movement of the moon and the stars and by knowledge of the local weather patterns and are aware of the symbiotic interactions of these forces with plants, animals and insects.

Holistic healing preparations are also being assessed, and the modern application of chemistry in pharmaceuticals and cosmetics has fine-tuned the ability to isolate and extract the various, distinct botanical compounds found in plants. Herbalists have long understood and trusted the power of these compounds and have shared the mystery of their interactions in the body despite not being able to isolate or name them distinctly.

Preserving the Tradition

Humans have long been fascinated by herbs and many herbalists have recorded their observations and shared their knowledge in order to inspire others. One of the most influential works in Western

Herbology is “The English Physician,” compiled by Nicholas Culpeper in 1652. In this seminal work, Culpeper shares his understanding of herbal identification, plant attributes and common folklore uses and then describes how to prepare a wide range of medicinal products and products for cosmetic, scents or for flavourings in foods.



13 Nicholas Culpeper

Sharing the Pleasures of Propagation and Production

At Hazelwood Herb Farm, Barbara and Mark are carrying out the ancient tradition of knowledge transfer from one generation to the next, and they use their gardens, nurseries, and processing kitchen as their classrooms. A visit to the nurseries or production gardens can be very informative for the visitor who seeks to understand the traditional and contemporary uses of herbs for culinary, household, cosmetic, botanical or spiritual purposes.

Barbara is committed to propagating annual and perennial herbs at Hazelwood Herb farm, partly because of her own fascination with herbs, but also because she shares a growing concern for the preservation of medicinal plants and the expansion of knowledge about their safe uses and preparation. In this regard, Barbara identifies strongly with the teachings of Rosemary Gladstar of the United States,

who is committed to the conservation and cultivation of medicinal plants that are at-risk across North America, and to the preservation of botanical sanctuaries ¹².

Hazelwood Herb Farm provides sanctuary to a wide range of herbal plants in both cultivated and wild landscapes. Barbara and Mark are committed to encouraging biodiversity on the farm, and they encourage the cultivated plants to co-exist with the local wild plants.

Variety is the Spice of Life

Creating spaces for symbiotic (mutually-beneficial) relationships to develop between different species is a key element to encouraging biodiversity. Biological diversity (biodiversity) is essential for sustaining plants, people, and animals because having a wide variety of species creates a robust ecosystem ¹³.

Barbara encourages biodiversity in the cultivated gardens by adopting sustainable gardening practices. Natural fertilizers, herbal pest repellents, beneficial insects, compost and crop rotation in the cultivated garden all protect and help maintain this balance. While the wild gardens are tended by human hands, nature has the final say in what grows where, and for how long.

Cultivated Herbs

A wide variety of herbs are cultivated at Hazelwood Herb Farm, and many of them begin their lives as tender shoots in the nursery. Here they are nurtured along until they are hardy enough to be gradually “hardened” to cooler temperatures before they are moved outside to the display or production gardens. Other plants are of hardy varieties that will establish themselves well in local climates and do not need to be acclimatized.

Gatherings from the Gardens

The Production Garden is where herbs of all sorts are carefully cultivated to bring out the most potent characteristics of the plant, for later use in a range of preparations. From early spring, young shoots and tender leaves are harvested for fresh use and later, seeds or stalks are collected for drying and processing, while roots can be dug despite the frosts of fall and winter. Many herbs have multiple applications, while others are very specific, and this is all essential knowledge for herbalists to have.

One example of an herb that has multiple, divergent applications is Rosemary (*Rosmarinus officinalis*).



This hardy perennial has adapted very well to the Maritime Mediterranean climate of southern Vancouver Island. The leaves and stems of this woody, pine-scented evergreen are harvested throughout summer and fall, and they can be used fresh or dried.

Rosemary has a long history in European culture; Pliny the Elder recorded 18 different remedies that were made from the plant. Its pungent odour was thought to improve memory, and it remains a symbol of remembrance at weddings, war commemorations and funerals ¹⁴. Others hung sprigs to repel bad dreams and ward off witches.

14 Rosemary in Kohlers Medicinal Plants, 1887

More recently, rosemary has been approved in Germany for the treatment of indigestion, and its oil can be used for muscle and joint pain, or to increased circulation¹⁴. The anti-oxidant properties of rosemary are widely recognized, as is its capacity to inhibit food-borne pathogens such as *Listeria monocytogenes*, *Bacillus cereus*, and *Staphylococcus aureus*¹⁴. Most people, however, know rosemary as an essential culinary herb for Mediterranean cooking not because of its preservative properties, but because the pungent flavour is well suited to lamb, chicken, or pork, as well as to soups and sauces.

Culinary Herbs

Other culinary herbs that are age-old favourites include oregano, sage, and certain species of flowers. Culinary oregano (*Labiatae origanum vulgare*) was used extensively by the Romans, whose myths reveal that Venus was the first to grow this herb in her garden. The Romans introduced oregano across Europe, and it eventually made its way to North America, where some strains have naturalized as wild marjoram.

Hazelwood Herb Farm grows plenty of culinary oregano. Its leaves and stems are used as a preservative, disinfectant and to flavour food, while its flowers and leaves are used to produce essential oils.

A wide variety of sages are also grown at Hazelwood, including many fruit sages such as Pineapple Sage (*S. elegans* and *S. elegans aureus*) and Tangerine Sage (*S. elegans* cultivar). These perennial shrubs prefer full sun and well-drained soils, and they need to be taken inside for the winter. Many varieties of fruit sages are used to flavour teas, jams, jellies and fruit salads. In the garden, the fragrant leaves of the fruit sages will release a tropical aroma when brushed against, and the late-blooming flowers of pineapple sages will keep the hummingbirds and butterflies visiting the garden well into autumn.

A Bouquet for Breakfast

The pleasures of flowers extend well beyond their looks or their fragrance. Traditional herbal remedies incorporated flowers as dried, fresh, or in essence. Edible flowers were widely enjoyed during the Victorian era, and their use is seeing a revival by modern chefs¹⁵. Today, flowers make delicious additions to salads or vegetables dishes and can beautify cakes and garnish plates.

Fresh flowers should always be used in moderation, as their unusual presence may upset the digestive system or aggravate allergies. Flower petals that can be used fresh include tuberous and waxy begonia, dandelion, day lily (*Hemerocallis* species), and nasturtium (genus *Tropaeolum*)¹⁵. The blossoms of the domestic apple (*Malus* species) may be candied for use as cake decorations or added sparsely to fruit dishes in fresh form.



Edible flowers also stimulate table conversation, seeming strange to eat something so naturally beautiful. However, before rushing out to begin picking, there are a few essentials to keep in mind:

15 Nasturtium flower

- ❖ Be very sure to know which flowers are edible before you nibble; some will make you very sick.
- ❖ Remove the stamen and pistils and eat only the petals (eat pansies and violas whole).
- ❖ The best edible flowers are organic and are picked away from the roadside or pet zone !

Skin Care Herbs

Long recognised for calming the soul and the skin, herbs are used around the world to help people (and animals) look and feel better. Lavender, aloe vera, calendula, rosemary, chamomile, wheatgrass and bergamot remain essential to many beauty products and routines.

Calendula (*Calendula officinalis*) is a valued ingredient in many skin care products. Both the flowers and the leaves of this bright cheerful plant can be used in skin lotions to cleanse and nourish, to clear up pimples, and to remove warts, corns and callouses ¹⁶.

As a member of the marigold family, calendula is recognized for its rejuvenating properties and its antiseptic, anti-fungal, and anti-bacterial qualities. It was used extensively to dress wounds in the American Civil War, as it promotes healing, similar to arnica.

Botanical Herbs

Evidence of herbal medicines being used dates back as far as 50,000 years ago, with traces of pollen in Neanderthal caves indicating its use as a bronchial dilator. Ephedrine, which is found in pollen, is recorded in the first known herbal medicine guide, Shennong Bencao Jing (Classics of Materia Medicine), which was produced during the Han Dynasty nearly 2,200 years ago ¹⁷.

One healing herb that is familiar to many North Americans is St. John's Wort (*Hypericum perforatum*); in fact, "wort" is the Anglo-Saxon word for medicinal herb and "hypericum" refers to "above the pictures" because it was hung above early shrines to repel evil spirits ¹⁸. St. John's Wort grows in temperate zones all around the world, so its medicinal properties were put to use by many civilizations. The English used it to cure mania, in Russia it protected against hydrophobia, Brazilians used it as an antidote to snake bite, and many indigenous people used it as a calming agent.



16 St. John's Wort

Today, St. John's Wort oil is known for treating neuralgia, sciatica, wounds, varicose veins, ulcers and sunburn ¹⁸. Many herbs that have potent botanical (medicinal) properties also make powerful household or utilitarian products.

Utility Herbs

Herbs have been used in housekeeping applications for thousands of years. Archeologists have discovered that as early as 77,000 years ago, plants that deterred pests were spread out on sleeping platforms and then burned periodically to destroy any accumulated insects ¹⁴.

Housekeepers during the Middle Ages strewed herbs on bare dirt floors to repel fleas, lice, moths and other insect pests. The herbal carpet masked unsavoury smells and provided insulation. Lemon Balm, basil, chamomile, costmary, cowslip, daisies, fennel, pennyroyal, pine, rose, sage, southernwood, sweet flag, sweet woodruff, tansy, thyme, sweet violet and winter savory were used for this purpose ⁴.

Fragrant flowers and herbs were often strewn before royalty or newlywed couples, sometimes to ward off diseases of the streets but also to represent virtues such as loyalty and love. Laurel, rosemary, and bay leaves were commonly used ¹⁹.



17 The Kings Herb-woman, and her 6 Maids, with baskets of sweet herbs & flowers, strewing the way

Housekeepers also cultivated calendula (*Calendula officinalis*) for the yellow dyes that could be extracted for colouring cheese, butter or fabric, while the red dyes from St. John's Wort (*Hypericum perforatum*) were said to represent the blood that was let at his beheading. When hung above the door on the saint's birthday, St. John's Wort was believed to ward off evil spirits and thunder. Other herbs were used in a variety of ceremonies because of the spiritual properties they were believed to possess.

Sacred Herbs

Since time immemorial, many civilizations have used herbs in ceremonies and rituals or when communicating with their ancestors (think of incense, frankincense and myrrh).

The nine sacred herbs of the Anglo Saxons are chamomile, chervil, crab apple, fennel, mugwort, nettle, plantain, sainfoin, and watercress, which were all considered to drive away evil. Other herbs that warded off spells, the devil, and lightening were dill, garlic and houseleek (hens and chicks) ¹⁴.

For many Native Amerindians, the four sacred herbs are tobacco, cedar, sage, and sweetgrass. These sacred herbs each had distinct properties, although they are all used in smudging (burning), cleansing and for offering prayers ²⁰. Other wild herbs are also used for sacred purposes, such as red willow bark, osha root (lovage), and uva ursi (kinnikinnik).

Wildcrafting Herbs

When is a weed not a weed?



Sometimes overlooked as “weeds” in our backyards, native plants are regaining popularity worldwide, as their role in health, comfort, low maintenance gardening and traditional ceremonies is being revived. Many traditional herbalists prefer to harvest herbs and plants where they grow wild (wildcrafting) as opposed to cultivating them where it is convenient for harvest.

18 Stinging Nettles (*Urtica dioica*)

Native plants thrive in response to the local terroir (complete growing environment), so they generally need less care and water than introduced species. Local plants play a vital role in the local ecosystem, providing food, shelter and medicine for local animals, birds, insects and people. At Hazelwood Herb Farm, the surrounding woodlands provide a natural environment that allows the continuation of wildcrafting (gathering native plants) for some of Barbara’s favourite local herbs.

Some guidelines to consider when gathering wild plants include:

- Know and respect the endangered species, leave the first plant you encounter and seek the next, and allow the mature plants to stay in place to nurture the next generation along.
- Pick only a few leaves or flowers from each plant; only uproot them if you will use the root.
- Pick only from healthy plants and take only what you can use right away.
- It is customary to thank the plant and offer a prayer, song or words of gratitude. You can also offer sacred herbs or even a strand of hair to show respect to their creator.

Whether cultivated or wildcrafted, the herbs that Barbara at Hazelwood Herb Farm is thankful and respectful of the herb plants that she carefully nurtures. All the herbal products made in the processing kitchen are processed according to traditional, small batch recipes and methods, although with a little help from some modern kitchen conveniences !

Preparing for Processing

Harvesting

When plants are thought of as commodities, they begin to be harvested without thought or thanks for the contributions they make to the human experience. At Hazelwood, Barbara and the staff are always mindful when they harvest the herbs, and they are committed to making the best use of the plant as is possible. This means knowing when in its cycle to harvest each plant part to gain the most benefit from its properties. From early spring, young shoots and tender leaves are harvested for fresh use, and later in

the summer, seeds or stalks are collected for drying and processing. Roots can be dug late in the season, despite the frosts of fall and winter.

Harvesters and foragers must also pay attention to the time of day and the weather to be sure to pick plants on sunny days after the dew has dried from their leaves. Whole plants lose their potency more slowly than plant parts, so it is also advisable to leave plants intact until they are ready for processing.

There are several natural methods of preserving herbs for cooking and for use in home remedies. Fresh herbs may be used immediately, carefully dried for future use, or processed as an infusion to preserve them and provide the basis for a variety of other herbal products.

Drying

Not all herbs are available in the garden year round and one simple way to preserve them is by drying.

The freshly-picked herbs at Hazelwood Herb Farm are dried on racks in a well-ventilated dryer on site. The thoroughly-dried herbs can store for one year if they are kept dry, cool, and dark.

Once dried, the leafy stalks are hand rubbed and sifted into flakes, which are ready for use in the kitchen. Dried herbs and flowers are excellent for making teas or for adding to culinary, skin care or household products.

Infusions in the Sunlight

Streaming sunlight creates potent herbal infusions ! Infusions are prepared much like teas, but are steeped for much longer to draw the properties of the herb into the solution as it sits soaking up the sunlight. Traditionally, monks infused spirits to create after-dinner digestive aids with herbs such as angelica, fennel, mint, thyme and violets ¹⁴.



Hazelwood Herb Farm creates solar infusions by immersing freshly-harvested leaves and flowers in water, oil, vinegar, alcohol or glycerin (depending on the end product) and placing the clear bottles in the sunlight. This process values the integrity of the plant and minimizes the impact on the environment. Barbara uses her infusions when she is processing extracts, salves, soaps, oils, vinegars or preserves.

21 Sunlight Infusions

Traditional Transformations in Process

At Hazelwood Herb Farm, small, hand-crafted batches of lotions, potions and culinary delights are produced in the health-inspected preparation room. This room has a “cottage kitchen” feel and is equipped with familiar kitchen tools that are used in processing the herbs. The processes are still very similar to the way that preparations were crafted years ago. While the equipment may have been upgraded and the chemistry of the processes more scientifically understood, the products and uses for them would likely be familiar to traditional herbalists.

Simple ingredients are combined with the Hazelwood herbs to preserve and support the beneficial properties that are essential to the recipes. Many of these recipes were handed down from the previous owners. Barbara and her staff continue to add recipes from both ancient and contemporary sources, including searching centuries-old writings about herbals, scanning reputable sites on the Internet and gleaning wisdom from renowned herbalists and the previous owners.

Traditional Emulsification and Preservation Challenges

For long term storage, the continual suspension of herbal ingredients in a carrier such as oil, fat or beeswax has been a challenge for herbalists. Animal fats can become rancid, temperature fluctuations alter the viscosity of many oils, and fermentation occurs without preservatives. Before the advent of sealed containers, liquids might be covered with oil to create an airless environment. Dried products only lasted until moisture crept in, but freshly picked and processed items lost potency quickly. Often remedies were prepared on an as-needed basis, encouraging frequent visits to the village herbalist or apothecary.

Mortar and Pestle

The mortar and pestle (sometimes referred to as an "Apothecary Grinder") is an essential tool that is used worldwide by traditional and modern herbalists. The bowl-like mortar holds the fresh or dried herbs, while the pestle is used to pound and grind the herbs to release the oils and flavour essences. Rice, corn, millet, sorghum and wheat are pounded in large mortars for food preparation around the world.



21 Mortar and Pestle

For pharmaceutical use, the mortar and the head of the pestle are usually made of porcelain, while the handle of the pestle is made of wood. This is known as a Wedgewood mortar and pestle and originated in 1779. For culinary purposes, non-porous materials are best, such as marble, ceramic or dense glass.

In Slavic folklore Baba Yaga or Baba Roga is a hag (wise woman) or witchlike character who flies through the air in a mortar, using the pestle as a rudder. In Russian tales, she kidnaps children (presumably to eat them), and she sweeps away the tracks behind her with a broom made of silver birch. In other myths, she is sought out for her wisdom and occasionally offers guidance to lost souls ²¹.



19 Baba Yaga with Mortar and Pestle

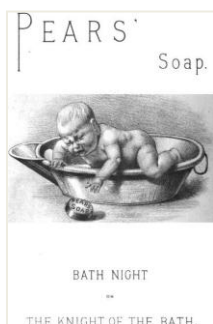
Baba Yaga is one of many archetypal "witches" whose image in the community fluctuates between the wise woman herbalist and the symbol of everything that is dark ²². Despite the ongoing persecution of herbalists and healers across the centuries and in multiple ways, the ancient practice of herbalism continues to be passed on between men and women who safeguard the knowledge about multiple culinary, beauty, household and health applications.

Traditional Culinary Products

Herbs were initially gathered and cultivated for their beneficial health and preservative properties. They were deemed essential to preserve prepared food, to add colour and to protect stored food from decay. Pungent garlic, juniper berries, clove and oregano initially preserved the freshness of food, through their anti-bacterial qualities. The prevalence of curries in hot climates illustrates the use of cayenne to extend shelf life, as these hot peppers have also demonstrated anti-bacterial qualities. Even common nettles had their purpose - historic use included wrapping dried nettle leaves around stored apples, root vegetables and moist cheeses to preserve them and keep off pests. With refrigeration and canning becoming commonplace, the primary contribution of herbs as a flavouring became more appreciated.

Traditional Cosmetic Products

Commonly used to soften skin and to beautify, early cosmetics contained fats, lard, minerals and herbal colorants as standard ingredients. Some men and women used Belladonna drops for pupil enlargement and Henna colouring for skin and hair, or they took milk baths for pale skin and applied berry juice for red lips. At other times, they risked their health by applying powdered arsenic and lead to whiten their skin! In the name of beauty, humans have undertaken some vain pursuits!



While the popularity of personal cleanliness has historically waxed and waned, some form of cleaning product has persisted for skin and hair. Solid soap was virtually unknown in northern Europe until the thirteenth century when it was first imported from Islamic Spain and North Africa. Most homeowners made their own soaps until commercial hard soaps were produced economically in England in 1789 by the still-familiar Pears' Soap Company.

22 Pears' Soap advertising

Some traditional cosmetic applications have worked well and others are now understood to be toxic. At Hazelwood Herb Farm, pure, non-toxic ingredients are blended into time-tested recipes for skin and hair care, and the results are enduring, safe and sustainable!

Traditional Medical Products

While many successful recipes and applications have persisted over time, the medical knowledge of the era influenced the way that herbs were employed. Tallow, turpentine, tar and invocations were added to the healer's tools in an attempt to enhance the plant powers that seemed so mysterious. Some plants were said to repel or attract spiritual elements, and these elements were blamed for illness. A belief in the "humours" of the body during the 15-1600s contributed to the use of bitters, sweets and sour as curative approaches²³. Purges, leaches and the influence of mythical powers were partnered with empirical herbal knowledge in early Victorian times.

The herbal benefits of many early products and treatment processes have more recently been proven to have scientific credence, while some of the products and application processes have not. For example, coal tar distillate is on display at Hazelwood Herb Farm, which was used as a vapor treatment for respiratory ailments. We know today that inhaling coal vapors would create health problems of its own!

Contemporary Transformations in Process

The use of herbal remedies and folk medicine is still a large part of the global health care system, and plant-based products are offered to consumers by a large assortment of practitioners and producers.



20 Lavender Plant

Large pharmaceuticals have replaced the apothecaries of yore, and rather than village healers, government health departments oversee mass production and distribution of health care and treatment. Modern health care products are commonly blended from ingredients that are collected and shipped across continents and are applied far from their origins. Artificial colours, fragrances and preservatives are used because they are less expensive and extend the shelf life and profit margin of most commonly-sold home products.

In contrast, at Hazelwood Herb Farm, there is a continuous flow from seedling to field to harvest and then to production. Many of the ingredients are handpicked at the peak of their potency and then carefully preserved within hours of their collection. Here, the advantage of fresh, local production gives the skilled staff the best possible ingredients to work with.

As the global availability of original ingredients shifts, Barbara is able to recreate the success of a product by using local plants, and in doing so, she reduces the need for shipping and storage. This also ensures that the freshest, most cost-effective products are presented in the store. Instead of Slippery Elm from Eastern Canada, perhaps local Marshmallow will provide the needed effect. From the field to your kitchen and cabinet, there is integrity and a personal touch in each of Hazelwood's products!

Small Scale Processing for Sustainability

Herbalism practised at the cottage herbalist level can promote the development of self-sufficiency and sustainability for the artisan and their products. On Hazelwood Herb Farm, sustainability also means ensuring the best use of all their resources.

Each item is hand crafted in the compact, health-inspected kitchen at Hazelwood. Due to public health standards, visitors are not invited into the preparation area, but can view it from the observation window just outside the boutique.

In order to maximize her time and effort, Barbara has been able to incorporate some modern appliances to assist with what were previously labour-intensive processes that can lead to repetitious strain injury. The processing kitchen on site sports a blender, a crock pot, a hand mixer and even at times the use of a hand-held drill and paint mixer for soap making!

Barbara's small-batch soap making has evolved through trial and research, and she has achieved perfection in spite of fluctuating environmental influences. She discovered that temperature, humidity and barometric pressure can alter the outcome of a batch, as can the amount of stirring!

Emulsifiers and Preservatives

High quality, safety and freshness are paramount in modern Herbology, so small batches ensure rapid distribution of popular products before the next replacement run is scheduled.

Various vegetable-based emulsifiers and oils are used by traditional soap makers to suspend herbal components in lotions and creams. Beeswax blended with oil hardens into a solid base for balms and salves, while lecithin and cocoa butter harden bars and sticks. Coconut, olive, almond and avocado oils offer soothing bases for skin products.



21 Honey comb

Instead of using potentially-harmful preservatives, Barbara relies on a series of barriers (inhibiting ingredients) to prevent contamination of her products. The use of boric acid, citric acid, vinegars and essential oils (among others) may slow the growth of bacteria and extend the shelf life for over 12 months. In combination, they halt a variety of potentially-destructive microbes. While this strategy works well, it is not meant to produce unlimited shelf life for her preparations. These products are meant to be used while at their peak, so the kitchen produces a ready supply of fresh products.

Bountiful Products in the Boutique

The range of stock on the shelves in the boutique is driven by demand at Hazelwood Herb Farm. The turnover of product is carefully monitored and shelf life is preserved with non-toxic ingredients and frequent production. From locally-sourced packaging, to on-site storage, to home-grown ingredients, the integration of local inputs shows the integrity in Hazelwood's commitment to sustainability.

The boutique is stocked with the simplest of dried herbs, myriad blended teas, a selection of salves or ready-to-prepare baking mixes and specialty culinary blends. Each product has its origins in the Hazelwood Herb Farm soil.

Culinary:

Spice rubs, bread mixes, vinegars and oils, mustards, prepared jellies and chutneys flavoured with ingredients grown on the land.

Beauty:

Lotions, creams, massage oils and aromatic essential oils and colognes. Lip balms, gentle shampoos, shower gels scented soaps for all occasions and a men's skin toner!

Medicinal:

Healing salves, delicate baby products, therapeutic teas and massage oils and Aromatherapy preparations and pillows. Soothing soaps and shampoos for common complaints.

And more!

Pet supplies that deter pests, catnip stuffed cat toys, safe housecleaning solutions and even vehicle air fresheners!

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Centuries of Cider-making

*Thirsty to discover how authentic cider
apples are turned into scrumptious cider?*

Written by: Jenny Horn PhD

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merridale



apples expressed



ÉCONOMUSÉE
BRITISH COLUMBIA

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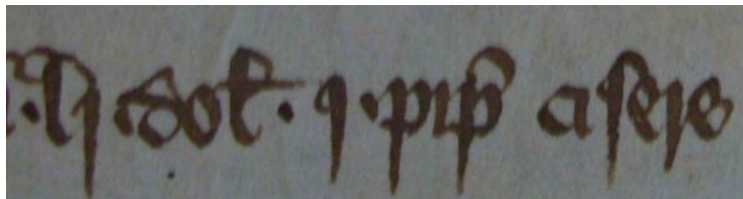
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Making Merry for Millennia

Neolithic foragers in 4000 BC learned to cultivate wild crab apples and pears and in all likelihood were the first to discover the delights of fermented apple juice. The Romans introduced apple orchards to Britain, but the Britons had already learned from earlier traders how use their wild crabapples (*Malus sylvestris* ssp *sylvestris*) to make strong drink, known in Hebrew as 'shekar' ¹. After the Norman conquest of 1066, the ancient tradition of cider making was instilled, such that cider figures prominently in the tax records of the time ¹.

The craft of cidermaking flourished in Europe, and by the 13th century cider orchards were common in monastery and chateau gardens. The earliest record of orcharding and cider production in West Gloucestershire is at Woolaston in 1262, while the first listing of cider presses as a source of income appears in 1230 in a Royal Charter granted to Jocelin Bishop of Bath ².

In England, selective breeding from native stock developed new varieties, and "cisere" was readily available for sale across the country.



Medieval Cider Order: 51 barrels (dol) 1 pip (2 pips = 1 barrel) of cider (cisere) ⁱ

The craft of cidermaking was developed and refined during the 17th and 18th centuries, with discourses on the husbandry of cider apples and on how to improve the quality of the rough farm house cider being produced. Apple cider research emerged in the late 19th and early 20th century and kept the ancient craft of cidermaking evolving. The 20th century saw factory-produced cider dominate markets in the UK and France, which eventually lead to the importation of fruits and concentrated juices from abroad ¹.

Recently, the taste for artisan-crafted cider has been rediscovered in Britain (and likewise in North America) and strong sales are creating a greater demand for good quality cider fruit ².

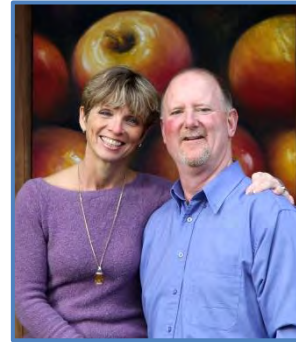
Merridale Ciderworks

Merridale Ciderworks is a gathering place where all are invited to enjoy traditionally-crafted cider products. Janet Docherty and Rick Pipes proudly share their bounty as Canada's largest producers of craft cider from heritage varieties of English and French cider apples.

In 1998, a weekend drive through the rolling pastures of Cobble Hill was all it took for Janet and Rick to fulfill their desire for a healthy lifestyle and a business where they could work together and be nearer to their family. They bought a burgeoning apple cider orchard – one of only a few in North America – and became leaders of the traditional cidermaking movement in Canada.

Janet brings a flair for the arts, her love of travel and her commerce degree to the partnership. Since buying Merridale, she has excelled in direct farm marketing and as an award-winning agri-tourism operator and advocate for culinary and wine tourism. She believes that Merridale's success is best achieved by promoting the growth of the community as a whole and then distinguishing Merridale within it.

Rick is mastering the art and the science of fermenting and distilling, which is a whole new challenge, since he practiced commercial law for 25 years ! Rick enjoys a challenge and the ability to express his creativity through the cider. He'll likely be found in the cellar wearing his gum boots, out playing on his tractor in the cider orchard, or in the Brandy House experimenting with the still.



Merridale Ciders, spirits, and fortified products are hand crafted, all natural, and made from 100% undiluted juice from Cowichan Valley apples and other BC fruits. Merridale also produces a variety of cider-enhanced food products and delectable baking using cider yeasts, and they market food and art crafted by local artisans in the Cider House. In addition, Janet will work with visitors to plan special events or create new traditions while being inspired by customs of old!

Janet and Rick are also proud to be the EconoMuseum Cidery for the British Columbia Network because they believe in promoting superior, traditional craft producers, direct farm marketing, and local food processing, along with sustainable agriculture and agri-tourism.



EconoMuseum Network Society

ECONOMUSEE Network sites celebrate the traditional and contemporary practices of top-quality artisans and agri-food producers. These select sites broaden your horizons in a dynamic environment and turn your visit into a learning experience.

Visitors to EconoMuseum Network sites benefit from a concept developed by professionals based on certified standards that ensure the quality, authenticity, and uniqueness of the contemporary artisans and their traditional products.

At each EconoMuseum Network site, you can meet the artisans at work and talk to them about their dedication to excellence in their craft. Expand your understanding further as you dig into the documentation center and interpretive panels, each designed to ignite their passion for the ancient craft under production. At every EconoMuseum, you can peek into the processes involved in the production workshop while enjoying a feast for the senses. You can also take home some living history from the boutique, where you can purchase contemporary products inspired by traditional practices.

Centuries of Cidermaking

The art of making cider from wild and cultivated apples was practiced long before the Romans brought apple orchards to France and England in the first 500 years AD. During this period Roman army veterans were given settlements on which to grow fruits (as an inducement to stay), and thus apple orchards were introduced into Britain¹. The arrival of the Normans in 1066 increased the quality of the cider apples in the orchards in Southern Britain and improved the craft of cidermaking overall.

As a way to ensure a good crop of cider apples the next year, a customary Wassail (Anglo-Saxon 'wes hal' for "be whole") was performed to protect the apple trees in the orchards. Mulled apple cider was



drunk at annual Wassail gatherings, where locals would gather around the best and the oldest of the apple trees³, sing the Wassailing song, and pour cider over the tree's roots. Some would then make loud noises to drive away evil spirits and others would place a cider-soaked piece of bread in the tree to attract good spirits⁴. Wassail is still performed in some old families and round the hearths of substantial farmers at Christmas. It is also called Lamb's Wool⁵.

Wassail Bowl being presented at the Christmas tableⁱⁱ

In the 14th Century children were baptised in cider, as it was cleaner than the water!² Cider was also part of worker's wages in the monasteries¹, and many farm worker's wages included four pints of cider a day². Labourers were rated by the amount they drank; one comment was that a 2 gallon-a-day man was worth the extra he drank!⁶

Cidermaking on Vancouver Island

Since Captain Cook arrived in the Pacific Northwest in 1778, cider has had a unique place in our local history. It was his common practice to issue cider on all his voyages to prevent scurvy (lack of Vitamin C) from ravaging his crews².

When the fur trade expended itself under the Hudson's Bay Company (HBC), a colonial government was established (1849 to 1859) and settlement of the Colony of Vancouver Island became a priority. Victoria merchants were also pressing for the establishment of a farming community that would support their businesses, especially as demand for products soared during the Queen Charlotte Islands, Thompson and Fraser River gold rushes in the 1850s.

Several rural districts were established, including Cowichan and Nanaimo districts, and Douglas saw to it that apple orchards were planted in the Cowichan Valley and on Salt Spring Island⁷.

Several of the apple orchards on Saltspring Island were owned and operated by freed African slaves who came with a group of approximately 600 members of the San Francisco Zion Church in response to Governor James Douglas' offer for free land in the island colony. Other orchards were operated by "Kanakas," who were freed slaves from the South Pacific and Sandwich (Hawaiian) Islands⁷.

Gulf Island orchards soon became major producers of fruit, and in the early 1900s, a fruit train ran daily from Victoria to Winnipeg. Unfortunately, during the 1920s and 30s, the local fruit industry could not compete with the large-scale Okanagan and American orchards⁷. The remains of a once-thriving orchard business can be seen in interpretive signage at Ruckle Provincial Park on Saltspring Island.

Many of the early Islands orchards sold their apples to the packing houses on Keating Cross Roads, which then supplied the first Growers Wine Company. This company was established in Victoria in 1927 and was intended to showcase unique British Columbia ciders and wines.



When Growers closed their Quadra Street location in favour of their Okanagan site in the 1950s, a Metchosin cidemaker named Al Piggott bought the hammer mill (grinder) and primary fermenters from the South African winemaker who had built them for Growers. This unique equipment became the basis of the cidemaking business that evolved into Merridale Ciderworks. The primary fermenters are still in use up at Merridale Cidery today and the hammer mill was used until a few years ago.

Growers Wine being loaded in Saanich, 1927 ⁱⁱⁱ

The Making of Merridale

Frustrated by his quest across Canada to source traditional cider apples for his cidemaking, Al Piggott had set out to develop a traditional cider orchard for himself. He ordered root stock from English, French and German varieties but soon found the windy Metchosin district not suitable for apples. He set out to identify the perfect growing conditions for his cider apples, and relocated Merridale Cider to its current site in Cobble Hill in 1990.

The Cobble Hill location has the perfect balance of climate, aspect, elevation, soil conditions and water required to produce world-class cider apples. The Maritime Mediterranean climate, rich soils and “terroir” (complete growing conditions) of the Cowichan Valley district mirror the renowned cider regions of Somerset in England and Normandie and Brittany in France.

The Cowichan Valley offers one of Canada's finest climates; Cowichan means “land warmed by the sun” in native Coast Salish dialect. On average the valley receives over 1,800 hours of sunshine per year and the highest average annual temperature anywhere in Canada. It has a low average annual rainfall (for the west coast) of only 17 inches, which are concentrated in a few winter months. Over 200 frost-free days per year makes the growing season long and assures plenty of good weather for cider apples⁸.

In the UK and France, cider apples tended to be grown towards the western extremities because the climatic and soil conditions were most suitable. Under the influence of the Gulf Stream, the weather was relatively mild and the areas concerned had a fairly heavy annual rainfall². These areas are very much like Vancouver Island in soil, weather, and terroir (overall growing environment) characteristics.

The launching of Merridale Cider as the first licensed Estate Cidery in British Columbia was due to a change in liquor licensing regulations in the early 1990s. These new regulations were intended to allow farm wineries to produce and sell their wines from the “farm gate,” or in private liquor stores, restaurants and pubs. Under Rick and Janet’s guidance, the Estate Cider licence was grandfathered in by Cabinet Order in the late 1980s ¹⁰.

Today, Merridale Ciderworks helps to preserve rural lifestyles and landscapes in Cobble Hill (and across the Island region) by meeting the growing desire for sustainable, local food and drink. Local production and processing of food and drink can stimulate economic development for rural areas such as Cobble Hill. The creation of a heritage or cultural identity for a region is central to stimulating the tourism industry, and this can be achieved by transforming agricultural landscapes into cultural tourism landscapes ¹¹. The opportunity to experience authentic, traditional rural practices in contemporary settings can draw visitors, particularly with a diversity of agri-tourism, food and gastronomy tourism in the region.

Supporting Sustainable Agri-Tourism

The products of small-lot farming extend beyond agriculture production as a mere commodity, but include social benefits such as enhancing livelihoods, cultures, and ecological biodiversity ¹². Rural communities, livelihoods and landscapes can be more sustainable when artisans and agri-food producers collaborate to create a space where old meets modern in engaging and educational ways ¹². Agri-tourism can also strengthen linkages *within* a community of small-scale producers who come together to create a unique identity for the region.

Artisan producers can achieve more success in their business by building better connections in the region. By working together to create a better understanding of the contemporary importance of their traditional trade, artisans can strengthen the value chains that enhance artisan and agri-tourism opportunities. At the same time, they can build local capacity, protect biodiversity, create jobs and enrich livelihoods, cultures and ecological resources ¹².

The Vancouver Island region is rich with social, cultural and agricultural networks. The region offers many opportunities to engage in "sustainable" tourism, which is a growing segment of the industry. For example, alternative food networks can provide an authentic or heritage experience for visitors, which can improve the economic and environmental sustainability of tourism and agriculture ¹³.



Acres of Orchards at Merridale

Apple Orchards at Merridale

Sustainable farming practices are evident at Merridale Ciderworks, where Rick prefers to hand weed the wide orchard rows rather than spray herbicides to control the weeds. There are no pesticides used on the property, and the only products allowed are those approved for organic orchards, although the orchard is not certified.

Rick is careful to test the soil before applying fertilizers to compensate for the nutrient draw-down during high harvests. In the rainy season, he applies a combination of pelleted orchard fertilizers and natural fertilizers, along with “prilled” (granulated) lime and mulch.

Other sustainable practices at Merridale Ciderworks include using no water on the orchard in July and August because they want to produce dry cider apples, and recycling all of their office and food waste through Cowichan Recyclists. This enterprising small business uses only sustainable transportation, such as bicycles with wagons or a small truck that runs on 100% bio diesel derived from waste vegetable oil collected here in the region ¹⁴.

Janet and Rick are partnering with The Land Conservancy to continue to develop habitat in the orchards that is attractive to the native bees. The bee populations on the Island, and around the world, are in decline and it is not clear exactly what is causing the collapse of their colonies. Along with the TLC, Merridale Ciderworks is putting more focus on plant life that attracts bees, and to providing “nests” for the bees in the form of ceramic pots and tea pots. These beautiful nests will add to the whimsy and the magic of the orchard walk through the property.

Many cider producers and growers are developing orchard practices to improve and enhance the environment. For example, they may leave wider margins around the orchard and encourage wild flowers and the beneficial bugs they attract as natural predators of the pests on the apple crop. This reduces the spraying of pesticides, which is typically lighter than is the case in orchards growing fruit for the supermarket shelf ¹⁵.

In the past, orchards were planted so they could graze animals under them or grow crops, and orchardists tried to stretch the period of apple picking as much as possible. With factory cider production, growers were pushed to maximise production, so mechanical harvesters and shakers were invented, along with sprays and new varieties of apples. Trees now needed to be closer together and the harvest times reduced to September to December, so that early varieties are typically required ¹⁶.



The orchards at Merridale were planted to suit a small-scale, artisanal cider production system. The 13 acre *pomerium* or *orto* ¹⁷ (apple garden or orchard) was planted with traditional cider apple stock from the renowned cider regions of England and Europe. The trees are all started on M26 and M9 semi-dwarf root stock, given clean water and plenty of room to spread out, and each can expect to produce happily for up to 50 years. This orchard produces more than 70 tons of fruit per year, while contract growers in Keremeos, Kelowna and

Quamichan supply another 30 tons; however, the Okanagan season is 6-8 weeks shorter and these apples do not achieve the strength of flavour that the Island apples show.

Raising cider apples on the Island does create its own challenges, as the mild winters here are hospitable to the air-borne fungal spores of anthracnose, which eats at the young bark of the trees. Rather than

use harsh chemicals, Rick carefully trims and prunes around the damage. Nonetheless, Rick prunes his trees heavily every three years for improved health, functionality, and to avoid clumping. Typically, the trees in Merridale's cider orchards are pruned more lightly than with orchards of eating apples, for which appearance is all important.

Much like their wild crabapple ancestors, cider apple varieties have flesh that is fibrous and dry. They give fuller body and colour to cider, unlike the sweet, juicy dessert apples most other cidermakers use.

Besides the obvious differences of taste and flavour, the cider apple can be set apart from culinary and dessert fruit because its flesh has a fibrous texture which makes it easier to extract the juice. Cider apple juice is high in tannin (which gives it its body and colour) and high in sugar, but is low in acidity and pectins.

Real cider is fermented apple juice, pure and simple. Traditionally, it is made with Bittersweet and Bittersharp apples, which have the tannins and acidity required to make a quality product. While Sweet dessert apples (such as Granny Smith or MacIntosh) are used by large commercial cider makers, these common varieties often require the addition of modifiers such as concentrates, synthetic flavourings, and other unnatural additives.

True to traditional cidermaking practices, the cider apples at Merridale are definitely not desirable for eating ! To make the best traditional cider, they use only heritage cider apple varieties, proven over many centuries in England, France, and Germany. They carefully blend the apples in combinations of Sweet, Bittersweet, Sharp, and Bittersharp to create cider products to please a range of palates.

Cider apples are divided into four categories according to the relative proportion of acidity and tannin. Generally speaking, French varieties are mostly classified as bittersweets, as are Spanish cider apples. Swiss and German cider apples tend to be high in acid and sugar, with fairly low tannin levels¹⁸.

Sweet varieties are good for eating but make bland cider because they are low in both acids and tannins, so they are blended with the more strongly-flavoured varieties. A typical variety is Sweet Coppin or Jonnagold, while a rarer one is Court Royal.

Bittersweet varieties impart the characteristic flavour of English ciders, as they are low in acid and high in tannin – these tannins produce astringency and bitterness on the palate. Dabinett, Yarlington Mill and Tremlett's Bitter are typical bittersweet apples.

Sharp varieties are predominately acidic but have been displaced by culinary fruit varieties, which are similar in flavour balance. Full sharp cider varieties include Crimson King and Brown's Apple.

Bittersharp varieties are quite high in tannins and acids, but do not have the range of flavours shown with the bittersweets. Typical variety is the Stoke Red¹⁸.

Heritage Apples for Harvesting at Merridale Ciderworks

- 🍏 **Chisel Jersey:** Somerset origin; high tannins; broad based, conical apple with long leaves; late bloomer and ripener. Used in Cidre Normandie.
- 🍏 **Dabinett:** Somerset origin; related to Chisel Jersey; full bodied flavour; yields low but high quality juice; late ripener. Used in Traditional and Cidre Normandie. (It is Rick's favourite apple for making cider.)
- 🍏 **Frequin Rouge:** Brittany origin; strong acids and sharp tannins; bi-annual, unpredictable yield. Used in Scrumpy.
- 🍏 **Hauxapfel:** German origin; tart apple; red stripes on green; ripens November.
- 🍏 **Jonagold:** American origin from Jonathon and Golden Delicious; sweet with balancing acid; only dessert apple used at Merridale.
- 🍏 **Judaine:** Hybrid French origin; bold acids and very light tannins; bi-annual, unpredictable. Used in Somerset cider.
- 🍏 **Julienne:** Normandy origin; tannins and acids soft; balanced juice; not attractive but good yields.
- 🍏 **Kermerien:** Normandy origin; soft tannins and reasonable acid; juice can stand on its own; favourite with the deer at Merridale.
- 🍏 **Michelin:** French origin but popular in Britain; moderate tannins and acidity; high yield and productivity. Used in Scrumpy, Cyser, Traditional and Cidre Normandie.
- 🍏 **Tremlett's Bitter:** English origin; full bittersweet; frost-resistant blossoms; heavy yield in October.
- 🍏 **Yarlington Mill:** Somerset origin; Jersey variety; high tannins and low acidity; high yields in late October. Used extensively in Traditional Cider.

Apple Blossoms and Bees

Like all apple trees, fully three quarters of all the 240,000 flowering plants in North America rely on bees, birds, bats and other animals and insects to pollinate them so they can bear fruit. Since many of our food crops are imported to North America, we depend on European honey bees to perform their duties¹⁹.



Honeybees and Mason or “Blue Orchard” bees (*Osmia lignaria*) keep busy with the apple blossoms in the cider orchards at Merridale. Janet and Rick have hives of honeybees brought in on contract from a local beekeeper when the weather is warm enough. Rick assures that the honeybees are provided with plenty of dandelions to feed on until the maple trees bloom. Soon after, a multitude of apple blossoms appear in the orchards, followed by the arbutus trees, which flower in May. The beekeeper then moves the honeybees up into the mountains before Rick starts pressing the early apples, as the wasps that are attracted to the juice and pressings will kill the honeybees. The “apple blossom” honey is collected and infused into apple juice, which is then fermented to produce Meridale’s award-winning Cyser.

In the Island region, the indigenous mason bees and apple blossoms both emerge in April, when the temperature reaches 55° F/14° C. Mason bees are amazing pollinators who don’t produce any honey, rarely sting, and are only visible for six weeks. Each female bee accidentally pollinates over 2,000 blossoms per day while feeding herself and storing food for next year’s bees. (Male bees have to get their own supper !) ²⁰

Mason and other native bees are not vulnerable to the many diseases and mites that affect European honey bees, which are an introduced species that is currently threatened. Together, the native and honeybees work to pollinate all the blossoms to ensure a bountiful harvest in the orchards, gardens and nearby woodlands.

Good Looks Will Get You Nowhere

For many centuries, cider orchards came alive in October, when pickers arrived to shake the trees, beat them or hook the apple clumps with long poles until the fruit fell to the soft ground. There was no need to fuss about bumps or bruises because cider apples are grown for their juice characteristics, rather than size or appearance. Women and children would then gather the apples into baskets, or stash them in piles of straw to rest a week while the apples “sweated” out their moisture, thereby converting fruit starches to sugars.

More contemporary practices involve harvesting and storing the cider apples according to their best



ripening times, so careful hand picking (set fruit deep in palm, then twist to retain the stem) assures the fruit remains un-bruised. Early September apples are soft and do not keep well so they are first into the grinder. The semi-hard apples are harvested in October and November and must be stored a short while before they are ready to process, while the late harvest apples are the most aromatic and need to be stored a long time; they sometimes wait until December for pressing.

Working the farm press with stone grinder in foreground ^{iv}

Milling and Pressing in Preparation

From the Merridale orchards, the apples are gathered into the cidery, are washed in a mild solution, and then carefully inspected. Only the firm, sound apples are sent on to the mill for grinding, where they are crushed in preparation for pressing. Merridale uses a 1960s Bucker Mill that still does a fine job of making course ground apple sauce or “pomace” for pressing into juice.

Traditionally, the dry cider apples were crushed by hand in a trough or with a mortar and pestle. Eventually, a large circular grinding stone was used for milling, most often horse-drawn. The first mechanical mills appeared in the 1600s, and although they were faster, they did not grind the apples to the same fine pulp as the traditional stones, and the pips did not get broken down as before.

Authentic cider apples and crabapples produce a dry pomace, while the softer dessert apples produce a soupy applesauce when ground. In either case, the pomace is too sloppy to stay in place for pressing, so it was contained in “cloths” while the juice was carefully squeezed out. In early days, the pomace was wrapped in “cheeses,” which were layers of cloth (originally made of horse hair) or of twisted straw. The cloth was laid out on the press bed, then several buckets of pulp were laid down, the corners would be tucked up to contain the pomace under pressure, and the layering would continue on until it was about 8 layers deep. A heavy board was placed on top and the pressure was slowly applied.

As the weight increased (or later, as the screw was turned in the “wring”), the pressure increased until the cheese was reduced to one third its height. In this way, cidermakers were sure to release the last reluctant dribbles of apple juice from the ruptured fruit cells. The dry pomace that remained was fed to the pigs on the same day, otherwise the pulp would ferment and the pigs would get tipsy ! ¹⁸

Travelling Cidermakers

Improvements to the designs of the presses and grinding mills in the Victorian era lead to the emergence of the travelling cidemaker. These entrepreneurs would bring the entire operation to the small apple orchards throughout the countryside, towing their equipment with a team of horses, or later on, with a tractor. The travelling cidemaker often worked a set route during the short harvesting season, and charged at a piece rate – at the turn of the 20th century the fee was a penny per gallon.



Travelling Cidermaker ^v

Small farmers would gather their apples together so the ciderman could mill all at one place, and at other times, the local landlord would buy apples from the small farmers and the crew would set up for pressing outside of the pub. This country cider was often considered rough, as the travelling cidemaker only arrived once a year, regardless of the ripeness of the apples, which would all be harvested, ground and pressed in a matter of a day or so.

At Merridale Ciderworks, they recently retired the original vertical rack and cloth press and acquired a brand-new stainless steel horizontal press from Good Nature in upstate New York. The new press allows Rick and his crew to process more fruit in a day, and to maintain higher sanitation standards while doing so. It takes about 15 pounds of apples to yield one gallon of juice, and the horizontal press can press 15,000-20,000 pounds per day.

The fresh-squeezed juice, or “must”, is then transferred into vats to undergo fermentation. The dry pomace that is left over is moved to the Brandy House to be used in making distilled spirits and fruit brandies. What is not used there, it is either fed to neighbouring farm animals, or is composted for use in the orchards afterwards. Rick mixes the dry pomace with wood chips and lime and lets it degrade for at least 4 years before he uses the compost.

Transformation through Fermentation

At Merridale Cider, they ferment their juice only once a year, at harvest time, so they must plan carefully. In commercial cideries, where they use concentrates, they can simply make more cider whenever they need it. Merridale makes all of their cider for the coming year when the fruit ripens. Therefore, from time to time, loyal drinkers have to wait until the next vintage is ready.

Only pure, first-pressed juices are used to make cider at Merridale, where the 4,900 and 5,720 gallon (22,000 and 26,000 litre) stainless-steel tanks are filled with raw juice and various yeasts. The primary



fermentation tanks have the optimum shape for fermenting cider. In this anaerobic (without air) environment, the cider is allowed to ferment naturally and slowly to bring the flavours of the fruit out delicately. Rick has studied fermentation science related to cider, and he trusts that Mother Nature does the job the best. Other cidermakers, however, heat their juices or add chemicals to hasten or hinder the process.

Oak and Stainless Steel Tanks at Merridale

Various yeasts and yeast nutrients are added to the raw juice, according to the recipe for the end product. Rick does careful testing to match the acidity and sugar levels of the juice, so that the finished products have guaranteed, consistent quality and characteristics.

It is time to move the cider after 6 to 12 weeks in the primary fermentation tanks, as the fermentation slows because the yeasts consume all the available sugar. The amount of time the cider is left to “rest on its lees” impacts the flavour of the final product. The “lees” are made up of dead yeast cells and apple solids, and the lees that are left behind at this stage are re-used in the brandy making or are composted on site.

When the time is right, the cider is siphoned out and redistributed into tanks ranging from 500 to 5000 gallons (2273 to 22,730 litres). These tanks are filled to the brim to assure that an oxygen-free environment is maintained, as cider will oxidize or turn to vinegar if the fermentation process is contaminated. The cider is left to rest as it continues to settle and mature slowly, which gently brings

out its full body and flavour. This resting period can range from a few months for a Draft cider, or up to two full years for the Scrumpy or Cyser, depending on the temperature and other conditions.

Once the cider has matured, it must be cleared of the yeastly “must” that can cloud it. If the cider has not “fallen” sufficiently, then clarity can be achieved in several ways. Some cidermakers use chemicals or fining agents to clear their ciders, but true craft cidermakers do not. The cider products at Merridale Ciderworks are cleared using a fine filtering system.

Wines are usually filtered at ½ microns or less to ensure that no yeast cells remain, which means the wine will not continue to ferment in the bottle. Fermented apple juice has larger suspended solids that add color and flavour to the products, so Rick filters to only 1 micron; however, this leaves some yeast cells behind. Thus, Merridale Cider is still “living” when you take it home and open up the bottle.

Cooling, Carbonating, and Bottling

The fresh taste and clarity of Merridale Cider comes from bottling a living cider that is naturally and slowly fermented and then carbonated to keep alive the best flavours from the cider apples. While others use fining agents to clarify the cider, Rick prefers a wine-style pad filter to “polish” the cider.

Bottling is an ongoing activity at Merridale Ciderworks, as the various cider products mature throughout the year. Once filtered, the cider is cooled before being bottled. Cooling the cider at this stage achieves three things: it slows down the remaining yeast from fermenting, it keeps the cider fresh, and it maintains the consistency of the carbonation. All the Merridale ciders products are “frost packaged” at temperatures below the frost level, which is around 34°F (1.2°C).

The cool cider is then pumped to the carbonator, which forces the CO² into the cider at high pressure in a process called “force” or “pinpoint” carbonation. Carbonating a warm cider would result in larger, coarser bubbles that would overwhelm the fine flavours, while “frost-packed” cider produces a smaller, more refined bubble that enhances the taste and tickles the tongue.

The 1963 German Seitz Champagne filler at Merridale can fill a variety of bottle sizes. It is a counter-pressure filler, which removes the air before filling and pressurizes the bottles to prevent foaming. The cider bottles are then hand capped, washed down, and labelled using a recycled Italian labeler. Then the bottles are ready to be taken to the cooler to await distribution to the Cider House on site, or to retail outlets, pubs and restaurants in Southern British Columbia.

Merridale produces “living” ciders that contain active yeast cells, so all of their cider products must be kept refrigerated during shipping and storage so that they do not re-ferment. The cider that is leaving the farm is shipped to refrigerated warehouses in Victoria or Vancouver, from where it is distributed to the retailers within 2 months. Rick and Janet educate the retailers and the consumers to keep their cider in the fridge to maintain the freshness and integrity of the product.

The Cyser, MerriBerri, and House have higher sweetness levels and so are more likely to re-ferment if allowed to warm. The Traditional, Somerset, Cidre Normandie and Scrumpy are drier and therefore more stable in the bottle for longer than 6 months.

The choice of bottles was a long a difficult one for Rick and Janet to make, but in consideration of flavour, freshness, safety and the environment, they have chosen to use recyclable plastic bottles.

In order to retain the flavour and freshness of a cider that is still living, rather than pasteurized, it is important to maintain its stability and its anaerobic environment, so the capping must be secure. Other cidermakers chose to bottle in glass, often with a traditional pop-top ceramic cork, but there is a real danger of the glass exploding if the cider is not bottled or stored carefully. Plastic bottles offer a safer option yet still maintain the freshness and stability of a living cider.



Plastic bottles also have a much smaller carbon footprint than their glass cousins do. Some of the plastic bottles that Merridale uses are shipped from Calgary, while others come from Kelowna. Glass bottles must be sourced from overseas, and the recycling costs are much more for glass. On the contrary, the green plastic bottles are not shipped off the island to be recycled. Clearly, Janet and Rick have made the right choice, albeit difficult, because the carbon footprint of plastic bottles is less than 25% that of the glass options.

Tasting Notes

Tasting cider involves all the senses, so that sight, smell, taste, hearing and touch each contribute to the overall experience and to the assessment of its quality.



Authentic apple cider is best tasted from a clean, un-tinted glass that holds at least six ounces. A tulip-shaped glass is best, as the bulbous bowl and tapered chimney hold the bouquet at the lip of the glass. Select a clear glass, as cut crystal will interfere with your view of the explosion of small bubbles that rise as the gurgling liquid is poured, and if you are pouring an effervescent cider, be sure to listen for the joyful popping and fizzing as the bubbles explode on the surface¹⁸.

Naturally-effervescent ciders produce a froth when first poured, which turns to small bubbles that merge into larger spheres while rushing to the surface. When these bubbles release, they shower tiny particles into the tasters' nose, which heightens the senses and enhances the bouquet!¹⁸

Serve dry ciders at cold or at room temperature and then serve colder as the cider rates sweeter. Sample the dry before the sweet, the young before the old, and the lighter alcohol content before the stronger ones¹⁸.

Once poured, hold the cider glass to the light (daylight is best) and appreciate the color and clarity of the cider. The color will vary according to the type of apples used, such as rose or pink if crab apples were used, and a range from dark amber to champagne-blond. The cider should look neither dark nor watery, and should be clear and not hazy. A living cider still contains yeasts, pectin, and vegetable matter, which will settle into the bottom of the bottle as the "lee." It is best not to shake the bottle before serving, and only pour the top two-thirds to seven-eighths of the content to avoid disturbing the sediment¹⁸.

Take a sip, enjoy the warm flavour and then roll the cider around your mouth to release the sweetness or the bite of the apples. There are four fundamental tastes to stimulate your tongue, which sends messages to your brain for translation into the experience of taste. Along with taste, the smell imparts an overall sense of flavour. The tastes to be aware of are sweet, bitter, saline, and acidic, although the vocabulary for describing ciders (and wines) can be quite extensive. The Long Ashton Research Station at the University of Bristol²¹ has developed a cider-tasting vocabulary that includes 163 words to describe unique appearance, aroma, and taste attributes¹⁸.

Similar diverse vocabularies have been developed to describe the attributes of wine, including Apple Wine, but this product is much different than traditional apple cider. For instance, sugar (or traditionally raisins) is added to the pressed apple juice before or after fermentation to increase the specific gravity, and inevitably, the alcohol content of the apple wine to 10 or 12 percent. Apple wine is usually aged longer than apple cider, and often in oak barrels, which alters the taste again.

The ciders at Merridale are traditionally produced, being fermented from 100 % first-pressed juice of several heritage varieties of cider apples.

Their cider products include:



Traditional - A balanced, dry and effervescent cider that appeals to true connoisseurs and has been called “the best English-style cider in Canada” by wine expert Jurgen Gothe. Winner at Bath & West Show and at the International Cider and Perry Competition at the Hereford Cider Museum.



House - This Pub Draft cider is a lighter, sweeter version of our traditional cider, but still very dry, served on tap. House cider is on tap in Vancouver Island’s finest pubs and restaurants.



Scrumpy - In old England, Scrumpy was made by farm workers who stole or ‘scrumped’ apples from the orchard. This cider is strong, sharp and rich in the flavours of our strongest cider apples. If you’re a Scotch drinker, try this one. Winner of Gold & Silver North American Brewers Awards in Idaho Springs.



Somerset - This is the English version of champagne-style cider, which is dry and sparkling with balanced acids. It is slowly aged for more than a year to become completely dry then carbonated under pressure at sub-zero temperatures.



Cidre Normandie - A full-bodied, still cider that is fermented to dry, then aged in French oak barrels to soften the finish. Perfect with pork, chicken, and rabbit. Winner of commendation at Northwest Cider Competition.



Merri Berri - A refreshing blend of apple cider and the unfermented juices of a blend of BC berries and fruits. Perfect for those who enjoy spritzers or lighter alcoholic beverages.



Cyser - A traditional blend of pure apple juice and wildflower honey that dates back to the Viking days. Favourite of sherry drinkers or for an aperitif or dessert drink. Aged for several months to a year after bottling. Winner of Silver Medal at the North American Beer Awards



Apple cider vinegar - Hand-crafted Scrumpy apple cider vinegar contains more tannins and anti-oxidants than other varieties. Known for its antibiotic properties to revitalize the skin. Merridale combines Scrumpy vinegars with Epsom salts to complement their existing line of specialty cider soaps, foot scrubs, and other spa products made from their pesticide-free apples.

In the Spirit of Life

As early as 800 BC, an ancient Alchemist from Egypt is believed to have discovered the secrets of the distillation process. This process is based on the differing boiling points of water (100 C) and ethyl alcohol (78.4 C), which will separate in form of a vapour. This vapour essence is captured and cooled so that it condenses and then is collected in liquid form. Many early households used distilled spirits as a source of stimulant, but also as an anesthetic, disinfectant, vitamin, tranquilizer and cleaning fluid ²².

Known now as brandy, distinctive brandewijn, or burnt wine, has been drunk since the 7th century, when alchemists distilled grapes and other fruits to produce medicinal spirits. The name “burnt wine” arises from the distilling practice that heats the juice of the fruit, which releases alcoholic spirits with a rich flavour and aroma; this distilled essence is referred to generically as the “aqua vitae,” or water of life. The clear fruit nectar is known generally as “Eau de Vie,” and specifically, distilled apples produce “Pomme de Vie,” or apple of life.

Brandies are made by carefully fermenting the fruit and then distilling it to capture the spirits and the nectars. To make apple brandy or “Calvados,” the master distiller ages the Eau de Vie for years in carefully-selected oak barrels. Calvados is also known as “eau-de-vie de marc de cidre,” “applejack,” “trebern,” or “batzi.” The most famous Calvados region is “Calvados du pays d’Auge,” which carries an Appellations seal, assuring that it is distilled twice in a pot still (as is cognac), and is then aged in oak for a year or much longer ¹⁸.

Somerset Cider brandy is a popular version of a distilled product in SW England that holds Protected Geographical Indication (PGI) status in the European Union. This status provides assurance that the use of this name indicates a geographical place where a unique agri-food or artisanal product is made to specific standards. Well-known examples include Champagne, Prosciutto de Parma, Florida Oranges, and Dresden China ²³.

It was while they were on a cider-tasting tour in Northern France that Janet and Rick were first inspired by the apple brandies of Somerset and Normandy and imagined that they might produce similar apple brandy back home at Merridale Ciderworks. When they saw that many cidermakers also distilled their products to create spirits and fortified ciders, it seemed a natural extension of their burgeoning cider business. As it happened, many of the heritage cider apples that are preferred for making apple brandy

were already planted in the orchards at Merridale.



Merridale Brandy House

Rick set out to educate himself on the fine art of small batch distillation, which is still carried out in Europe, but is relatively new in North America. A few years later, Rick and Janet tasted the first distilled products from their own cider orchards while sitting in their brand-new Arts and Crafts-style Brandy House (as pictured to the left).

It was near this same time (2005) that the government of British Columbia eased up on its licensing regulations for small-scale distilleries, and the first craft distillery opened soon after, in the form of Okanagan Spirits. It seemed inevitable that all the pieces came together at the right time for Merridale Ciderworks to join in the nascent artisanal distillery movement in the province. In response to the growing interest, an Artisan Distillers Guild of BC has been formed to collaborate on developing the



industry, and to advocate for inclusion in the policies and regulations that currently support the thriving local wine industry.

Currently, less than 10 craft distillers are operating in the province and they are working hard to build the burgeoning industry.

The flavours of a distilled product can be enhanced during the storage process, whether it is in toasted air-tight oak barrels or stainless steel vats.

Hand-crafted copper Mueller still at Merridale

Origins of Oak Barrels

The various woods used to make oak barrels each impart their own flavour and aroma to the final product and react differently to acidic grapes than they do to the softer brandies. Oak's primary aromas tend to include clove, cinnamon, nutmeg, vanilla and "allspice," while on the palate, they show rich flavours such as caramel, coconut, vanilla, cinnamon, clove, smoke, tea, mocha, toffee and butter ²⁴.

Although barrels are made from oaks all over the world, the most sought after for brandymaking are those made from the French or American Oak. This is partly because the best barrel oaks grow in cool climates, where they are slow to mature and consequently form a tight grain and higher wood tannins. The tighter-grained barrels releasing less vapour, while others let air leach through, resulting in a more concentrated product after several years.

Many of the French Oak barrels are harvested from 5 distinct forests that were planted by Napoleon for ship building purposes: Allier, Limousin, Nevers, Tronçais and Vosges. When ordering barrels from the French coopers, the customer has the option to indicate which forest they would like the wood sourced from, depending on the flavour they want to impart to the products as they age. (French Oak contributes the trans isomer of beta-methyl-gamma-octalactone and American Oak contributes the cis isomer ²⁵.) American Oaks have wider grains and lower wood tannins, so are a little "sweeter" than typical French oaks. These barrels are not distinguished by their sources, which include 18 different states, although most are from the forests of the Midwest and in the Appalachians, or from Oregon ²⁴.

The North American White Oak has a northern reach into southern Ontario, where the colder climates result in a finer and tighter grain than the French Oaks. Chemical analysis supports the notion that there is a special, distinct flavour to Canadian Oak barrels that reflects the distinct geographic and

environmental living conditions (terroir) of the trees²⁶. Unfortunately, Canadian Oak barrels are hard to source at the present time, since the forester that has the harvesting license also has an exclusive distribution agreement with a barrel maker (or cooper) in the United States²⁶.

Merridale Ciderworks primarily sources its barrels from a small artisan cooper in the Okanagan Valley, who is practicing the ancient craft of traditional barrel making. Although this cooper cannot source Canadian Oak, they do produce fine custom barrels from French, American, and White Oak.

Coopers around the world work with different woods to shape their barrels, and they all “toast” the wood during the assembly to impart various depths of “char” to the finished product. The char will have different effects on the wine or spirit being produced, depending if the barrel is rated as Light Toast, Medium Toast or Heavy Toast²⁴.

Brandy and Cider Barrels at Merridale



Distinct Distilled Spirits

Our apple juices are fermented and then distilled to capture the fragrant “pomme de vie,” which can be aged for years in oak barrels to add depth, colour and flavour to our unique fruit spirits. Enjoy these in your favourite martini or as a digestif (served after the meal, as opposed to apertif, which is served before).

Blackberry Oh de Vie: Fresh Vancouver Island blackberries are pressed and their unfermented juices are added to the “rough” brandy, which is further distilled. The results are a strong berry aroma with a hint of anise.

Apple Oh de Vie: French and English cider apples are carefully selected, fermented and then slowly distilled three times over in small batches to release the authentic apple flavour and aroma, which has a distinct undertone of apple blossoms. This creates a smooth, fruity brandy.

Frizz Vodka: Always innovating, Rick and his staff have launched into producing 100% fruit vodkas, which are full strength and full of fizz ! Most flavoured vodkas are derived from an infusion of fruit into a potato or grain spirit, which is then charcoal filtered to soften the harshness. Merridale vodkas are not filtered since their fruit origins produce a soft, smooth vodka that arises from a secret blend of spirits made from cherries, plums, apples, and some pear. Just for fun, they decided to carbonate the vodka, and after a few failed attempts, discovered a method of carbonating the vodka in 150 gallon batches over many weeks at temperatures close to freezing. The resulting bubble is small and refined, or as the Italians would say “Frizzante.”

Fortified and Feisty

Unlike with their vodkas, Merridale does infuse spirits into some of their cider products, and the result is a series of “fortified” products that have distinct apple origins. A fortified product starts with a fermented base (in this case cider, but also wines), and then infuses distilled spirits to stop the fermentation process and preserve the natural sweetness of the product.

Under their current licensing, Merridale Ciderworks is allowed to produce artisanal batches of cider, spirits and fortified spirits up to 22% alcohol content.

Some spirits and fortified products are aged in oak barrels. When spirits are stored in oak barrels they can take on a caramel colour and flavour components distinct to the barrel type, as with Cognac, Calvados or whiskeys.

Other Merridale products utilize the basic “eau de vie” straight from the still to fortify the dessert or port-style products, and this assures the original fruit characteristics are maintained. These products are not barrel aged because doing so would impart other flavours or colours to the clear product.

Winter Apple: A fresh and velvety sipping drink with an aroma of baked apples and buttery brown sugar. Served straight, in the tradition of port, and paired with cheddar or blue cheese, melons, fruit desserts and dark chocolate.

Pomme Oh! A delicate balance of apple and brandy, with a soft, slightly sweet finish. In the tradition of Normandy and Bretagne, this product starts with fresh apple juice fermented in French Oak barrels until it reaches just the right sweetness, when cider brandy is infused to stop the fermentation. The result shows an exquisite balance of fruitiness, body and alcohol, and is excellent with soft cheeses.

Mure Oh! Fresh-picked Vancouver Island blackberries are the basis of this blackberry wine that is fortified with blackberry brandy. This delicate combination produces a full, fruity desert drink with a deep colour, strong blackberry odor and taste, with a bitter sweet finish. Great with apple pie.

Cider House: Boutique, Baking and Bistro

Every corner holds a surprise at Merridale Cider, where there is always plenty to do. You can tour the cidery and stroll around the ½ km orchard walk at your own leisure. The orchard walk wanders through the 20 acres and is great for adults and children, who may encounter faeries and orchard folk along the way to teach them about the life of the orchard.

Other options include taking a guided tour of the production site or hosting a private function or brandy seminar in the distillery, where you can learn from Rick Pipes about how he makes spirits and fortified ciders, giving you the opportunity to engage all of your senses in the learning.

Tempting aromas might also draw you to the Cider House at Merridale Ciderworks, where visitors can sample a taste of the ciders, spirits and food in a fun, tasty and informative way!

Why not sidle on up to the granite tasting bar in the Cider House, where the delicious fermented, distilled and fortified cider products are available for age-appropriate visitors to taste? The modest tasting fee that is collected goes to a local charity, so it is all for a good cause. You can also move into the bistro, with a choice of an indoor and an outdoor seating area.

*The Cider House at Merridale
Ciderworks*



The Bistro is the source of delectable meals, cooked with both heart and soul. The chefs do their best to use fresh ingredients sourced right in the Cowichan Valley and Island region. The menu at the bistro combines cider pairings and seasonal menu items that are “comfort food” and provide the diner a familiar and delightful experience. The bistro adjoins the covered patio overlooking the orchards.

Brick Oven Baking: It's the Yeast We Can Do

On the patio are located the traditional brick ovens – one wood fired and the other heated by gas. These ovens produce a wide range of delectable baking items that are leavened with cider yeast. During brick-oven baking, very high temperatures are reached, so the food cooks quickly. This is why the baked goods taste so good and different.

The unique texture of brick oven baking is given greater body by the Cyser yeast the baker skims from the ciders as they ferment. Apple cider and orchard honey are perfect foods for the slow moving yeasts, which make the breads, pastries, apple pies and pizzas rise slowly and results in a more dense product with much greater body. Merridale does not need to steam its bread as most brick-oven bakers do.

True to ancient craft, the wood-fired brick oven takes 16 hours to reach a baking temperature of 650° F/344° C. After sweeping out the oven, a delectable array of bread, pastries, apple pies, and pizzas are cycled through the radiant-heat chamber as it cools over the next few hours. The gas-fired oven is smaller than the wood fired version, but gas is thermostatically controlled so it provides versatility and control.



Bringing out the Bread at Merridale

Boutique and Delicatessen

Baking and cider products are all available for purchase in the boutique and delicatessen, which features a full product line of gourmet foods, many made right in the Merridale kitchens. An array of health and beauty products that contain apple or cider elements are also available for purchase, such as scrubs, soaps, and apple cider vinegar treatments. Rick and Janet are experimenting with producing apple cider vinegar, which has long been known for its antioxidant and health-promoting properties.

The deli and boutique also stock a diverse range of food, functional art and paintings that are produced by other dedicated artisans in the Cowichan Valley region. The products and art are chosen specifically by Janet because they are made by people with passion for what they do, which truly reflects the Merridale way !

Making Merry the Merridale Way

Janet and Rick both endeavour to make Merridale Ciderworks a place that draws passionate people together, whether it be for a casual lunch, community gathering, family reunion, retreat, or wedding celebration. By encouraging the community to work, play and celebrate together, Merridale Ciderworks helps to grow the social and economic strength of the Islands region. By being the BC EconoMuseum Cider site, Janet and Rick are helping to create thriving local businesses that engage the public, tourists, other artisans, and scholars in perpetuating the contemporary practice of traditional artisanal craft and agri-food production.

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SDE



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