

2014

Mack Laing House Report: Phase 2, Planning and Funding



Mack Laing Heritage Society

Respectfully Submitted to:

Comox Town Council

By: Mack Laing Heritage Society

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Acknowledgements

The Mack Laing Heritage Society (2014) wishes to extend particular thanks to the Town of Comox Council which granted us a year's extension to develop a plan for Baybrook, and explore the feasibility of developing economic opportunities at Baybrook .

This phase of the project owes a lot to the many residents of the Town of Comox, who have enthusiastically embraced MLHS's plans to see Baybrook return to its former glory as the Comox Valley's "Nature House" where children and adults can celebrate this region's many natural wonders.

We particularly wish to thank Councillors Barbara Price and Patti Fletcher for "being there" when needed.. As always thanks are owed to Jim Gillis for bringing the Regional District's perspective on this part of the Comox Valley's heritage. And special thanks is also owed to the ineffable patience and courtesy of Al Fraser, who gave us unfettered access to Baybrook.

We also wish to give special thanks for Martin Hagarty, Architect, for his continued interest in the project, and his insights into design of the future restored Baybrook.

As always, none of this work would ever have been possible without the support and encouragement of our elders, Alice Bullen, Betty Brooks, Norma Morton and Liz Stubbs whose experience reminded us of how little we knew.

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Executive Summary

1. *This report is a summary of the economic feasibility and proposed strategies for the restoration of “Baybrook” as a cost-effective heritage destination. It addresses questions of economic and strategic feasibility within the constraints imposed by the site (limited parking, no car access, no adjacent public parking) that were left unresolved in the 2013 Mack Laing House Report. The proposed economic strategy is not only intended not to be a tax burden, but rather to contribute directly to the Town of Comox’s tax base, and its economy.*
2. *“The Mack Laing Heritage Society” was registered as a non-profit in May 2014. All but one of the directors are residents of the Town of Comox. One half of the directors are immediate neighbours of “Baybrook”. The society is dedicated to seeing Mack Laing’s home, Baybrook, become an “interpretive natural history centre”, as per Mack Laing’s Will and Testament, **at no cost to the taxpayer.***
3. *The project depends on harnessing nature education and conservation tourism opportunities in the Comox Valley. The educational potential is modelled on the economic model of the premier interpretive centre of Vancouver Island, the “Nature House” at the Swan Lake and Christmas Hill. The tourism potential is adapted from the success of the Strathcona Wilderness Institute Centre at Paradise Meadows.*
4. *In spite of parking problems, the Swan Lake Nature Centre, attracts over 60,000 visitors annually. Startlingly, because of parking restrictions visitors come mainly by foot, bicycle and bus. Controlling registration numbers, controls potential parking impacts. Swan Lake’s success is tied to educational programs for children, youth, adults and seniors. The North Island has no similar facility, nor similar programs. Similar programs could easily be developed at Baybrook.*
5. *One of the mainstays of Swan Lake is the “nature pre-school”. Although nature preschools have been enthusiastically endorsed by municipalities throughout the Lower Mainland, and have recently been the object of a recent CBC report, there is no parallel outside of Victoria on Vancouver Island.*
(<https://soundcloud.com/cbcvictoria/outdoor-kindergartens-cropping-up-everywhere>.)

6. In June 2014, MLHS received a proposal to support a nature pre-school at Baybrook. The board supports this proposal which would put Baybrook on a par with the Swan Lake Nature Centre. This link also increases access for funding of a further \$75K by making the upgrades at Baybrook eligible for funding from the Ministry of Children and Family Development.

7. Visitor statistics to the SWI Centre are consistent with tourism data that show that ecotourism and conservation “voluntary tourism” are the fastest-growing types of tourism, out-trending traditional “mass tourism”. The unfunded volunteer-driven SWI draws 100 visitors a day (60% from out of the valley). The heavily funded CV Visitors Centre, draws 75 visitors a day. Baybrook as a tourism hub could easily grow this untapped market year-round out of a readily identifiable Nature Centre.

8. In consultation with an economist, Michael Mascall and Associates, MLHS determined that, if it pays taxes, a restored Baybrook would need an operation budget of \$7,500 per year.

9. Based on “handicap” calculations of the minimal gross revenue possible, **without any grants**, if Baybrook modelled its operations on Swan Lake’s educational programmes, and established a conservation tourism hub, it should **at minimum** gross about **\$124,746 annually**. Given that this figure could easily be doubled this would mean an added annual \$600,000 - \$1,000,000 to the economy of the Town of Comox.

10. Funding potential indicates that MLHS should have access to a further \$100,000 (from BC Nature, BC Heritage, Ministry of Child Care and Bateman Foundation, in addition to the \$73,000. left by Mack Laing’s will.

11. Cascadianwoodtech, a Comox Custom building firm, has offered to do volunteer work to restore Baybrook, if Baybrook is developed as a nature-interpretive centre on a par with the Swan Lake Nature Centre, for between **\$120,00** and \$140,000 (depending on extent of the restoration.)

2. Introduction

This report is a summary of the economic feasibility and proposed strategies for the restoration of “Baybrook” as a heritage destination, in keeping with the intent of Mack Laing’s will that his home be used as “a natural history museum,” and the mandate given to the authors of the 2013 Mack Laing House Report by the Town of Comox Council.

This is an implementation plan. It addresses questions of economic and strategic feasibility that were left unresolved in the 2013 Mack Laing House Report. It does not address questions related to presentation such as, First Nations signage at Baybrook, or interior design and permanent informational display. Some of these questions were already addressed in the 2013 report.

3. Terms of Reference for This Report

The Mack Laing House Conservation Committee was constituted in June 2013 in response to concerns over the proposed demolition of Mack Laing’s original 1921 home: Baybrook. The team consisted of retired professionals (architect, engineer, planners, historian and biologists) who gave pro-bono time and expertise to the preparation of the Mack Laing House Report, which was presented to the Town of Comox Council in September 2013.

The report found that Baybrook was the only one of two Mack Laing houses that could be salvaged to meet Mack Laing’s wish, explicit in his Will and Testament, that his “home be used as a natural history museum.” The Mack Laing House Conservation Committee therefore proposed that the committee be dissolved and a separate non-profit society be duly constituted, with an explicit mandate to uphold the intent of Mack Laing’s will, oversee future activities associated with the day-to-day business activities at “Baybrook” and assume the responsibility of making Baybrook a self-sustaining financially viable heritage destination.

In November 2013, the Town of Comox Council gave the Mack Laing House Conservation Committee 12 months to:

- a. form a non-profit society,
- b. develop economic strategies to the long-term operation of Baybrook,
- c. begin to develop heritage building restoration plans consistent with the economic strategies, and
- d. determine costs and funding opportunities, and begin fundraising.

In keeping with the strategy outlined in the 2013 Mack Laing House Report, the economic feasibility of developing educational and tourism opportunities at Baybrook are to be in keeping with constraints imposed by:

- a. limited parking (2 cars)
- b. limited access (pedestrian and bicycle traffic.)
- c. no public parking in adjacent neighbourhood.

Additionally, the operation of Baybrook is to be economically self-sustaining, **at no additional cost to the taxpayers of Comox.**

4. The Mack Laing Heritage Society

The Mack Laing Heritage Society (MLHS) was constituted and formally incorporated in May 2014. The purposes of the society are:

1. To fulfill the stated wishes of Mack Laing in his Will and Testament : “that my home be used as a natural history museum”, as faithfully as possible.
2. To oversee the restoration and maintenance of Mack Laing’s home at Baybrook.
3. To maintain and promote the dissemination of Mack Laing’s environmental values and legacy.
4. To fundraise annually to maintain a variety of environmental programmes of interest to the general public throughout the Comox Valley and the Town of Comox.

To these ends the MLHS has also set up a website for public communications of news of interest to the society and for communication of planned MLHS events : <http://macklaingsociety.ca/> .

All but one of the directors of the MLHS are Town of Comox residents and taxpayers. The majority of the directors are Orchard Park residents, and close neighbours of “Baybrook.”

LIST OF OFFICERS

President: Kate Panayatof, 75 Orchard Park Dr Comox, BC V9M 2S9

Vice-President: Sonja Telovsky, 1303 Midden Road, Comox, V9M 2R7

Secretary: Angela Burns, 1528 Comox Ave., Comox V9M 2S2,

Treasurer: Dick Grant, #107 1686 Balmoral Avenue, Comox V9M 2N1

Directors: Frieda Home, 1521 Baybrook Drive, Comox V9M 2S6

Paul Horgen, 101 Stafford Drive, Comox V9M 3W7

Fred Newhouse, 1853 Queens Ave., Comox V9M 2B8

Gordon Olsen 321 Glacier View Drive, Comox V9N 6A1

Executive director for MLHS: Loys Maingon (Comox Valley Nature, President).

5. Baybrook Operational Budget

In planning for the future of Baybrook there were two sets of costs to be established, prior to developing and analysing the business opportunities that would contribute to the long-term finance of this heritage building. The two costs are: annual operation and maintenance cost, and the building restoration cost.

The latter was determined by obtaining a firm quote from a Comox-based building contracting firm with experience in heritage building restoration, Cascadianwoodtech. That will be presented and discussed in section 10 of this report.

The operational cost of the building, as all budgetary analysis, was carried out in consultation with Michael Mascall and Associates, professional consulting economist, with experience with BC Government, PriceWaterhouseCoopers, Lavelin, CIDA and the World Bank.

It was determined that the annual cost of operating Baybrook, once it was fully restored and renovated, would be about \$ 7,500. per year (**Table 1: Approximate Annual Operation Cost of Operating Baybrook as a Heritage Destination**).

Approximate Baybrook Annual Operational Budget	
Taxes	2,500
Insurance	2,000
Hydro (Electricity)	1800
Maintenance (Contingency fund)	1000
Total Annual Cost	\$7, 500

Table 1: Approximate annual cost of operating Baybrook as a multi-function heritage destination.

The figures are based on a three “handicap” assumptions.

The first is that, unlike other Comox groups who receive tax exemptions, Baybrook would pay taxes to the Town of Comox. This would be consistent with the MLHS commitment not to be a burden on the taxpayer. The figure of \$2,500 is based on over half of the \$4,829 exemption which Nature Trust of BC receives for its stewardship of the 6.3 acre Baybrook property. As water, sewage, recycling and garbage are included in Comox Property Tax bills, these items would be accounted for through MLHS’ tax contribution.

The second assumption is that the cost of hydro would be equal to a large residential home. As the facility is to be renovated, fully insulated and windows replaced, this figure is artificially inflated.

The third is that the building would require maintenance work. This should be unlikely in the first years since the building would be fully professionally

renovated and all work warranted for the first five years. This cost would therefore go forward as a contingency fund towards future maintenance costs.

The figure of \$7,500 is therefore taken to be the revenue that needs to be raised annually by the MLHS through the activities it manages at Baybrook in order to provide revenue streams that would make the Baybrook entirely financially sustainable.

6. Two Economic Models for Baybrook: The Swan Lake Nature Centre, Victoria and Strathcona Wilderness Institute Centre at Paradise Meadows

As discussed in the 2013 *Mack Laing House Report* the concept of the “museum” has greatly evolved since the passing of Mack Laing in 1981. The concept has moved from the traditional nineteenth-century model of static “top-down” formal displays towards a more interactive model that favours a hands-on learning experience. Today’s museums are largely public “interpretive centres.”

6.a. Swan Lake Nature Centre

The Swan Lake Nature Sanctuary Nature House in Saanich is Vancouver Island’s premier nature interpretive centre. It has a limited parking problem. In many respects it can serve a model for the kinds of programme delivery to be developed at Baybrook.

Before the construction of a modern “Nature House” between 1975 and 1988 it successfully provided nature displays at a heritage house, similar to Baybrook at 3873 Swan Lake Road. This building now houses the Garry Oak Recovery Team’s offices and conference room, and provides more specialized educational opportunities. The Nature Centre features maps, seasonal exhibits, photographs. It was originally staffed by one naturalist who kept annual floral and faunal survey records of the park and provided slideshows and public educational opportunities. Although the original facilities have been greatly expanded, with the addition of a library in the “Nature House” built in 1988, the delivery format has remained essentially the same.

Aside from the usual grant support and donations, the Nature House is largely maintained through the delivery of public education programs and by partnerships with environmental educational ventures. This low-impact facility which originally drew 20,000 visitors in 1990 now draws over 60,000 visitors annually, which amounts to about 18% of the population of Greater Victoria (350,000 people). Given parking limitations, most of these visitors arrive on foot, bicycle or bus.

This is not to say that Baybrook would draw the same numbers or proportions, but that the programs offered are in extreme demand, in spite of the transportation and parking limitations. Because the attraction lies in the high quality of the programmes, the numbers and impact of visitor densities can be controlled by controlling registration to the programmes offered.

Educational programmes at Swan Lake are of three kinds: Adult programmes, Youth environmental education and nature pre-school. Adult programmes are 3 hour week-end workshops for which participants pre-register and pay for by donation.

There is a school outreach programme for youth from kindergarten to grade 7 which provides 1 to 1.5 hrs of instruction for groups of up to 15 students about twice a week at about \$75 per hour, to a maximum of 3 times a week. The Swan Lake schedule for January to June 2014 is attached in **Appendix 1**. There is also an additional programme for Home Schoolers.

Swan Lake also hosts an extremely progressive and successful nature pre-school, (See, Biological Buddies <http://www.swanlake.bc.ca/biology-buddies.php>) which is run entirely outdoors and only uses the building as a geographical reference and emergency shelter. These are 4-week 2-3-hour programmes that run from Monday to Thursday. These programmes are very popular and as recently reported by the CBC are now found in every community across Europe and North America <https://soundcloud.com/cbcvictoria/outdoor-kindergartens-cropping-up-everywhere>. This is an educational need that is yet to be met for parents of young children in the Comox Valley. Registry is up to 15 children @\$75 per week per child.

6b. Strathcona Wilderness Institute Centre at Paradise Meadows

Built with a \$350,000 Rotary grant, the Strathcona Wilderness Institute is a membership and volunteer-operated facility. This year operations are funded by a \$35,000 Mountain Equipment Co-op capacity-building grant; however prior to that it was maintained solely by donations and occasional BC Parks funding below \$5,000-\$10,000.

Like the Swan Lake Nature Centre, the SWI Centre is largely funded by donations for weekly interpretive hikes. It also runs a small bookstore of used nature-related books and local maps produced by SWI members. The Centre is entirely volunteer operated and has no paid staff, outside of a summer student paid for by a BC Parks grant., or this year by MEC.

Although the Centre is underfunded and entirely volunteer-managed and operated, it plays a disproportionately large role in the development of eco-tourism in the Comox Valley. As the attendance statistics indicate, (See **Appendix 2**) although the SWI Centre is only open between 28 and 109 days per year, it receives and assists about 100 visitors a day. Only 40% of these visitors are from the Comox Valley, 10% are from Europe.

The SWI Centre statistics complement, and compare very favourably with the heavily funded, Vancouver Island Visitor Centre, which operates on a large budget and is run by paid staff. The Vancouver Island Visitor Centre is open year round, 7 days a week, 8-9 hours a day. It received a maximum of 26,401 visitors over 12 months in 2013, which equals to about 75 visitors per day.¹ While the Vancouver Island Centre plays an important role in the Comox Valley's economic development, through its location by the highway, and access, it targets a large automobile-centre segment of the tourism market which the industry knows as "mass tourism."

¹ Nutesne Consulting for Comox Valley Naturalists Society. *Heritage Crossroads Assessment of the Economic Value of Conservation Projects for the Development of Conservation Tourism in the Comox Valley (2014)*. p.20. (Data from the Visitor Centre in the Comox Valley Situation Analysis).

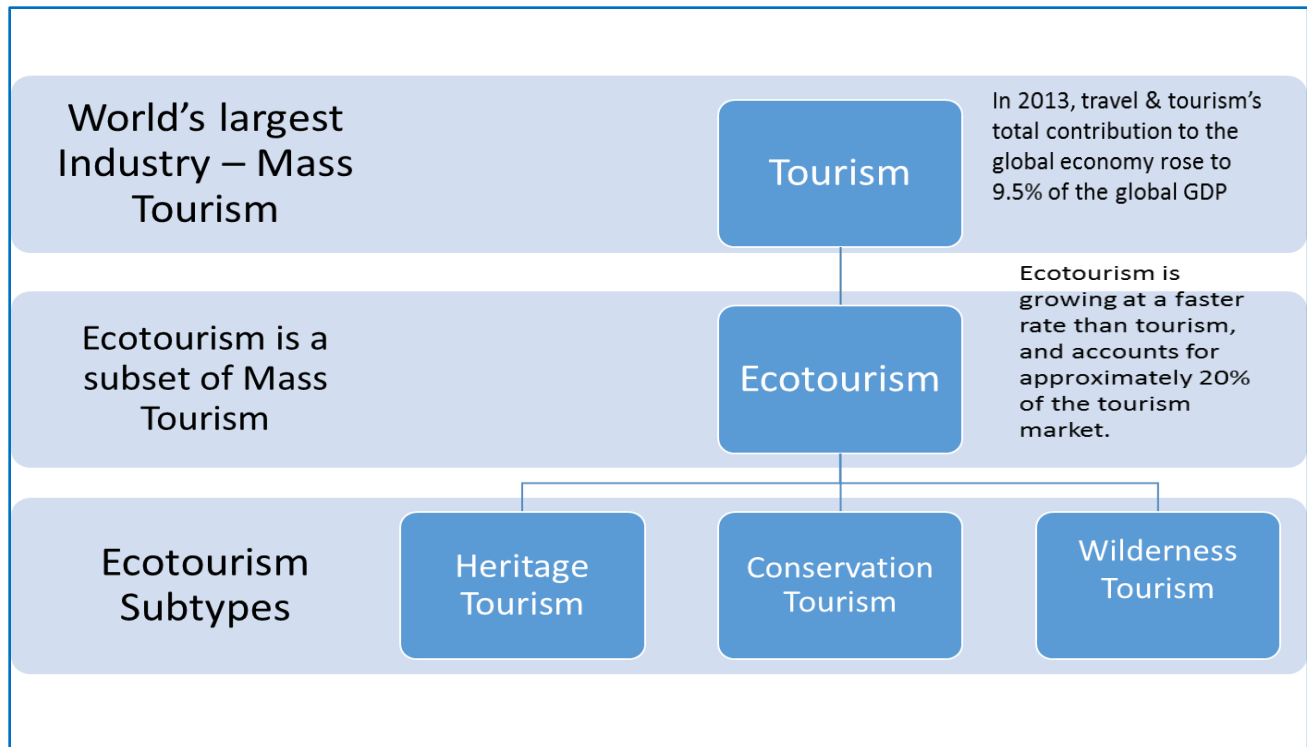


Figure 1. Types of Tourism: Mass tourism, Ecotourism, Heritage Tourism, Conservation Tourism and Wilderness Tourism²

The difference between the two visitor centres does not so much contrast different economic performances, rather it reflects different tourism markets and an ongoing shifts in the demographics of tourism population. While the greater fiscal efficiency of the SWI Centre can be attributed to its unpaid volunteer-based staffing, the success of the SWI Centre in attracting a relatively high number of tourists is proportional to the rate of increase of the rising popularity of eco-tourism and conservation and heritage tourism, and the general progressive decline in “mass tourism.”

Although the SWI Centre clearly provides an ideal venue to welcome eco-tourism and natural heritage and conservation tourists, it does not actively capitalize on this

² Nutesne Consulting for Comox Valley Naturalists Society. *Heritage Crossroads Assessment of the Economic Value of Conservation Projects for the Development of Conservation Tourism in the Comox Valley (2014)*. p.1.

opportunity. The Centre only acts as an information sorting house for visitors. It does not actively provide a link with the bed and breakfast industry, or with the many conservation programmes and activities that the Comox Valley can offer.

As part of research in preparation for a report due in the Spring of 2015 on the value of ongoing and planned environmental projects that can contribute to the restoration of the Comox Valley's lost natural capital, Comox Valley Nature commissioned a preliminary tourism report for the Comox Valley. It was prepared by a First Nations tourism consultant, (Nutense Consulting Ltd.), *Heritage Crossroads Assessment of the Economic Value of Conservation Projects for the Development of Conservation Tourism in the Comox Valley (2014)*. This tourism consultant's report estimated the economic value of the annual ecological work done by the Comox Valley's environmental societies to be about \$61 million (CDN). Even if we assume that this is an inflated figure based on a multiplicative factor of \$41 for every grant dollar³, it is consistent with the findings of the United Nations report on the rate of return of government investment in natural capital, which places returns at a non-diminishing compound rate of about 25-60% per annum.⁴

No matter what indices one uses to estimate the inherent economic value of the Comox Valley's natural capital for tourism, its economic opportunities for the development of ecotourism and conservation tourism presents are currently insufficiently developed.

One of the key findings of the *Heritage Crossroads Assessment* is that as opposed to "mass tourism" which is the kind of traditional automobile-centred tourist market that facilities such as the Vancouver Visitor's Centre caters to, eco-tourism

³ Nutesne Consulting for Comox Valley Naturalists Society. *Heritage Crossroads Assessment of the Economic Value of Conservation Projects for the Development of Conservation Tourism in the Comox Valley (2014)*. p.24-25.

⁴ Robert Costanza et al. (2012). *Building a Sustainable and Desirable Economy-in-Society-in-Nature*. New York: United Nations Division for Sustainable Development.

has been growing at a phenomenal rate of 300% ⁵ over the last decade. Overall, ecotourism now accounts for over 20% of the tourism market.

As recently reported by the CBC, outside of Quebec, Canada as a whole has been slow to respond to alternative outdoor low-impact tourism that is not automobile-centred. (<http://www.cbc.ca/news/is-canada-missing-the-boat-on-cycling-tourists-1.2717129>). Similarly, within the ecotourism market, heritage and conservation tourism are part of a large untapped market which has seen a phenomenal rise in popularity in the last decade. This promises to continue to grow, as public environmental awareness continues to evolve, however this is largely unsupported by conventional mass tourism agencies.

Among the opportunities inherent in novel forms of eco-tourism is the growing interest in “voluntourism”, for which the state of Oregon has successfully taken the lead to develop since 2010:

*“The International Ecotourism Society (TIES) and the destination hosts Travel Oregon and Travel Portland are working with the ESTC Voluntourism Partner Planeterra, a world leader in volunteer travel, to bring volunteering to the forefront this year in recognition of the increasing importance of voluntourism as a niche of sustainable tourism.”*⁶

“Voluntourism” is tourism in which participants volunteer to work on social and/or environmental projects. A voluntourist either volunteers his or her own specialized professional skill to a project, or takes time out to be involved as a lay person in a specialized project, and in the process gain an educational experience.

The Swan Lake Nature Centre and the Strathcona Wilderness Centre provide models for low-impact volunteer-supported educational and tourism business opportunities. These two models put together in a heritage location, such as Baybrook, create conditions that naturally appeal to “voluntourists” interested in the Comox valleys many conservation opportunities.

⁵ Nutesne Consulting for Comox Valley Naturalists Society. *Heritage Crossroads Assessment of the Economic Value of Conservation Projects for the Development of Conservation Tourism in the Comox Valley (2014)*. p. 1-2.

⁶ TIES, 2010. <https://www.ecotourism.org/news/ecotourism-and-sustainable-tourism-conference-features-voluntourism-first-time>.

7. Proposed Revenue Streams for Baybrook

From an environmental point of view, the Comox Valley is unique in its regional biodiversity. It provides easy access to a northerly pocket of Mediterranean microclimate as well as endangered coastal and alpine ecosystems that are of tremendous interest to naturalists and eco-tourists. It is one of the largest Important Bird Areas on the Pacific Coast. Ever since the mid- nineteenth-century settlement it has established a global reputation as a mecca for birders. Each year its mild microclimate makes it a seasonal refuge to rare bird species, some of which draw visitors from across the world, just as the Comox estuary drew Mack Laing and Major Allan Brooks after the First World War.

By drawing on both the rich local environmental educational potential of the Comox Valley, and the complementary tourism interest inherent in the regional natural history, Baybrook could become an economic generator for the Comox Valley. To do so, Baybrook would need to become the nature interpretive centre for visitors such as Mack Laing wanted his home to be, and much as the Swan Lake Nature Centre is today in Victoria.

Following the models discussed in the previous section, there are a number of low impact revenue streams that can make a restored Baybrook an economically sustainable venture. As at Swan Lake and the SWI facility, sustainability depends on a partnership of a volunteer corps which maintains public dialogue and a professional educational cadre which delivers high quality naturalist programmes to children. In addition, the potential tourism work that is currently being done only in the summer at the SWI centre needs to be harnessed to tap into year-round “voluntourist” conservation opportunities.

As at Swan Lake, the anchor of the centre’s activities is the presence of one or more local naturalists who keep track of annual flora and fauna, and organize interpretive walks and displays. The entire set of programs is built around the interpretation and monitoring of the site’s natural history. This is essentially what Comox Valley Nature provides to the entire Comox Valley on a weekly basis. This volunteer service could be adjusted and re-organized around Baybrook’s tremendous potential. This volunteer force would be able to provide natural history services year-round out of Baybrook in collaboration with more formal educational partners.

The success of Swan Lake rests largely in that the Board of Directors and the City of Saanich had the foresight to anchor naturalist interests in independently

progressive educational programmes. Of particular note has been the success of the outdoor pre-school programme and the school outreach programme (See **APPENDIX 1**).

The key in this concept is that all educational work with children is done by qualified environmental education professionals, who are certified and legally screened to work with children. While youth, adult and senior programmes can be delivered by a resident naturalist, the children education programme is delivered only by certified children educators who use local naturalists as resource persons. Thus, programme development and delivery are not carried by the Swan Lake Christmas Hill Nature Sanctuary Society, but by a separate entity, which administers the pre-school programmes, carries its own insurance and pays rent to the Society.

7a. Adult and Senior Programmes

As at Swan Lake and at SWI, adult programmes are funded by donation and delivered by both professional and volunteer naturalists. Assuming the same rates as Swan Lake and a limited delivery of week-end walks of only 30 out of 52 weeks, with donations normally ranging around \$10, and that there are only 10 participants, that would provide an annual gross revenue of \$3000 (See **Figure 2** below).

The conservative character of this estimate is best understood in contrast with the experience of Comox Valley Nature. Week-end CVN monthly year-round free public interpretive walks usually range between 40 and 85 participants. However CVN never takes donations or charges for these walks. Ten (10) participants is a conservative estimate based on the nature of the offering and the expected donation.

Approximate Minimal Annual Adult Nature Education Revenue		
Activity	Rate	Annual revenue
Interpretive walks	\$10x10x30days	\$3,000
Monthly Adult Workshops	\$20 x 10 x 12months	\$2,400
Monthly Workshops	\$60 x 1 (10) x 10months	\$600
Total Annual revenue		\$6,000

Figure 2: Estimated minimal potential revenue from adult and senior programmes, such as are run at Swan Lake Victoria, to “Baybrook.”

Victoria also organizes monthly nature 45 minute workshops for adults and seniors which include birding, botany and herpetology. With the estuary and its rich bird fauna, the diversity of hands-on workshop topics at Mack Laing Park and MacDonald Woods is possibly greater than at Swan Lake. It should therefore be possible to run similar workshops for small 12 person groups, at the same rate of \$60 per person from February to November. Gross revenue would be about \$6,000 (See **Figure 2** above).

7b. Mack Laing Tree Pre-School

As noted above in sections **6a** and **7**, many municipalities across Europe and North America – and in British Columbia, throughout the Lower Mainland - are enthusiastically embracing the outdoor-pre-school movement which started in Sweden in the 1950's. (**APPENDIX 3**). This is a pillar of the success of the Swan Lake Nature House, not just because of the high quality of the programme and teaching, but because it introduces children at a young age to the opportunities and values inherent in the natural outdoor world about them. For both parents and children, the formative pre-school experience carries over in later years to further natural history-related programmes.

As the CBC interview notes, the tree school movement is a healthy reaction by many young parents to the excessively television and computer-centred education of many children today. (<https://soundcloud.com/cbcvictoria/outdoor-kindergartens-cropping-up-everywhere>.) This is absolutely consistent with Mack Laing's minimalist outdoor philosophy of life.

A key to the relationship between the Swan Lake Nature House and the outdoor pre-school is that all activity is low impact and is always outdoors. Children are in small groups of 8. They are present only between 9am and noon, Monday to Friday. **The pre-school only avails itself of the building for toilet facilities, office and in instances of severe weather, common space for shelter.**

The pre-school is managed and operated independently from the society. It carries its own insurance and assumes all liabilities. However, because of the proximity in interests around natural history and the Nature Centre, the pre-school

environmental instructors can contribute to, and develop, the other natural history programmes offered through Baybrook.

It is important to note that the MLHS is only willing to assume responsibility for the restoration, maintenance and activities connected to the house. Here as in other communities throughout the province, **the Tree School proposal is a separate proposal tied to agreements with municipal parks**, and is therefore a separate proposal, albeit one that is entirely consistent with MLHS plans inasmuch as the Tree School requires the presence of an all-weather facility.

The pre-school therefore functions as a satellite of the Nature Centre. It has a vested interest in the nature centre as hub for educational activities. As such Baybrook becomes, however unconventionally, a child care facility subject to the requirements and support of the Ministry of Children and Family requirement. Therefore, the tree-school contributes fiscally to the operations of Baybrook, in a number of ways. In keeping with the practice at Swan Lake and other facilities in the Lower Mainland the Tree School would pay an annual rent of \$500 per month for each month of the year. This would contribute a net \$6,000. to the operation of Baybrook (**Figure 3**, below).

Mack Laing Tree School: Projected Revenue					
Age Group	Monthly Fee	Number of pre-schoolers	Sessions	Total	
3 to 4	\$169	16	12	\$32,448	
4 to 5	\$244	16	12	\$46,848	
Total Gross Annual Revenue				\$79,296	
Revenue to “Baybrook” (RENT)				\$6,000	

Figure 3: Estimated gross revenue for the “Mack Laing Tree School” and net revenue of \$6,000.00 to “Baybrook”.

7c. Youth Environmental Education Centre

With certified environmental educators in place, through the activities of the Nature Pre-school, further natural history programmes for youth can be developed which will supplement revenues.

There is a constant need in the educational system to provide field nature education outside the classroom and school environment. Again, Swan Lake successfully provides this service for the Greater Victoria municipalities. There is no similar service in the North Island. Naturalist groups, such as Comox Valley Nature, are regularly asked by both public and private schools to provide these interpretive services. However, the demand currently has to take a secondary role to Comox Valley Nature's other commitments. Therefore youth interpretive programmes, similar to those at Swan Lake would provide elementary and High School students of the North Island with the same educational opportunities as their counterparts in the Victoria region.

These opportunities will be of interest to 3 educational populations: Home Schoolers, Elementary and High School. Programmes for Home Schoolers have to be designed for individual students, and therefore the rate has to be adjusted. These field trips are generally limited to 12-15 students at a time, but can rise up to 30.

Using Swan Lake's programme and fee structure, and assuming again minimal interest and participation, for the Home School programme, 15 students over the Fall and Spring school terms would provide a minimal revenue of \$2,250. For Local School field trips, assuming only 2 groups of High Schoolers and 2 groups of Elementary per week for 24 weeks.

Approximate Minimal Annual Youth Nature Education Revenue		
Activity	Rate	Annual revenue
Home School Science Extension	\$75x15 x 2 seasons	\$2,250
Local School Field Trips (14 programs)	\$100 x2 x24 weeks	\$4,800
2 Age Groups: (Elementary and High School)		X 2= (\$9,600)
Total Minimum Annual Revenue		\$11,850.00

Figure 4: Estimated minimum potential revenue from Youth environmental education programmes for Elementary and High School age groups, such as are run at Swan Lake Victoria, to "Baybrook."

7d. Comox Valley Conservation Tourism Hub

One of the other potential revenue streams for Baybrook is its potential as a hub for the development of conservation tourism. As discussed above and in the *Mack Laing House Report* (2013) the Comox Valley is home to some internationally important multi-million dollar environmental restoration projects, such as the Blue Carbon project and the Tsolum River/ Mount Washington mine restoration project, to name just two, as well as the continuous interest in the valley's diverse bird population which is an important contribution to tourism.

These projects are continuously hampered by expertise cost and lack of volunteer manpower. Building conservation tourism, which is the fastest growing form of tourism is the key to addressing these problems.

Based on the Strathcona Wilderness Institute's experience and data, approximately 10,000 tourists a year come for an outdoor eco-touristic experience. Assuming conservatively that only 5 to 10% are interested in voluntourism, as things now stand, 500 to a 1000 visitors to the Comox Valley have nowhere to go to connect or be connected with the various ongoing and planned restoration projects, nor any obvious place to come to and begin making local environmental connections.

The most likely person to connect with would in fact be a regional naturalist in a nature centre. Baybrook, as an interpretive nature centre, then becomes a natural focus for "voluntourism". The requirements are extremely simple. All that is really required is a web-page advertising the Comox Valley's many conservation activities and providing an avenue for online registration to these projects and their managers. The registration fee can be \$15 to \$20 to cover time and effort to gather information relevant to the registrant's interests. Since these tourists will be looking for lodging, as in most tourism offices an arrangement can be negotiated with the local Bed and Breakfast industry. As in Europe's tourism offices a \$5 to \$10 fee is charged for each referral. Direct gross annual revenue for this would be, about \$12,500.

Conservation Tourism Revenue			
Activity	Rate	Customers	Revenue
Registration	\$15	500	\$7,500.00
Bed and Breakfast Referral	\$5	1000	\$5,000.00
Total Minimal Annual Revenue			\$12,500

Figure 5: Estimated minimum gross operational revenue from a “conservation hub” at Baybrook.

7e. Visitor-in-residence facility

As a conservation tourism hub, Baybrook should be able to attract specialized tourists, from lay volunteers interested in educational restoration projects, to scientific researchers interested in the estuary’s ecology or the regions diversity and nature writers interested in Mack Laing’s work, as well as in the history of the Comox Valley. Baybrook will have a small bed and breakfast style suite which it can rent to 1 to 2 visitors. This can be rented either by day at \$100 a day, or by week at \$500. (Cleaning services will have to be contracted and deducted from this revenue.) Assuming conservatively that the facility is only rented at a weekly rate for only 168 days of the year, minimal revenue would be \$12,000.

Minimal Mack Laing Bedroom Rental Revenue			
Activity	Rate	Cleaning Cost	Revenue
Daily Rental	\$100.00	\$25.00	\$75.00
Weekly Rental	\$550.00	\$50.00	\$500.00
Total Annual Revenue	(24 week Rental)		\$12,000

Figure 5: Estimated minimum revenue from the Mack Laing suite at Baybrook.

7f. Conference/Meeting Room Rental

The floor plan of Baybrook provides for two large rooms. The livingroom space in the original 1922 house is to be used as a natural history and Mack Laing artifact display room.

The newer “Stubbs” addition can be used as an interchangeable meeting/conference room with folding tables and chairs. This allows for seating about 24 people comfortably. With the recessed use of the kitchen area in the 1922

part of the house, the raised floor area of the kitchen allows for the seating of another 10 people.

Conservative estimate is therefore that if the room were rented only once a week for 2hrs at \$35 for the first two hours, annual revenue would then be \$1,750.

Conference/Meeting Room Rental		
(Seating capacity: 24)		
Rate	Usage	
\$35 (2 hrs)	50 weeks	\$1,750
\$75 (day)		
Minimal Estimate		\$1,750

Figure 6: Estimated minimum revenue from the Conference/Meeting room rental at Baybrook.

7g. Additional Streams, Visitors Donations, Book sales, Annual Fundraising

Setting aside annual applications for provincial and federal grants, such as senior's grants that could be available to the Mack Laing Heritage Society, and educational grants available to the pre-school, Baybrook has other potential sources of revenue, associated with the arts.

As an interpretive centre Baybrook is likely to maintain, as do Swan Lake and SWI, a small book stand of Mack Laing writings, as well as some nature guides, on sale to visitors.

Additionally, the Mack Laing Heritage Society is committed to annual fundraising.

8. General Revenue and 5 Jobs for Young People at Baybrook

What can be established is that if the plan set out above is accepted and executed, Baybrook would create 5 sources of local employment. There would be 2 teachers and a manager associated with The Mack Laing Tree School, a naturalist educator, and a conservation tourism hub manager.

The **minimal** lower-bound estimate of the total direct revenue that Baybrook should generate, once restored, should be about \$125,000.00 per annum. An upper-bound estimate of these activities could easily double this figure. To reach an

upper bound will depend on the initiative and commitment of staff employed at Baybrook.

Under these conditions, Baybrook would not have any difficulty in covering an annual operational cost of \$7,500. It would be self-sufficient and require no contribution from local government, and would in fact contribute to the tax base of the Town of Comox, and to the regional economy.

The usual rule of thumb is that every dollar generated in a community has a multiplier effect of \$4 in the business community. Therefore the contribution of a restored Baybrook serving –in the modern sense- as per Mack Laing’s wish “as a museum of natural history,” should add between \$600,000 and \$1,000,000 to the annual wealth of the Town of Comox.

Total Minimal Annual Revenues at Baybrook (2015)	
Mack Laing Tree School: Projected Revenue	\$79,296
Approximate Minimal Annual Youth Nature Education Revenue	\$13,200.00
Approximate Minimal Annual Adult Nature Education Revenue	\$6,000
Conservation Tourism Revenue	\$12,500
Mack Laing Bedroom Rental	\$12,000
Conference/Meeting Room Rental	\$1,750
TOTAL:	\$124,746

Figure 7: Estimated minimum gross revenue Baybrook.

9. Fundraising

The MLHS has currently received about \$2,500 of a probable \$5,000 from Comox Valley Nature. In addition, a future \$5000 is to be expected from BC Nature upon request from Comox Valley Nature.

The MLHS has just held its first fundraiser. It has held an early sold-out event from which at least another \$5,000 is expected to be raised.

A BC Heritage grant for \$25,000 is being applied for, due September 4, 2014. Additionally, as discussed previously, through the Mack Laing Tree School, the restoration of Baybrook would be eligible for a grant of up to \$75,000. There is also the probability that the Bateman Foundation, which was a donor to the first auction and has a particular interest in youth environmental education, may contribute to the restoration of Baybrook.

On this basis, we can project that MLHS could comfortably work on the Baybrook restoration with a working budget of about \$100,000 -in addition to the \$73,000 dollars left to the Town of Comox by Mack Laing to use his “home as a natural history museum.”

10. Baybrook Restoration Plans and Restoration Quote

The activities detailed above create specific uses for the building, which were outlined in the 2013 Mack Laing House Report. In that plan the space in Baybrook had to be designed for, in keeping with the assessment of Martin Hagarty, Architect:

- a) Display Room
- b) Meeting/Conference Room
- c) Office space for: naturalist/educator, conservation tourism manager
- c) Kitchenette for limited catering
- d) Public access washroom
- e) Small one bedroom rental suite for guests
- f) Space for washer and dryer for linen services associated with the rental suite.

Under the proposed plan, all the above remains with the added considerations:

- c) Office space is also to be shared by the pre-school manager and educator
- d) Shelter space and toilets to accommodate general public and children
- e) Wheelchair access, and wheelchair accessible toilet.

The feasibility of these objectives was greatly enhanced in June 2014 when, in the wake of the Tree School proposal, two young Comox parents, who have a profound interest in the educational opportunities that an outdoor nature pre-school would present for children, have volunteered time and expertise to the restoration of Baybrook.

Cyrill Werlen and Reto Schnyder are owners of Cascadianwoodtech (<http://www.cascadianwoodtech.com/>) a custom building firm based in Comox. They have offered to do all drafting and building work with a professional crew, largely volunteering much of their labour at 60% reduced rates. (see **APPENDIX 4: Proposal and Quote**).

They have provided design work, which Martin Hagarty has graciously offered to review, and are proposing to restore the building this fall so that Baybrook can be renovated by Christmas and open its doors by early January.

The quote on a full restoration, which would include a re-siding of the building to replace the cedar board and baton with white shiplap, as seen in the 1922 pictures of Baybrook, would be \$171,000 plus taxes. With the volunteer labour, this work should come to about \$120,000 if existing siding is kept, or \$140,000 with shiplap. Costs could be greatly reduced if local suppliers provided discounts on the materials for this heritage project..

In keeping with section 9 above, and bearing in mind the reality of project overruns, both these figures are well within the financial projections of MLHS funding.

APPENDIX 1



school programs

January - June 2014

When

Awaken Your Senses

Monday, Tuesday or Thursday
9:30 - 10:30 a.m. or 1 - 2 p.m.

Daring Ducks

Monday, Tuesday or Thursday
9:30 - 10:30 a.m. or 1 - 2 p.m.

Frog Fables and Turtle Tales

Monday, Tuesday or Thursday
9:30 - 11 a.m. or 1 - 2:30 p.m.

Way Cool Raccoon School

Monday, Tuesday or Thursday
9:30 - 11 a.m. or 1 - 2:30 p.m.

Social Insects

Monday, Tuesday or Thursday
9:30 - 11 a.m. or 1 - 2:30 p.m.

Wetland Discovery

Monday, Tuesday or Thursday
9:30 - 11 a.m. or 1 - 2:30 p.m.

Microscope Discoveries

Monday, Tuesday or Thursday
9:30 - 11 a.m. or 1 - 2:30 p.m.

Dino Bones to Indiana Jones

Monday to Thursday, a.m. or p.m.

Owl Program

Monday to Friday, a.m. or p.m.

Spider Program

Monday to Friday, a.m. or p.m.

Snake Program

Monday to Friday, a.m. or p.m.

Bat Program

Monday to Friday, a.m. or p.m.

Portable Pond Program

Monday to Friday, a.m. or p.m.

How

Fax your program request forms to 250.479.0132, or email to programs@swanlake.bc.ca. Download request forms at: www.swanlake.bc.ca

For more information call 250.479.0211

Maximum of 30/program.

Self-guided visits

Due to limited parking and site facilities, self-guided visit times should be booked in advance.

Call 250.479.0211 or email programs@swanlake.bc.ca to check availability.

PROGRAMS AVAILABLE AT SWAN LAKE

Awaken Your Senses (kindergarten to grade 1; 1 hour; cost \$80)

Compare your senses with those of the animals that make Swan Lake home.

Daring Ducks (kindergarten to grade 1; 1 hour; cost \$80)

Some dabble on the surface, some dive for their food - we'll explore the amazing adaptations ducks have for living on the lake and discover who's who in the duck world.

Frog Fables and Turtle Tales (kindergarten to grade 3; 1.5 hours; cost \$115)

Amphibians and reptiles are cool; 'Cold-blooded' that is! We'll take a close look at the reptiles and amphibians that live in the nature house, at the sanctuary and in our neighbourhoods. How are they the same as us; how are they different?

Way Cool Raccoon School (grade 1 to 2; 1.5 hours; cost \$115)

Through puppets, hands-on exhibits, and outdoor exploration we'll learn why raccoons are so good at living in our neighbourhoods.

Social Insects (grade 2 to 3; 1.5 hours; cost \$115)

A close look at our observation hive of real bees is our starting point as we examine fascinating world of bees, ants and wasps through games, role-play and exploration.

Wetland Discovery (grade 3 - 5; 1.5 hours; cost \$115)

Gain an understanding of wetland environments through hands-on examination of the plants, aquatic invertebrates, birds and mammals.

Microscope Discoveries (grade 5 - 7; 1.5 hours; cost \$115)

We'll collect living material from Swan Lake, prepare specimens and learn how to properly use both dissecting and compound microscopes and record their observations.

PROGRAMS AVAILABLE IN YOUR CLASSROOM or at SWAN LAKE

From Dino Bones to Indiana Jones (grade 1 to 7; 1.5 hours; 1 hour; in class \$130; at Swan Lake \$115)

What are fossils, how are they formed and what do they tell us about the ancient earth? We'll go prospecting, put together our own dinosaur and make a cast of a real fossil to take home.

Owl Program (K to grade 6; 1 hour; in class \$95; at Swan Lake \$80/1.5 hours in class \$130; at Swan Lake \$115)

We'll introduce your class to who's Hoo in their neighbourhood through stories, hands-on discovery and owl music. If you'd like your program to also include an owl pellet dissection, there is an extra fee of \$60 to cover the cost of pellets and 1/2 hour additional program time. **Ce programme est disponible en français.**

Spider Program (K to grade 5; 1 hour in class \$95 at Swan Lake \$80)

Spider dress-up, props and live spiders will demonstrate the biology and life-cycle of our local arachnids. **Ce programme est disponible en français.**

Snake Program (K to grade 7; 1 hour; in class \$95; at Swan Lake \$80)

With exotic and native snakes we'll introduce your students to the specialized adaptations and biology of these unique animals! **Ce programme est disponible en français.**

Bat Program (K to grade 4; 1 hour; 1 hour; in class \$95; at Swan Lake \$80)

Through story, props and specimens we'll explore the remarkable adaptations of bats to their nocturnal habitat. **Ce programme est disponible en français.**

Portable Pond Program (only available in class - grade 1 to 4; 1 hour in class, \$95)

We'll bring our portable pond to your classroom to introduce your students to the creatures of the wetlands through hands-on discovery. **Ce programme est disponible en français.**

APPENDIX 2

Strathcona Park Wilderness Centre stats						
	2013	2012	2011	2010	2009	2008
total visitors assisted	8895	10281	6867	4495	2636	2757
# includes nature walks, hikes, special events, groups w/questions						
days open	109	104	82	44	27	28
average per day	82	99	84	102	98	98
June visitors	578	277				
days open	15	8				
average per day	39	35				
July visitors	2672	2482	1589	1029	606	904
days open	30	28	25	10	8	12
average per day	89	89	64	103	76	75
August visitors	2860	3519	2814	2540	1748	1742
days open	31	30	28	25	14	15
average per day	92	117	100	102	125	116
Sept visitors	2171	3420	2351	926	282	111
days open	24	29	27	9	5	1
average per day	90	118	87	103	56	111
Oct visitors	614	860	113			
days open	9	9	2			
average per day	68	96	56			
Visitors from:						
Comox Valley	41.00%	45%	36%			
North Island	5.50%	8%	9%	43%		
South Island	22.00%	22%	21.50%	25%		
Rest of BC	6.50%	6%	8%	9%		
Rest of Canada	7.50%	6%	8.50%	8%		
# provinces/territories	11	12	10	11		
USA	4%	3%	4.50%	4%		
# states	35	27	30	19		
UK/Europe/EU	10.50%	8%	10%	10%		
# countries	23	18	23	19		
Other Countries	3%	2%	2.50%	1%		
# countries	20	23	16	9		
Program attendance						
nature walks/talks	127	122	133	96		
# walks/talks	13	10	10	8		
guided hikes	81	73	81	98		
# hikes	11	9	8	11		
pre-booked tour	5	22				
pre-booked school group guided	30	155	30			
special events(Parks Day)		60	52	20		
special events (Centennial)			102			

APPENDIX 3



Mack Laing Nature 'Tree' School

NATURALLY LEARNING

Updated: Wednesday, June 11, 2014

Background & Philosophy

Nature Preschool Movement

There is a rich history of Forest Preschools with roots in European models beginning with Swedish “Skogsmulle” schools from the 1950s (Skog – wood, Mulle – a fictional character who stood for stewardship for young children), and Ur och Skur (Rain or Shine) nature schools to Forest Kindergartens of the 1960s Germany. As of 2005 there are approximately 450 nature kindergartens in Germany. Over the last two decades Forest School programs have been increasing in popularity in many Scandinavian countries, New Zealand as well as many parts of the UK.

As adapted from Forest Preschool UK, benefits of a nature-based preschool include:

Healthier Bodies: Studies show increased frequency of physical exercise and a challenging environment helps to develop motor skills, e.g. navigating uneven terrain. Some research demonstrates less sick days due to open fresh air classrooms.

Healthier Minds: Forest Schools offer an opportunity to be sociable and also to have time alone. Space and resources are naturally available allowing individuals or groups to investigate and problem solve. Forest Schools provide time to just be, where individuals can relax and explore interests. Personal motivation, a willingness to try new tasks and the ability to persist at tasks increases.

Healthier Environment: A nature-based learning experience provides an understanding and appreciation of the natural environment, knowledge of how systems interlink and how we affect our surroundings. By spending time in the environment using it to play and learn effects us at a deep level. It is this connection with nature that opens us up to care more for the environment as adults.

Healthier Future: Many of the skills that develop as a result of spending time at a Forest School are essential life skills that in time will benefit the economy including developing determination to complete tasks, learning to work together as a team and communicating effectively.

OVERVIEW:

The proposed Mack Laing Nature 'Tree'School is an outdoor educational program that is designed to offer a unique early childhood learning experience for 3-5 year old children. Our classroom is the natural environment. Our chairs are the logs, our pencils are the sticks and our possibilities are endless! Our program is offered Monday to Friday from 9am to 12pm in the outside environment, as this is an outdoor environmental educational program. If there is severe weather, it may be necessary to use the Baybrook House. There are two certified and experienced early childhood educators that will teach a maximum of 16 children. Expanding on the BC Ministry of Education's Early Learning Framework, the emphasis of our program will be on a nature and play-based curriculum and will encourage preschoolers to engage their environment through art, music, games, physical activities and group learning. Our model for our outdoor educational program is comprised of two components: **Ecology** and **Adventure Education**.

SPECIFICS:

The **Ecology** component of our program focuses on becoming creative interpreters through the exploration of nature trails. This allows the individual student the time and the space to quietly experience the sights, sounds and smells of the natural world and then to express these feelings through drawing, song and dance. Birds will be viewed through binoculars, sea creatures through nets and plants through magnifying glasses. Throughout the year we will explore, question and interpret through sensorial play and meaningful encounters. We will follow the interests of the children, value their passions, ideas and individual learning styles, and provide an experience to encourage developmentally appropriate in-depth learning.

The **Adventure Education** component facilitates personal and interpersonal growth (communication, problem-solving, trust-building, risk-taking and cooperation) and is instrumental in the practice of SEDL skills (social, emotional, development and learning). Through hands-on activities, such as team-building and group cooperative games, children are able to expand on their development in communication, cooperation, trust, and problem-solving skills in an atmosphere that is safe, respectful, and fun. Students are guided in making connections between these activities and "real-life" situations. Families report a positive impact on home climate, child performance, and interpersonal dynamics when these activities are reinforced in the home.

LIABILITIES:

- Childcare Security Screening:

Under the Ministry of Justice, our program follows the B.C. Criminal Records Review Act, which states that *individuals working with children or vulnerable adults directly or potentially have unsupervised access to children or vulnerable adults must authorize a Criminal Record Check for their employer or authorized organization. This authorization is submitted to the Criminal Records Review Program (CRRP) for review.*

The purpose of the Act is to help protect:

- *Children from individuals whose criminal record indicates they pose a risk of physical or sexual abuse.*
- *Vulnerable adults from individuals whose criminal record indicates they pose a risk of physical, sexual or financial abuse.*

In doing so, all of our educators and parent volunteers must obtain clean B.C. Criminal Record Checks in order to participate with our program.

- **Safety:**

All of our program educators are required to hold current First-Aid (including CPR), along with in service training in child protection, safety and emergency management. Safety is our number one priority and we follow very strict procedures that outline First-Aid treatment, medical attention and emergency medical attention.

On a daily basis, the park site will be checked before programming begins for hazards such as garbage and dog excrement that may have been left by other park visitors. In addition, it is critical that the appropriate and effective hygiene practices will be adhered to while participating in the program. This will include a portable hand washing station (water/soap/sanitizer) and potty.

FINANCES:

- **Insurance:**

Our program will be carrying the insurance for the entire program and assume all liabilities. Our insurance carrier is Coastal Community where they offer a comprehensive Child Care Insurance Program through the Pacific Care Liability Program. Our program will be insured for \$5 million in liabilities, which includes \$50,000 in contents (program materials, tenant improvements and earthquake), property damage, field trips and all program operations (including injuries to parents/guardians who are dropping off and picking up). The annual rate is \$650.

- **Rent:**

Our program has factored into our annual budget the item rent and we are prepared to pay a monthly rate of \$500.

- **PROGRAM INCOME:**

The Mack Laing Nature 'Tree' School is comprised of 2 stages: **Seeds & Roots**. Seeds are 3 to 4½ year olds and meet Tuesday and Thursday from 9am to 12pm. Roots are 4½ to 5 year olds and meet Monday, Wednesday and Friday from 9am to 12pm. The price for Seeds is \$169/month and Roots is \$244/month.

Projected Annual Income

Seeds __ = Number of preschoolers x Number of sessions x Price/month

\$32,448 = 16 _x 12 _x \$169

Roots __ = Number of preschoolers x Number of sessions x Price/month

\$46,848 = 16 _x 12 _x \$244

TOTAL: \$79,296

With this financial projection in place, we have factored in the use of the Mack Laing Park and Baybrook House into our budget. In addition, Mark Sieben, Deputy Minister at Minister of Children and Family Development, has committed \$32 million toward the creation of up to 2,000 new licensed child-care spaces between now and March 2015. Restoration of the Baybrook House would certainly be eligible for this grant.

IN CLOSING:

The Nature Preschool movement is strong in North America. Once California adopted its philosophy, it quickly spread north to Oregon and Washington States. Currently it is spreading throughout Vancouver and Victoria. It's just a matter of time until it reaches the Comox Valley, and I believe the time is now. I've met with countless parents, educators and members throughout the community and the response has all been same. They are all ready to welcome this program into Comox and register their children! Let's join together and create a Nature Preschool that will only enhance our community.

In honouring Mack Laing's legacy as a naturalist, conservationist and school principal, we believe that environmental awareness, natural preservation and nature-based education are the key ingredients to planting the seed of stewardship for future generations. Mack Laing left his house and land to the Town of Comox to be kept as a nature park for future generations. We request your permission to allow us to plant these seeds and watch the roots of our future generations grow with our preschool children.

Thank you for your consideration,

Jarrett Krentzel

250-650-0438

APPENDIX 4

FUNCTIONAL RESTORATION DESIGN AND QUOTE for “Baybrok”

Proposal

Project: Restoration Baybrook House Comox



Submitted by:

©



2051 Wallace Ave
Comox BC

V9M 1X4

www.cascadianwoodtech.com

cascadianwoodtech@gmail.com

Contact Persons:

Cyrill Werlen 250 650 3025

Reto Schnyder 250 702 7425

Loys Maingon (MA,PhD,MSc, RPBio)
Aardscan Biological and Environmental Ltd.
6069 Tsolum River Road
Courtenay BC
V9J 1N9

August 4th 2014

Dear Loys

Thank you for your interest in our company and products. Please find attached the Quote for your exciting project.

cascadianwoodtech is a young dynamic company, who designs and builds high-end products in wood. Due to the regionally-based employees, the passion for wood and working with local suppliers, we can always meet growing customer requirements.

We would like to work with you, and transfer your idea into reality.

Sincerely
cascadianwoodtech

Cyrill Werlen

2 Organization and Qualifications

2.1 Firm

cascadianwoodtech is a young dynamic company, who designs and builds high-end products in wood and offers a variety of different services such as:

- House/Interior/Project Design
- Timber frame
- Custom Millwork
- Doors
- Stairs
- Custom Furniture
- Custom Kitchens
- Installs

cascadianwoodtech was founded by Cyrill Werlen and Reto Schnyder in June 2012. Both owners were born and raised in Switzerland, where they started their careers in the wood industry before coming to Canada in 2008. We are proud to offer a combined experience of 38 years in Timberframe, Prefab Houses, Millwork etc.

cascadianwoodtech key facts

- Founded in June 2012 through Cyrill Werlen and Reto Schnyder
- Operation Started in February 2013
- Home office at 2051 wallace ave, Comox BC, V9M 1X4
- Shop facilities on Huband Road, Courtenay

2.2 Key Personnel

Reto Schnyder, Owner/Operator

Experience: 18 years in diverse wood industry Companies
General Woodwork, Timber frame, Prefab Houses,
Panelized House Systems and Heritage Home Restorations

Training: 3 years apprenticeship as Timber framer
3 years Wood Engineering

Degrees: Wood Engineer FH (Master Degree)

CAD Work instructor in Reno, USA

Cyrill Werlen, Owner/Operator

Experience: 20 years in diverse wood industry Companies
General Woodwork, Timber frame, fine finishing,
Custom Millwork and Design, Restorations

Training: 4 years apprenticeship as cabinetmaker
2 years Bachelor of Wood Processing and Science

Degrees: Bachelor of Wood Processing and Science
(Woodworking Technician HF)

Teacher in AUTO CAD (Computer Aided Design)
Teacher Level 1

2.3 Engineering

cascadianwoodtech works with various engineers, depending on the project

2.4 Safety

Cascadianwoodtech is committed to provide a safe and healthy working environment, and works according to WorksafeBC standards.

Worksafe BC Account No.: 906111

GENERAL SAFETY RULES AND PROCEDURES

General safety rules and procedures for each site are to be posted for all to see, in areas such as site office, lunchroom, or other common areas.

Job-specific safety rules and procedures are to be established, and then reviewed at least annually, or any time there is a change in a job. They are to be dated, and indicate who established them. This is done at the company level. These rules apply to all employees, subcontractors and ALL visitors while visiting the work site. Supervisors will issue further instructions as the need arises. Employment with cascadianwoodtech, whether an Employee or a Subcontractor, requires acceptance of all its rules and regulations.

Drinking Alcoholic beverages or use of Illegal Drugs on company property, company work sites, in company vehicles, or at other locations, or coming to work impaired by either is not allowed (Workers Compensation Act 116(2)(d); Occupational Health & Safety Regulation

4.19, 4.20), and will be cause for immediate dismissal. Everyone is encouraged to report (in confidence) to the first aid attendant or site supervisor, when they are taking any medication or have any physical ailments that could affect the safety of their performance. If you see an unsafe act, talk about it with the person(s) involved and/or report it to the Supervisor (Workers Compensation Act 116 (e)(i); Occupational Health & Safety Regulation 3.10). All Personal Protective Equipment needed for the job you are doing must be worn properly. (Workers Compensation Act 116(2)(b)). The care, cleaning, and repair are the responsibility of the individual.

Working at heights, means precautions must be taken to protect those below from falling objects. (i.e.: barriers around lower areas toe boards, nets, signs, etc.) (Occupational Health & Safety Regulation 4.45). Fall protection systems, fall restraint systems, or fall arrest systems MUST be used when working more than 3 metres (10 Ft) above the ground/floor or where a fall from a lesser height involves an unusual risk of injury. (Occupational Health & Safety Regulation 11.2)

3 Similar Project Experience

Both owners do have extensive knowledge in Restoration of old buildings. We are very familiar with the term Restoration and do respect the history of buildings and owners. Many homes in Switzerland we worked on in the past, date back to the 16th century.

The famous writer Carl Zuckmayer was living the last years of his life in Saas – Fee Switzerland, were one of the owners of cascadianwoodtech – Cyrill Werlen – was born and raised as well were he started his career as a woodworker. Zuckmayer's house was completely restored in the years 2005 and 2006, without any changes in the outside appearance to the original.



4 Proposal Drawings

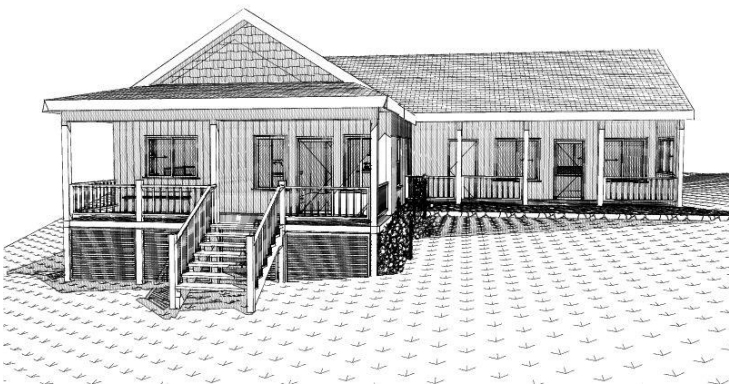


Courtesy: comoxvalleyecho

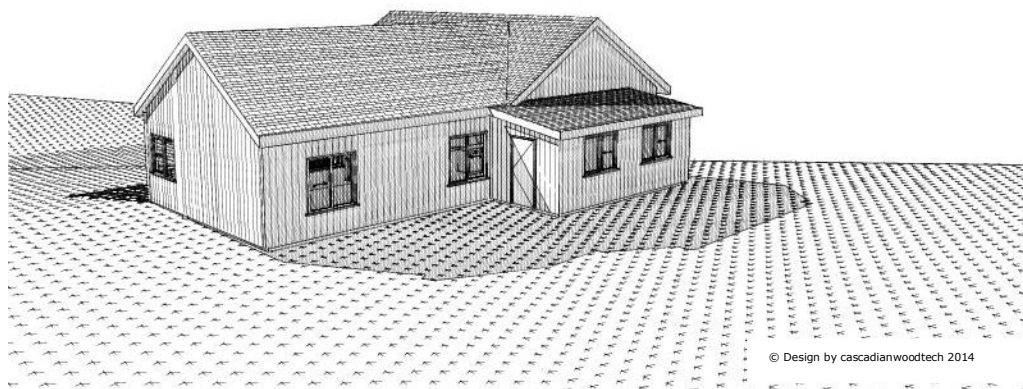
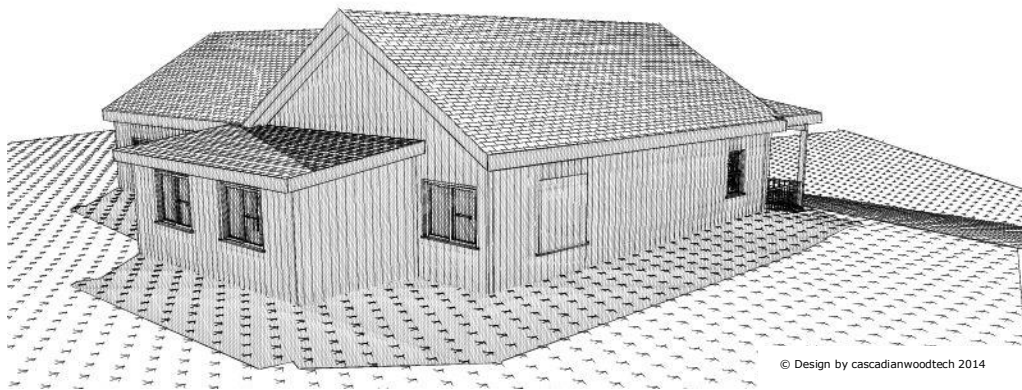
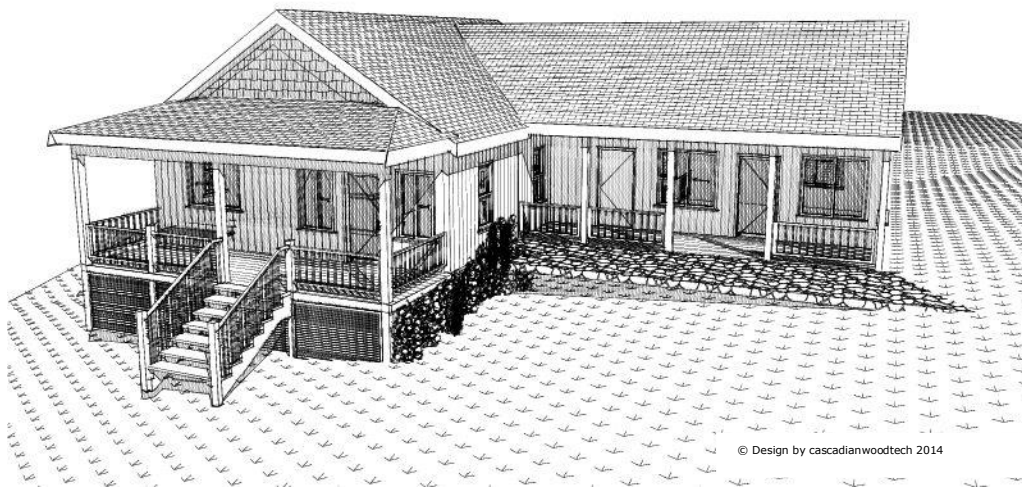
Original House



Actual Building



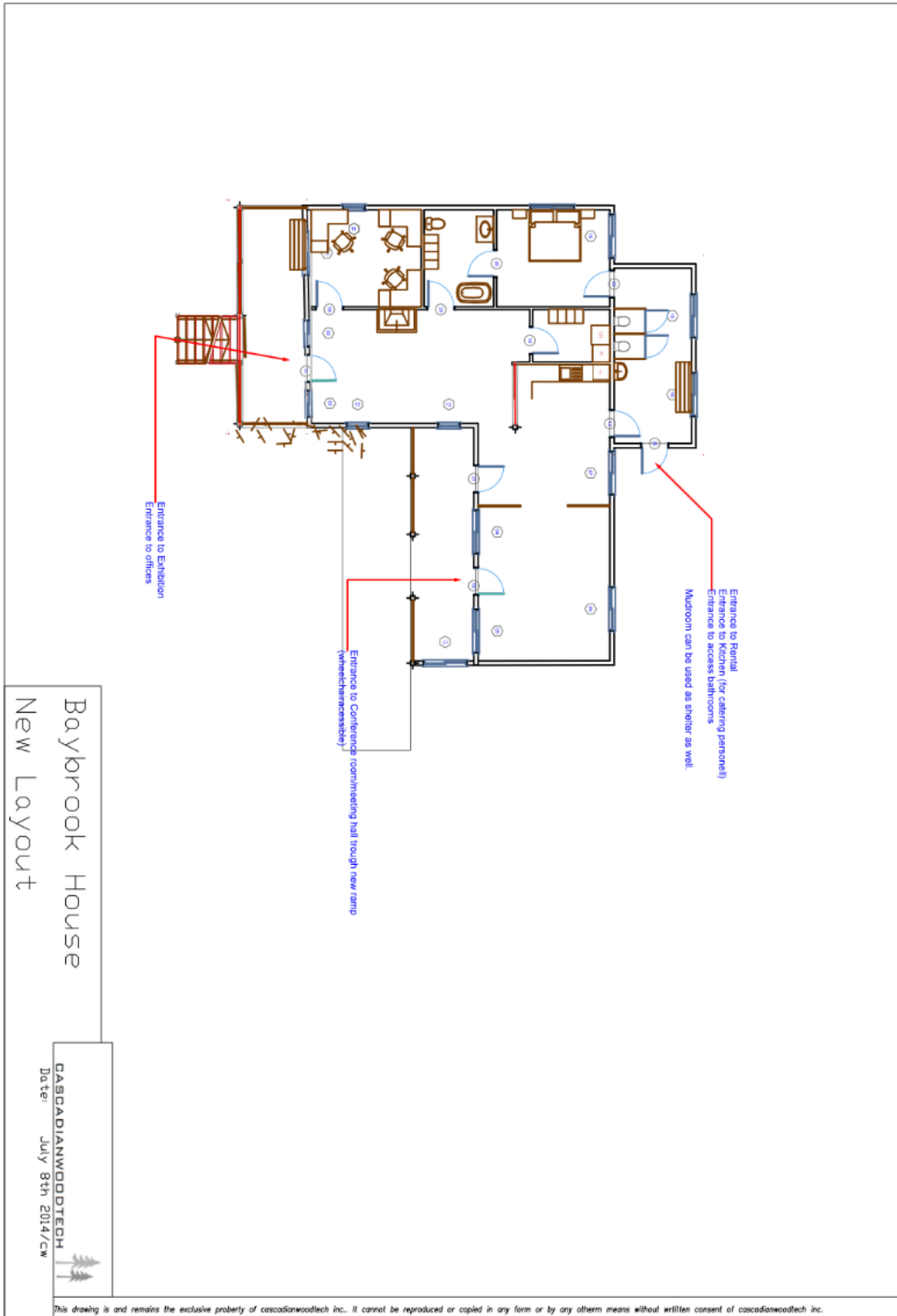
House after Restoration
3D Renderings



Interior 3D views



Floor plan
1st floor
new



5 Facility Proposal

5.1 General Information

The house will contain:

- One Bedroom
- Kitchen
- Storage/Laundry
- Office Space
- Exhibition Space
- Conference / Meeting Hall
- Mud room
- Bathroom for rental / exhibition
- Bathrooms for Visitors

5.2 Design

The House is designed to serve different purposes, such as:

- Exhibition
- Meeting Space
- Office Space
- Shelter

5.3 Foundation

- There is no work scheduled on the main foundation
- Old foundation will be reused for lean to on the backside

5.4 House Floors, Walls

Floors:

- Refinish existing floors

Wall built up (interior to exterior):

- Drywall
- Vapour Barrier
- Roxul insulation
- OSB
- Existing Solid Cedar Siding
- On newly framed Lean to there will be a Rain screen acc. to code

5.5 Roof

Main roof stays, north side of addition will be re roofed.

New roof on front porch and lean to

- Roof shingles to match existing roof

5.6 Kitchen

- Two open Cabinets as base for the sink (30" wide, 22" deep, 34" tall)
- Four open shelves to mount onto the walls
- Kitchen sink, standard

Materials used:

- Cabinets prefinished birch plywood 19mm thick, all edges sealed

5.7 Outside Deck

- Solid local (port alberni region) red cedar
- Locally milled here in Comox
- Logs are naturally air-dried here in comox to a moisture content of 13%
- Solid 5x5 posts
- Solid 1x5 deckboards
- Stair and railing built to appear like on original house

5.8 Insulation

- Roxul (moisture, rot and mold resistant as well fire retardant)

5.9 Windows/Doors

- Wood windows
- CSA Approved
- Double pain Glass
- U value 1.6w/m2k
- No fixed glass panels, all windows can be opened

5.10 Doors

- See point 5.9

5.11 Stairs (to access Loft)

- Pull down staircase to access loft

5.12 Finishing Material

- Paint whitewash
- Tiles
- Solid wood trim

5.13 Appliances

- N/A

5.14 Siding

- Remove existing siding
- Install Tyvek paper
- ½ rainscreen
- Shiplap solid cedar siding, 1.24" x 6"

5.15 Demolition

- Interior Walls
- Add backwall
- Incl. Waist bins

5.16 Warranty

cascadianwoodtech strives to deliver high end products and materials. We take pride in our workmanship and just use suppliers we trust. Warranties for Materials will be according suppliers, and will be determined before signing a contract.

6 Delivery Schedule

To be determined

7 Price estimate

Price consists:

Design

- Permit drawings
- Engineering
- Demolition
- New timber frame porch front
- New lean to back
- All finishing work acc specs.

Detailed Pricing (prices incl. materials, labor, install). Prices based on visual inspection. As it's a restauration there is a possibility of hidden costs which will possibly arise once the demolition is underway.

Design (5.2)	0.00
Foundation (5.3)	0.00
House Floors, Walls (5.4)	36'300
Roof (5.5)	6'420
Kitchen (5.6)	3'400
Outside Deck and add on (5.7)	36'000
Insulation (5.8)	6'300
Windows/Doors (5.9)	26'000
Stairs (5.11)	2'000
Finishing Materials (5.12)	18'000
Siding (5.14)	28'000
Demoliton (5.15)	<u>8400.00</u>
Complete estimated price: (excl. Taxes)	<u>170'820 CAD</u>

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