Appendix 1

People contacted and information received during the compilation of the Ecosystem Based Plan for Helliwell Provincial Park

Contact Name and Affiliation	Information Provided
Allen, Diana Assistant Professor, Dept. of Earth Sciences, SFU Armour, Moira Archivist Hornby	 with student (Greg Matsuo) has just completed a comprehensive groundwater chemistry study of Hornby Island. Comments included: they looked at the recharge areas and the evolution of water – how it changes in quality, incidence of salt water intrusion esp. coastal and peninsulas Whaling Station Bay and High Salal were their closest wells to Helliwell Park high incidence of salt intrusion, probably because low localized recharge and high demand for water (esp. Whaling station) study was requested and supported by the Islands Trust – will have some information available in a month groundwater movement is limited, not much of it, recharge is precious, water table close to ground, shallow saline depth NW highland is only significant recharge area – important to preserve water sources of salts on island – brines & ocean water contamination. Range of chlorine content, saltiness is often old ocean water trapped in pores and less well connected with fractures. will be giving a talk on the work probably in February provided access to Hornby archives.
Arthurs, Kate and Bertie and Keith Stonehouse, Ron Daizel, Eudel Strachan Long term residents of Hornby	- contacted about information on logging history and early industrial land uses with little success due to unavailability, illness, etc.
Baker, Donna Naturalist and long time Whaling Station Bay resident	- showed several books: Maps and Dreams by Hugh Brody Troller's Holiday by Margaret Sharcott 1957 Marine proposal by R. Zielinsk- suggested talking to Savoies - BLOY nest on St. John Pt. on end of pt. 1980's seen by Hancock's, Donna saw egg - Donna has movie of early Hornby incl. Flora Island - suggested Joy Smith for early Hornby info - Flora was completely burnt in 1950-60's, is more lush there now than before the fire, Stark's planted things - also suggested Hilary Brown - there is a small spring in the bay at the SW end of the park
Beckwith, Brenda University of Victoria, Fire Ecology Expert on Garry oak ecosystems	-provided references, case studies and recommendations on prescribed burning in the Georgia Lowlands ecoprovince, specifically Garry oak meadows. See notes on fire ecology section.
Bevan, Jan Long term resident	-provided information on wildlife and plants location in park on map included in features maps for the park.

Brown, Hillary	- provided some information on Helliwell's history
=	- does not recall anything about burning or logging.
Long term resident	- a few trees were cut down to use as fuel but the forest area
	was small.
	- recollections of Acton's farm and the Helliwell's dedication
Calada Carra an	of the land.
Cadrin, Carmen	- provided information on TEM mapping
Ecosystem Specialist,	
Ministry of Forests	'11'C ' 1 4 1 T 1 2 Cl 1 4
Cannings, Syd	- provided information and reports on the Taylor's Checkerspot
Zoologist, Conservation Data	in Helliwell
Centre, Victoria	- acted as COSEWIC contact
Carreg, Dave	- provided location of 2 Bald eagle nests in Helliwell and
Naturalist, 6+ years of monitoring	records:
records for Bald Eagles on Hornby	1996 # offspring 1 1
	1997 2 1
	1998 1 1
	1999 2 1
	2000 0 1
	- also noted that BLOY may nest on Flora
	- and that cormorants may not have raised young for 3 years on
	the bluffs
Ceska, Adolf	"Helliwell Park? I have been there quite a few times, but one
Botanist	plant still remains a mystery. I saw plants of <i>Lomatium grayi</i> that
	were grown from seeds collected in Helliwell Park (the man who
	collected them thought it was <i>Lomatium utriculatum</i>). Richard
	Martin and Chris Pielou were looking for it there, but they did
	not find it."
Chatwin, Trudy	- provided inventory data on Pelagic Cormorant in Helliwell
Endangered Species Specialist, BC	- provided report and information on Northern Alligator
MELP, Region 1 (Vancouver	Lizard on other Gulf Islands
Island)	
Doyle, Don	- provided information on Peregrine Falcon and Northern
Biologist, BC MELP, Region 1	Goshawk for Hornby and confirmed that there was no data for
D 1 D1499	Helliwell
Dearden, Phillip	- provided information on wildlife viewing impacts on marine
Duffus, David	mammals
Geographers, University of Victoria	
Eldridge, Morley	- only archaeological work done in area is on Denman.
Archaeologist, Millennia Research	- sent me the management summary of a mitigative excavation
Limited	from site DISe10 on Denman
	- some reference to diet and practices

Fletcher, Olivia	-provided contact names, photographs, recollections of Helliwell
Author of book on prehistory of	and references
Hornby, long term resident of	- references to look up
Hornby	Spirit Dancing Amongst the Salish Indians by Dr. Sara Robinson
	articles by Margaret Sharcott on Actons.
	Historic Hornby Island by Margery Corrigall
	History of the Salish by Homer G. Barnett
	- 1871 First surveyor of Hornby. Field notes in archives of
	Ministry of Forests (now in the BC Surveyor General's archives,
	under Carey.)
	- Ed MacLure - anthropologist.
	- Diane Acton (mother was an Acton) will write and send
	anything related to Helliwell.
	reminiscences of Helliwell Park before it became a park were
	that the flora was often waist high, children would roll in
	meadows and have picnics there.
	- spoke to Mrs. Mary Clifton when she was sill alive, wife of
	Comox chief. She spoke about wearing moccasins when
	picnicking on Hornby Island at end of 19th century because of
	cactus.
	- recommended interviewing Barbara Frank, wife of present
	chief. Very knowledgeable about Mary Clifton's life whaling station in 1871-73 very short.
	- looked for pictures in Helliwell in 1960s but could not find
	anything appropriate.
Fowler, B.T.	- "The Committee on the Status of Endangered Wildlife in
Co-chair, Lepidoptera and Mollusca	Canada discussed and listed the Taylor's Checkerspot last week.
Species Specialist Group	They made recommendations for changes to the report.
(COSEWIC), Canadian Wildlife	Consequently, I have to contact the author to make the required
Service	changes and then finalize the report. The report will be available
	to the public only once all that is done."
Frank, Barbara	- taped interview (tape enclosed)
Elder of the Comox Band	
Fuchs, Marilyn	- provided literature review and management issues for Garry
Garry Oak Ecosystem Recovery	oak ecosystems
Team (GOERT) chair	•
Gayton, Don	-provided recommendations for specialists in coastal fire ecology
Southern Interior Forest	and references
Ecosystem Research Program,	- Bob Gray is "single handedly building a culture of fire ecology
Forest ecosystem specialist	in the province. He has been doing prescribed burns of CDF in
	Squamish District" Chilliwack (604) 824-8726
	- read <i>Indians, Fire and the Land</i> by Richard White about burning on Whidbey Island
	- US names are Jim Agee, Forestry Department of University of
	Washington.
Guppy, Chris Butterfly	
Specialist, BC MELP Quennel	- provided information and references, reviewed both
	butterflies' species accounts.
	Contacted but no response.

Hay, Doug	-provided database of herring spawn locations and intensity
Department of Fisheries and	-commented on the status of herring stocks in the Hornby Island
Oceans, Herring research scientist	region
Hardy, Chief Ernest Sr.	- provided traditional place names (map included in this report)
Chief of the Comox Band, was	- traditional use studies under the Galgalis Project, with
assisted by band council	interviews of April Shopland, Joan and Dave Davis and Barbara and Norman Frank. (given to archives)
Heath, Amanda	-provided detailed maps of distributions of six-gilled sharks,
Hornby Island Diving	marine birds and mammals based on personal observations.
	-provided data on number of divers using diver charter in the park by month for the years 1998-2000.
	-provided detailed lists of marine flora and fauna at main dive sites within the park and indicated locations of dive sites -reviewed commercial fishery information and edited according
	to personal observations
	- provide an unpublished collection of document entitled "Re:
	The formation of a National Marine Park at Hornby Island"
Hebda, Richard	- provided references on his papers and PhD student Kendrick
Paleoecologist Royal BC Museum	Brown chronicling the long-term fire incidence in coastal forests of southern British Columbia from pollen analysis in lakes
Higgs, Eric Ecological restoration specialist	- provided principles for restoration generally and references from Jasper National Park restoration plan.
Holroyd, Susan	- confirmed that there is no official status report on Townsend's
Inventory Specialist, BC	Big-eared Bat
Environment, Region 1 (Vancouver	- provided considerable material on wildlife species
Island)	- offered to review species account
Mackie, Richard	- sent 5 pages of notes taken from George Drabble's papers in
Historian and specialist on early surveyors	Campbell River Museum on his visits to Hornby/Denman from 1862-1885
,	- very little on Hornby and the only reference to land use was
	"It was naturally open land that attracted them [Ford and
	Maude]."
Martin, Richard	- provided plant lists
Naturalist Hornby Island	1
Martini, Fran	- provided some contact names and material
Long term resident of Hornby	*
Maslovat, Carrina	
Native grass restoration	-provided guiding principles for grassland restoration,
specialist	recommendations for Helliwell and substantial references
- E	(see Grassland restoration section)

Morrell, Mike	- provided bird records from a study at Heron Rocks, also
Fisheries Biologist, Birder, Denman resident	consulted on species for Helliwell
Morrison, Karen MOE Wildlife, Nanaimo	- had record of an incident where a Barred Owl attacked a jogger in the park in September 2000. An adult Barred owl was sighted in and around the park subsequent to this and one of the fledglings was seen flying through someone's yard adjacent to the park. It was not confirmed as to whether the adult or fledgling attacked the jogger.
Morrison, Jim Department of Fisheries and Oceans	- provided maps of fisheries activity in the Helliwell area (DFO Management Area 14) compiled from interviews with Fishery Officers
Moule, Ian Biologist, contractor for CWS	 provided data, notes and references for Pelagic Cormorant status at Helliwell Park provided information on Great blue heron populations in the Strait of Georgia
Mustard, Peter Dept Earth Sciences, SFU	 with a Masters student (Deane Katnick) has redone the geology of Denman and Hornby provided summary of Hornby work, a paper and a map of the geology of the area
Nagorsen, Dave Royal BC Museum	 only Hornby mammal record in Royal BC Museum is Peromyscus maniculatus Sorex monticolus on Denman no records of red squirrels or any carnivore but suspects raccoons, mink and otter as well as deer
Olesiuk, Peter Department of Fisheries and Oceans, Marine mammal biologist (no longer with DFO)	-provided unpublished records of seal and sealion haulouts from 1988 and 1995provided information on movements of sea lions in the area from radio telemetry studies.

Parminter, John Fire ecologist, Ministry of Forests	- provided fire history maps and report on fire history (included in the fire history section) - three maps; 2 spreadsheets Map 1 displayed known fires to 1979 all fires human-caused primarily escaped slash burns from logging including largest fire in 1952 around Mt Geoffrey Map 2 is from computer database, all fires human-caused primarily escaped campfires. The latitude was calculated incorrectly so some fires appear in ocean. In reality they were on the south shore of St. John's Point. Nine in park alone, one on Flora Islet. Map 3 Lightning strike history - historical aboriginal burning on Hornby is a bit of a mystery, there are no lightning caused fires in records—all human caused - if a case can't be made for prescribed burning then perhaps manual fuel reduction and removal is a possibility where fuel loads represent a hazard -Bruce Lawson and Brad Armitage have consulting firm and have done fire management work in a number of provincial parks. The Forest Service fire suppression personnel are happy to assist with prescribed fire planning and execution as well.
Pike, Jim Archaeologist for Archaeology Branch, Ministry of Small Business, Tourism and Culture	- provided archaeological site inventory form for the only recorded site in Helliwell Park, DjSd11 - in a letter, he notes, there has been very little archaeological work on Hornby Island - majority of recorded sites are rock art and relatively conspicuous middens -there does not seem to have been a systematic shoreline (or other) archaeological survey on Hornby - information is limited to inventory level descriptions - there have been no archaeological impact assessments on Hornby - there must be local area artefact collections and it may be possible for an archaeologist to offer some preliminary observations about these sites.
Raudzins, Ilze Resource Manager, Naturalist, Hornby resident	- provided Rick Martin's data, also provided coastal waterbird survey information and observations on marine mammals

Rodway, Michael	- Provided detailed Information on Harlequin ducks in the form
Simon Fraser University	of publications in press and unpublished data. Commented on
PhD candidate, Harlequin Ducks	potential impacts on Harlequin ducks resulting from human use
	of the park.
	- most stressful time for harlequins is moult when they are
	flightless and this is time to limit kayakers who can push them
	along the shore
	-educational posters at park entrances kayak launch sites and
	ferries, campgrounds or other accommodations to paddle away
	from shore and go around visible flocks may help
	-this could apply to all times of year and in particular loose dogs
	and people walking into the lower tidal areas are also disturbing harlies and other shoreline birds. This info. could also be added
	to any posters to explain why people should keep their dogs
	leashed.
	-during herring spawn time although major disturbance an occur
	from boats, dogs and people in the vicinity, it is an easy time for
	harlies as they spend less than 20% of their time feeding during
	spawning as compared to 60 or 70% of the day during mid-winter
	and thus the consequences of disturbance may be less.
	-The availability of the spawn is the critical factor and thus any
	programs to protect the herring and the habitat for spawning are
	important.
	- It is possible the period in April just after spawn and before
	most of the resident birds on Hornby head to their breeding
	grounds is more important in relation to disturbance, as the birds
	will be trying to maintain good body condition for migration and breeding.
	- Mid-winter is also a critical period days are short, weather is
	inclement and feeding takes most of their time.
Sheppard, Jon	_
Butterfly specialist	- provided information on butterflies and references
Suttles, Wayne	- provided references on his work on the north and central
Ethnographer on Salish people	Coastal Salish
	- interviewed Andy Frank in 1961, these notes incorporated into
T	Island Comox traditional use study.
Turner, Nancy	- provided only reference she knew on ethnobotany of Island
Ethonobotanist, University of Victoria	Comox and Pentlatch
VICTORIA	Sliammon Life and Sliammon Lands, Bouchard and Kennedy 1983 Talon Books
	- very little research done on Hornby on ethonobotany and
	traditional uses of land due to few survivors of Island Comox and
	oral histories
	1

Veale, David General Manager for High Salal and botanist

- provided overview of High Salal oak grove, and species on this property
- toured the recent management activities
- provided part of the written management plan
- says he can't speak for the owners of High Salal, the Sorenson's, however these are his thoughts:
- values: old Fd, oaks, open grassy meadows, marine shoreline, birds
- noted that woodpeckers etc are in oak grove, not the AMRO & DEJU that are at their house
- recognizes the regeneration of Shore pine and the invasion of Douglas-fir which overshadows the Garry oaks and are infringing on the bluffs and grassy meadows
- lots of pressure from deer browse in meadows, this is a corridor between the 2 parks (Helliwell and Tribune) therefore no hunting, deer in large numbers, feels affects oak regeneration, deer not eating Shore pine and holly. He hasn't seen a *Fritillaria* in years feels it's because of deer. We inspected a couple of oak regens that are very browsed
- they are removing small firs in oak grove
- they received a HCTF grant to remove Fd, cut down large Fds., need to figure out where "boundary" at back should be, Doug Morrison involved "Oak Grove covenant" are mowing invasive grasses, enhancement of oaks
- within strata, once decided supported, start with tree cutting, some last year and HCTF this year, small projects had been done before
- not done any prescribed burns
- this year's Fd cutting infringed on surrounding lots, but these lots aren't sold yet
- left some of Fd, if existing Oak was near an Fd removed the Fd, old knarled Fds were left, remove young Fd unless felt was of value, aesthetic choices. Made special effort not to damage oaks, Fd's went for firewood, branches were burned in one pile
- mowing is a bit contentious, must be cut at right time
- problem with deer eating acorns and wild flowers
- felt there were fewer opossums now than there once was, they removed 3 this summer 1 unknown, 1 male, 1 female at compost pile. Believes that as strata has a number of dogs this may keep opossums away
- strata folks are not supposed to have gardens of their own, they have metered water, and there are restrictions on tree removal
- have mink and river otter, used to have farm animals, Bald eagle and others visited but not a problem now, have goldfish pond now and Bald eagles, Great blue heron and others are greatly valued by the summer people, they are nice to see.
- osprey nest in Tribune park somewhere, watches them fly west to fish
- Peregrine seen in Oak Grove area, ? nest Sharp-shinned, Turkey

Vultures hang out around cliffs

- see lots of CBCH, SPTO, RBNU, BRCR
- see Alligator lizards on High Salal, in oak grove, 3 colours of Garter snakes
- lots of HYRE (*Pseudacris regilla* PSRE) lots of tadpoles in upper pond
- just revamped lower pond, used to be very stagnant water by July, bubbling, so excavated, re-sculptured edges, removed alders, put an outflow at bottom to siphon system
- sees Clouded salamanders under woody debris, not seen Newts here

The following is from the part of the "Conservation Area Management Plan"

- note there is a "vegetation control zone" for lots adjoining the oak grove (# 25-30)

there-in owners are asked to cooperate with Oak Grove Committee on matters such as removing invasive plant species (broom, holly, firs) which may be considered by committee, a threat to the oaks' survival

Within Oak grove:

- to comply with directives from Committee wrt mgmt of grove Committee advised by MOE regional manager who will provide leadership in management techniques to "rejuvenate the area while accounting for biological processes in maintaining this edaphic climax oak meadow"
- initial treatments:
- mowing grasses during the appropriate season with sufficient frequency to remove exotic grasses
- treatment of trees to improve spatial distribution, age classification and density (could include thinning, limbing, and even removal as well as planting seeds or seedlings, new trees would need protection with deer proof barriers until have grown sufficiently to be safe from damage
- assessing wildflower distributions, abundance and changes with these mgmt techniques, enhancement of meadow's biodiversity with native or formerly native flora may be necessary
- developer commits to help organize the committee to assume responsibility for implementing policies, will attempt to elicit pledge from Strata members for annual financial support for betterment of oak trees to be paid into reserve fund. This ultimately will contribute \$7000 to fund
- Ministry will provide expert advice such as but not limited to timing and frequency of mowing of grasses, thinning of firs, replacement of trees cut for viewscapes, recruitment for dying oaks, planting, fencing and caring for seedlings, advice on reseeding wildflowers; will look for alternative funding.

Wheatley, Andy	- provided student paper on restoration thoughts for Helliwell
Resident and student of ecological	Park
restoration	- provided information during walkabout in park on known
	locations of some rare species, recommendations for trail
	diversions, special features of park (two sisters on mid- park
	trail)
	- drew attention to problem of prickly pear as introduced species
	becoming nuisance in warming climate, e.g., Australia
	- thoughts on role of fire as pesticide for old trees, i.e., burn scars
	prevent insect infiltration
	- role of wind on desiccation and encroachment influencing
	amount of salt/wind desiccation changing plant communities
Whitehead, Pam	- suggested Mike Rodway to contact re Harlequins
Canadian Wildlife Service	
Wilson, Willi	- suggested we contact John Yearsley original warden of
Former park contractor	Helliwell now marine biologist with Department of Fisheries and
	Oceans.
Wright, Ken	- said would contact the other Harlequin researchers and put
Research biologist, Harlequin	together something
Society, BC	- but for them, main issue is disturbance: Pets are # 1, also
	Kayak, and Jet skiis
	- also pollutants – alter survival
	- would like Parks to create fines for disturbance, also signage
	re: HADU
C-1-2- C	- HADU are an issue in Helliwell ALL year
Cadrin, Carmen	- Assisted in the TEM
Resources, Inventory Branch,	
Ministry of Forests, Victoria	A - that d - table as we will not a suppose table a
Flynn, Samantha	- Assisted with rare plant communities
Assistant Ecologist	
Conservation Data Centre	
Ministry of Environment, Lands	
and Parks, Victoria	Assisted with Consitius December 1
Kirkby, Jan	- Assisted with Sensitive Ecosystems Inventory, rare features
Conservations Science Specialist,	and rare plant communities
Conservation Data Centre,	
Ministry of Environment, Lands	
and Parks, Victoria	
Sadler, Kella PhD candidate UBC,	-
Bryophyte specialist	