

COMOX LAKE BLUFFS

PAC 1752

COMOX LAKE BLUFFS - PLANT OBSERVATIONS

Field notes of 12 May, 1994, by H. Roemer

Numbered references are to 4 different sites of open rock outcrops as marked on the attached map. Sites with closed forest have not been surveyed for additional species.

Many listed species are near the environmental and/or geographical limits of their range in this location. Unusual plant communities associated with the dry open sites there are characterized by the following tree/shrub combinations:

1. Douglas-fir (Shore pine) - Arbutus - Manzanita - Bearberry, and
2. Douglas-fir (Shore pine) - Arbutus - Rocky Mountain Juniper.

COMOX LAKE BLUFFS

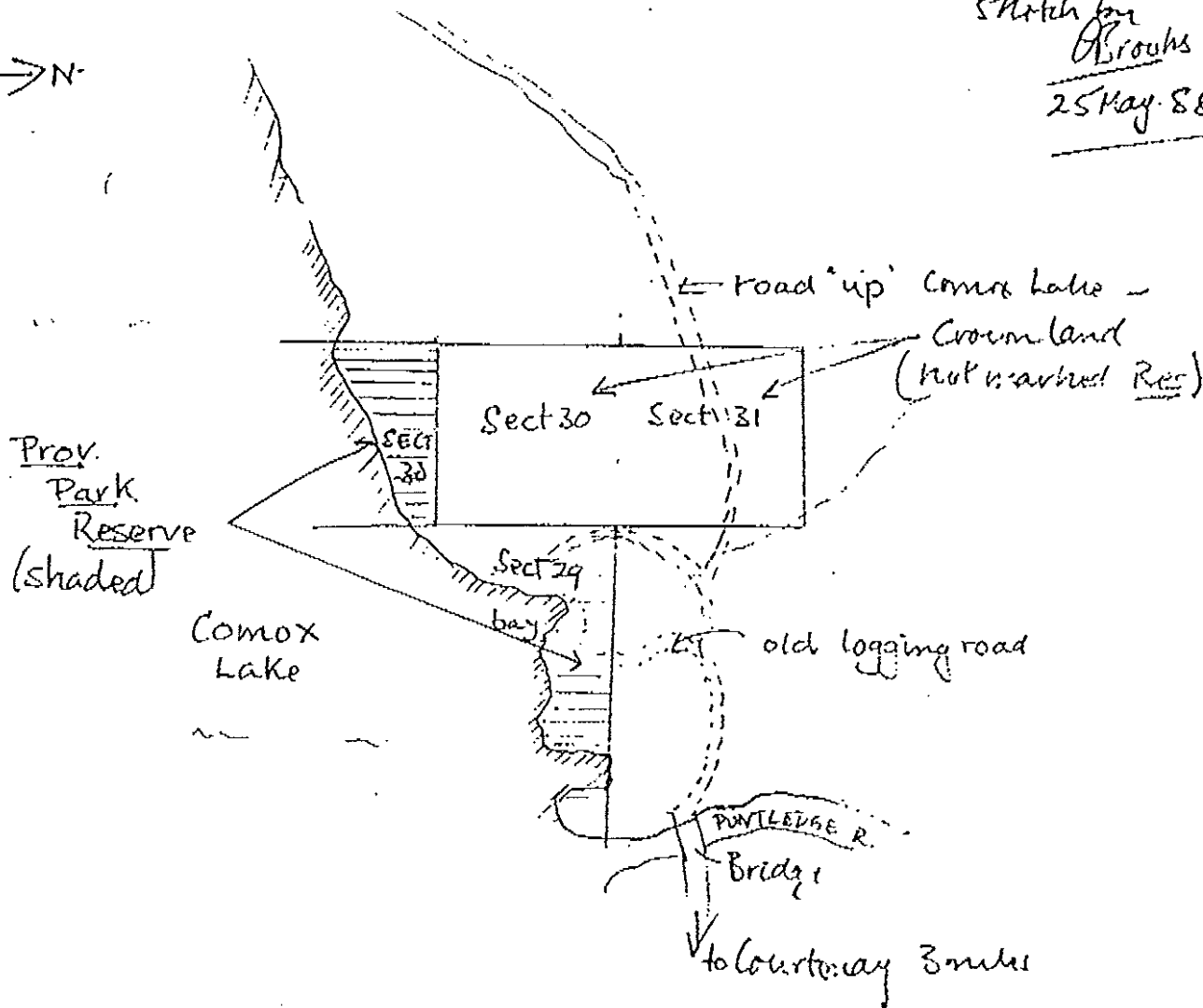
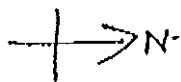
localities				
1	2	3	4	(x = occurrence; X = major occurrence)
x	x	x	x	<i>Achillea millefolium</i> (yarrow)
x	x	x	x	<i>Aira caryophylla</i> (silver hairgrass)
x	x	x	x	<i>Aira praecox</i> (early hairgrass)
x	x	x	x	<i>Amelanchier alnifolia</i> (saskatoon)
x				<i>Anaphalis margaritacea</i> (pearly everlasting)
x	x	x		<i>Antennaria racemosa</i> (racemose pussytoes)
x	x			<i>Apocynum androsaemifolium</i> (dogbane)
X	X	X	X	<i>Arbutus menziesii</i> (arbutus)
X	X	X	x	<i>Arctostaphylos columbiana</i> (manzanita)
X	X	X	x	<i>Arctostaphylos uva-ursii</i> (bearberry)
X	X	X	x	<i>Arctostaphylos "media"</i> , natural hybrids of the above
x	x	x	x	<i>Arenaria macrophylla</i> (large-leaved sandwort)
x	X	X	X	<i>Aspidotis densa</i> (Indian dream fern)
	x	x	x	<i>Asplenium trichomanes</i> (maidenhair spleenwort)
	← (X)			<i>Botrychium simplex</i> (a grapefern) <b>BLUE LIST</b>
	x			<i>Brodiaea coronaria</i> (harvest brodiaea)
	x	x		<i>Bromus mollis</i> (soft brome)
	x	x		<i>Camassia quamash</i> (early camas)
	x			<i>Campanula scouleri</i> (Scouler's harebell)
	x	x	x	<i>Castilleja miniata</i> (red Indian paintbrush)
	x	x	x	<i>Cerastium arvense</i> (field chickweed)
x				<i>Chimaphila umbellata</i> (prince's pine)
x				<i>Cladina portentosa</i> (Pacific reindeer lichen)
x				<i>Cladina rangiferina</i> (reindeer lichen)
x				<i>Cladonia uncinata</i> (... lichen)
x	x	x	x	<i>Collinsia parviflora</i> (blue-eyed Mary)
x	x	X	x	<i>Collomia heterophylla</i> (vari-leaved collomia)

x	x	x	x	<i>Cornus nuttallii</i> (Pacific dogwood)
x	X	X	x	<i>Cryptogramma crispa</i> (rock brake)
X	v	X	X	<i>Danthonia intermedia</i> (timber oatgrass)
		x	x	<i>Daucus pusillus</i> (dwarf wild carrot)
			X	<i>Dodecatheon pulchellum</i> var. <i>watsonii</i> (pretty shooting star)
x	x	x	x	<i>Elymus glaucus</i> (western wildrye)
x	x	x	x	<i>Eriophyllum lanatum</i> (woolly sunflower)
x	x	x	x	<i>Festuca occidentalis</i> (western fescue)
X	X	X	x	<i>Fragaria virginiana</i> (blue-green strawberry)
		x		<i>Fragaria vesca</i> (wood strawberry)
	x	x	x	<i>Fritillaria lanceolata</i> (chocolate lily)
x	x	x	x	<i>Gaultheria shallon</i> (salal)
x	x	x	x	<i>Goodyera oblongifolia</i> (rattlesnake plantain)
			x	<i>Heuchera micrantha</i> (small-flowered alumroot)
x		x		<i>Hieracium albiflorum</i> (white hawksbeard)
X	X	X	X	<i>Holodiscus discolor</i> (ocean spray)
x				<i>Homalothecium megaptilum</i> (shiny gold moss)
			x	<i>Juniperus communis</i> (common juniper)
	x	x	x	<i>Juniperus scopulorum</i> (Rocky Mountain juniper)
	x	x	x	<i>Koeleria macrantha</i> (june grass)
x				<i>Listera cordata</i> (heart-leaved twayblade)
		x		<i>Lithophragma parviflora</i> (fringecup)
	x	x	x	<i>Lomatium utriculatum</i> (spring gold)
x	x	x	x	<i>Lonicera ciliosa</i> (orange honeysuckle)
x	x	x		<i>Luina hypoleuca</i> (silverback luina)
	x	x	x	<i>Luzula campestris</i> (field woodrush)
			x	<i>Madia</i> sp. (a tarweed)
x	x	x	x	<i>Mahonia aquifolium</i> (tall Oregon grape)
x	x	x	x	<i>Mahonia nervosa</i> (Oregon grape)
x	x	x	x	<i>Microsteris gracilis</i> (microsteris)
		x	x	<i>Mimulus alsinoides</i> (chickweed monkeyflower)
	x	x	x	<i>Mimulus guttatus</i> (monkeyflower)
	x	x	x	<i>Minuartia</i> sp. (a sandwort)
			x	<i>Montia fontana</i> (blinks)
	x	x	x	<i>Montia parvifolia</i> (small-leaved montia)
	x	x	x	<i>Orobanche uniflora</i> (one-flowered broomrape)
X	X	x	x	<i>Pachystima myrsinites</i> (falsebox)
	X	x	X	<i>Panicum oligosanthes</i> var. <i>scribnerianum</i> (few-flowered witchgrass)
x				<i>Peltigera britannica</i> (freckle pelt)
	x	x		<i>Pentagramma triangularis</i> (goldenback fern)
X	X	X	X	<i>Pinus contorta</i> (shore pine)
x	x	x		<i>Platanthera unalascensis</i> (Alaska rein orchid)
			X	<i>Plectritis brachystemon</i> (small-flowered seablush)
	x	x		<i>Plectritis congesta</i> (seablush)
	x	x	x	<i>Penstemon serrulatus</i> (coast penstemon)
x	x		x	<i>Poa</i> cf. <i>stenantha</i> (a bluegrass)

x				<i>Polypodium glycirhiza</i> (licorice fern)
	x	x		<i>Polystichum imbricans</i> (imbricate swordfern)
	"	x	x	<i>Potentilla glandulosa</i> (sticky cinquefoil)
x	..	x	x	<i>Prunella vulgaris</i> (self-heal)
x	x	x	x	<i>Prunus emarginata</i> (fire cherry)
X	X	X	X	<i>Pseudotsuga menziesii</i> (Douglas-fir)
X	X	X	X	<i>Rhacomitrium canescens</i> (greyish rock moss)
x	x	x	x	<i>Rosa gymnocarpa</i> (bald-hip rose)
x	x	x	x	<i>Rubus ursinus</i> (trailing blackberry)
x	x	x		<i>Salix sitchensis</i> (Sitka willow)
			x	<i>Saxifraga ferruginea</i> (Alaska saxifrage)
x	x	x	x	<i>Saxifraga integrifolia</i> (entire-leaved saxifrage)
	x	x	x	<i>Saxifraga rufidula</i> (rusty-haired saxifrage)
	x	x	x	<i>Sedum oreganum</i> (Oregon stonecrop)
X	X	X	x	<i>Selaginella wallacei</i> (Wallace's selaginella)
		x		<i>Silene gallica</i> (small-flowered catchfly)
	x			<i>Spiranthes romanzoffiana</i> (ladies' tresses)
	x	x	x	<i>Stellaria nitens</i> (shining starwort)
x	x			<i>Stereocaulon</i> sp. (coral lichen)
			x	<i>Suksdorfia ranunculifolia</i> (buttercup-leaved saxifrage)
	x			<i>Symphoricarpos albus</i> (snowberry)
X	X	X	x	<i>Symphoricarpos mollis</i> (trailing snowberry)
x	x	x	x	<i>Trientalis latifolia</i> (star flower)
	x	x	x	<i>Trifolium tridentatum</i> (tomcat clover)
		x	x	<i>Trifolium microcephalum</i> (small-headed clover)
	x			<i>Triodanis perfoliata</i> (Venus looking glass)
X	X	X	X	<i>Triteleia hyacinthina</i> (fool's onion)
x				<i>Vaccinium caespitosum</i> (dwarf blueberry)
x				<i>Vaccinium membranaceum</i> (black huckleberry)
x	x	x	x	<i>Vaccinium parvifolium</i> (red huckleberry)
X	X	X	x	<i>Viola adunca</i> (early blue violet)
	X	X	x	<i>Vulpia pacifica</i> (annual fescue)
x	x	x	x	<i>Zygadenus venenosus</i> (death camas)



Sketch by  
A. Brooks  
25 May 88



Crown Land N. side of  
Comox Lake  
Prov. Park Reserve represented  
by shore line running through  
a part of Sect. 29 v Sect 30 identified  
as lots 0149027 & 0193795(20)

Proposed Ecological Reserve on Comox Bluffs,  
north side Comox Lake just west of  
Courtenay, B.C

PARTIAL FLORA OF THE COMOX LAKE BLUFFSACERACEAE; MAPLE FAMILY

*Acer macrophyllum* Large-leaf maple

APOCYNACEAE; DOGBANE FAMILY

*Apocynum androsaemifolium* Spreading dogbane

BERBERIDACEAE; BARBERRY FAMILY

✓ *Achlys triphylla* Vanilla leaf

✓ *Mahonia aquifolium* Oregon grape; Tall mahonia.

✓ *Mahonia nervosa* Low Oregon grape.

CAMPANULACEAE; HAREBELL FAMILY

R4 *Campanula scouleri* Scouler's harebell

CAPRIFOLIACEAE; HONEYSUCKLE FAMILY

~~*Lonicera borealis*~~ <sup>Twin flower</sup>  
*Lonicera ciliosa* Orange honeysuckle

*Symphoricarpos albus* Waxberry; snowberry

*Symphoricarpus mollis* -

CARYOPHYLLACEAE; PINK FAMILY

*Arenaria macrophylla* Large-leaved sandwort

*Cerastium arvense* Field chickweed

CELASTRACEAE; STAFF-TREE FAMILY

✓ *Pachystima myrsinites* False box

COMPOSITAE; SUNFLOWER FAMILY

✓ *Achillea millefolium* Yarrow; milfoil.

*Anaphalis margaritacea* Pearly everlasting

*Eriophyllum lanatum* Woolly sunflower

*Hieracium* sp. Hawkweed species

*Lactuca muralis* Wall lettuce

*Luina hypoleuca* Silverback

CORNACEAE; DOGWOOD FAMILY

*Cornus canadensis* Bunchberry

✓ *Cornus nuttalli* Pacific dogwood

CRASSULACEAE; STONECROP FAMILY

✓ *Sedum divergens* Creeping stonecrop

CUPRESSACEAE; CYPRESS FAMILY

✓ *Juniperus scopulorum* Rocky mountain juniper

ERICACEAE; HEATH FAMILY

R4 *Allotropa virgata* Candystick

✓ *Arbutus menziesii* Madrone; arbutus

R4 *Arctostaphylos columbiana* Hairy manzanita

✓ *Arctostaphylos x media* Manzanita x kinnikinnick hybrid

✓ *Arctostaphylos uva-ursi* Kinnikinnick

ERICACEAE (continued):

- Chimaphila menziesii Menzies pipsissewa; Little Prince's p.
- Chimaphila umbellata Pipsissewa; Prince's pine.
- Gaultheria shallon Salal
- Vaccinium parvifolium Red huckleberry
- ~~Vaccinium caespitosum~~

HYPERICACEAE: St. John's Wort Family

- R4 Hypericum anagalloides St. John's wort ck.

LABIATAE: MINT FAMILY

- Prunella vulgaris Self-heal; heal-all
- R4 ~~Satureja douglasii~~ Verbe Buena

LILLIACEAE: LILY FAMILY

- R4 Brodiaea coronaria Harvest brodiaea
- R4 Camassia quamash Camas lily
- Fritillaria lanceolata Chocolate lily
- Lilium columbianum Wild tiger lily
- Zygadenus venenosus Death camas

LEGUMINOSAE: PEA FAMILY

- Vicia americana American vetch

ONAGRACEAE: EVENING PRIMROSE FAMILY

- Epilobium angustifolium Fireweed

OROBANCHACEAE: BROOMRAPE FAMILY

- R1 Boschniakia hookerii Ground cone
- Orobanche uniflora Cancer root; Naked broom-rape.

ORCHIDACEAE: ORCHID FAMILY

- Calypto bulbosa Fairy slipper; False lady's slipper
- Corallorrhiza maculata Spotted coral root
- Habenaria unalaschensis Rein orchid; Elegant piperia
- Listera cordata Heart-leaved twayblade
- Goodyera oblongifolia Rattlesnake plantain

PINACEAE: PINE FAMILY

- Pinus contorta Shore pine; Lodgepole pine
- Pinus monticola White pine
- Pseudotsuga taxifolia Douglas fir

POLEMONIACEAE: PHLOX FAMILY

- R4 Collomia heterophylla Varied-leaved collomia

POLYPODIACEAE: POLYPODY FERN FAMILY

- Asplenium viride Green spleenwort
- Cryptogramma (acrostichoides)<sup>crispa</sup> Parsley fern
- Polypodium vulgare Licorice fern - <sup>check</sup>
- R1 Polystichum imbricans <sup>Imbricate wood fern.</sup>
- Polystichum munitum <sup>Western sword fern</sup>
- ~~Polystichum densa~~ <sup>Indian's Dream Fern</sup>
- R3 Pityrogramma triangularis Golden-back Fern (bluffs by road)

PORTULACACEAE: PURSLANE FAMILYR3 *Lewisia columbiana*

Columbia lewisia

*Montia parviflora*

Montia; Miner's lettuce\*\*

PRIMULACEAE: PRIMROSE FAMILY*Trientalis latifolia*

Star flower

RANUNCULACEAE: BUTTERCUP FAMILY*Anemone lyallii*

Lyall's anemone

*Anemone deltoidea*

Wood anemone

RHAMNACEAE: BUCKTHORN FAMILY*Ceanothus sanguineus*

Buckbrush; Oregon tea tree

ROSACEAE: ROSE FAMILY*Amelanchier alnifolia*

Saskatoon; Service berry

✓ *Fragaria chiloensis*

Coastal strawberry

*Holodiscus discolor*

Ocean spray; Arrow-wood

*Potentilla* sp.

Cinquefoil sp.

*Rosa gymnocarpa*

Woodland rose; Dwarf rose

*Rosa nutkana*

Nootka rose; Wild rose

*Rubus leucodermis*

Black raspberry; Black cap

*Rubus ursinus*

Creeping blackberry; Trailing blackberry

RUBIACEAE: MADDER FAMILY*Galium boreale*

Northern bedstraw; Cleavers

SCROPHULARIACEAE: FIGWORT FAMILY*Castilleja <sup>miniata</sup> grandiflora*

Red Paintbrush

*Collinsia parviflora*

Blue-eyed Mary; Innocence

Blue-eyed Mary; Innocence

R3 *Mimulus alsinoides*

Little (or Baby) monkey flower

*Mimulus guttatus*

Monkey flower

✓ *Pedicularis ornithorhyncha*

Bird's-bill lousewort

*Veronica wormskjoldii*

American alpine speedwell

*Penstemon* sp. *serulatus*

Beardtongue species.

SALICACEAE: WILLOW FAMILY*Salix* sp.✓ *Coast Penstemon*

Willow species

SAXIFRAGACEAE: SAXIFRAGE FAMILY*Heuchera* sp.

Alumroot species

✓ *Saxifraga occidentalis*

Western or Saw-toothed saxifrage

*Saxifraga ferruginea*

Rusty saxifrage

✓ *Saxifraga integrifolia*

Early saxifrage

*Tiarella unifoliata*

Foamflower

*Lithophragma parviflora*

Fringe-cup

\*\* - true Miner's lettuce is *Montia perfoliata*



UMBELLIFERAE: PARSLEY FAMILY

✓ *Lomatium utriculatum* Spring gold

VALERIANACEAE: VALERIAN FAMILY

*Platirites congesta* Sea blush

VIOLACEAE: VIOLET FAMILY

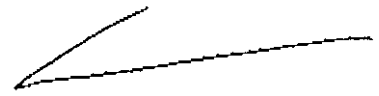
*Viola adunca* Common, purple or dog violet

*Viola glabella* Tall yellow violet

*Viola sempervirens* Evergreen Yellow Violet

Harry Jackson

March '87



Grossulariaceae

*Ribes sanguineum* Red Flowering Currant

Plantaginaceae

*Plantago major* Common Plantain

Typed list by Harry Jackson '87

Additions 87-88 by B. Brooks + H. Jackson

C.S.N.H.S.

Rare Plants (according to Stridey et al.)

R 1 2 species

R 3 3 "

R 4 8 "

13 "