From: "Enns, Rob WLAP:EX" < Rob.Enns@gems4.gov.bc.ca>

To: "XT:MPS, Emcon Services Inc TRAN:IN" <emcon1@emconservices.org>

Cc: "Routledge, Ron WLAP:EX" < Ron.Routledge@gems5.gov.bc.ca>,

"Sinclair, Earl WLAP:EX" < Earl. Sinclair@gems9.gov.bc.ca>

Subject: Monck Seed Mix

Date: Thu, 30 Sep 2004 10:44:26 -0700

X-Mailer: Internet Mail Service (5.5.2657.72)

Frank,

Here's an acceptable seed mix for use at Monck Park:

Seed % Weight % Count Italian Ryegrass 22 30 Western Wheatgrass 30 20 Bluebunch Wheatgrass 24 20 Slender Wheatgrass 21 20 Hard Fescue 3 10 Seeding Rate: 15-30 lbs/acre

Available from Pickseed Canada ph. 1-877-504-7964 (toll free, Abbotsford)

This mix has been used during the past year in Parks for rehabilitating fire guards, and is also being used by Telus in this area in their reclamation activities so it should be readily available. You may wish to use this same mix for all your seeding around the development.

Rob Enns Area Supervisor, Fraser Area Protected Areas Section Thompson Region Ministry of Water, Land and Air Protection

		% of Park in Unit	Latin Name		Ab	undan	ce		
D l	34. 1	III Unit	Datin Maine	Common Name	Prk	Reg	Prv	Comments	
	Monck PP xh 2-0	. 4							
DEC:	PP Xn 2-0	4 45	The advisory						
		45	Festuca campestris		0		f	g	
		45 45	Festuca idahoensis	Idaho fescue	r		f	g	
			Koeleria macrantha	junegrass	0		f	g	
		45	Poa secunda (juncifolia type)		r		f	g	
		45	Vulpia octoflora	six-weeks fescue	f		f	g	
		45 45	Elymus spicatus		С		С	g	
			Pseudotsuga menziesii	Douglas-fir	0	•	С	g	
		45	Poa secunda		f		С	g	
	•	45	Carex rossii	Ross' sedge	0		f	g	
		45	Tetradymia canescens	gray horsebrush	0		0	g	
		45	Shepherdia canadensis	soopolallie	0	•	f	g	
		45	Juniperus scopulorum	Rocky Mountain juniper	0		0	g	
		45	Juniperus communis	common juniper	r		f	g	
		45	Artemisia tridentata	big sagebrush	f		C	g	
		45	Amelanchier alnifolia	saskatoon	f		c	g	
		45	Achillea millefolium	yarrow	· f		f	g	
		45	Chrysothamnus nauseosus	rabbit-brush	c		- f	g	
		45	Phacelia linearis	thread-leaved phacelia	0		f		
		45	Epilobium brachycarpum	•	r		r f	g	
		45	Stephanomeria tenuifolia	narrow-leaved skeletonweed	f			g	
		45	Silene antirrhina	sleepy catchfly	0		0	g	
	ě	45	Senecio cana		0		0	g	
		45	Selaginella wallacei	Wallace's selaginella	f		0	g	
	•				1	(ס	g	

Paris/Region Abundance: C=common, F=Frequent, O=occasional, R=rare Province Abundance: Red=endangered, Blue=threatened, Yellow=management concern, G=not classified *Non-native species BEC: Biogeoclimatic Ecosystem Classification

% of Park			Abunda		·
in Un	t Latin Name	Common Name	Prk Reg		Comments
_ 45	Sedum stenopetalum	worm-leaved stonecrop	0	f	g
48	Bromus inermis ssp. inermis	smooth brome	0		8
45	Polygonum douglasii	Douglas' knotweed	0	f	<u>.</u>
48	Bromus tectorum	cheatgrass	0	ı	g
45	Phacelia hastata	silverleaf phacelia	-		_
45	Penstemon fruticosus	shrubby penstemon	0	0	g
45	Penstemon confertus	yellow penstemon	0	f	g
45	Oxytropis sp.	Janon ponsionon	0	f	g
45	Lithospermum ruderale	lemonweed	0	F	
45	Gayophytum diffusum		0	f	g
45	Gaillardia aristata	brown-eyed Susan	r	0 7 C	g
45	Fragaria virginiana	wild strawberry	0	f	g
45	Erigeron filifolius	thread-leaved fleabane	0	C	g
45	Rosa woodsii	prairie rose	f	f	g
48	Erigeron corymbosus	-	f	C	g
48	Zigadenus venenosus	long-leaved fleabane	г	0	g
48	Tragopogon dubius	meadow death-camas	O	f	g
48	Taraxacum officinale	yellow salsify	0		
48	Sisymbrium altissimum	common dandelion	0		
48	Silene menziesii	tall tumble-mustard	0		
48		Menzies' campion	0	0	g .
48	Silene douglasii	Douglas' campion	r	0	g
48	Medicago sativa	alfalfa	0		
	Agropyron cristatum		0		
48	Erigeron subtriplinervis		0	f	g
45	Heterotheca villosa	hairy golden-aster	0	f	g
	· · · · · · · · · · · · · · · · · · ·	•			

Park/Region Abundance: C=cemmon, F=Frequent, O=occasional, R=rare Province Abundance: Red=endangered, Blue=threatened, Yellow=management cencern, G=not classified *Non-native species *No

	% of Park			A 1.			
•	n Unit	Latin Name	Common Name	Prk	ınd a n Baz		
	48	Centaurea diffusa		111	reg	PTV	Comments
	48	Astragalus tenellus	diffuse knapweed	0			
	48	Astragalus miser	pulse milk-vetch timber milk-vetch	0		0	g
	48	Artemisia dracunculus	•	f		C	g
	48	Stipa nelsonii	tarragon	.0		f	g
	48	Stipa comata	mandle and at	0		f	g
	48	Poa pratensis	needle-and-thread grass	0		f	g
	48	Poa bulbosa	Kentucky bluegrass	0			
	48	Elymus repens	bulbous bluegrass	r			
	48	Lepidium densiflorum		r			
	45	Asclepias speciosa	prairie pepper-grass	0			
	45	Descurainia pinnata	showy milkweed	r		0	g
	45	Pinus ponderosa	western tansymustard	0		f	g
	45	Mahonia aquifolium	ponderosa pine / yellow pine	C		C	g
	45	Cirsium undulatum	tall Oregon-grape	0		C	g
	45	Chenopodium fremontii	wavy-leaved thistle	0		f	g
	45	Chaenactis douglasii		0		0	g
	45	Allium cernuum	hoary false yarrow	0		0	g
•	45		nodding onion	0		f	g
	45	Astragalus filipes	threadstalk milk-vetch	f		0	b
	+5 1 5	Delphinium nuttallianum	upland larkspur	0		f	g
	+3 ! 5	Atremisia campestris	•	0		0	g
		Arctostaphylos uva-ursi	kinnikinnick	f		С	g
		Apocynum androsaemifolium	spreading dogbane	f		f	g
		Arabis sparsiflora	sickle-pod rockcress	0		f	g
4	5	Arabis holboellii	Holboell's rockcress	0		c C	g

Park/Region Abundance: C=common, F=Frequent, O=occasional, R=rare Province Abundance: Red=endangered, Blue=threatened, Yellow=management concern, G=not classified *Non-native species BEC: Biogeoclimatic Ecosystem Classification

	% of Park in Unit Latin Nan			Abi	undance		
		Latin Name	Common Name	Prk	Reg Pr	v Comments	
	45	Antennaria umbrinella	umber pussytoes	0	f		
	45	Antennaria parvifolia	Nuttall's pussytoes	г	0	g	
·	45	Antennaria dimorpha	low pussytoes	0	f	g	
	45	Astragalus purshii	woollypod milk-vetch	0		g	
	45	Crepis atrabarba	slender hawksbeard	0	o f	g	
EC: PP xh 2-L	۲.			U	1	g	
	5	Salix prolixa		•	<u>,</u>	_	
	5	Rosa nutkana	Nootka rose	0	f	g	
	5	Rosa woodsii	prairie rose	0	0	g	
	5	Populus balsamifera ssp.	black cottonwood	f	c	g	
		trichocarpa	older cottonwood	С	С	g	
	5	Populus tremuloides	trembling aspen	0	f	G.	
	, 5	Alnus tenuifolia		c	C	g	
	5	Cornus sericea	red-osier dogwood	f	_	g	
	5	Oenothera villosa			C	g	
	5	Salix lucida	the second secon	0	0	g	
	5	Artemisia ludoviciana	western mugwort	1	I	g	
	5	Carex crawfordii	Crawford's sedge	I	f	g	
	5	Carex lanuginosa	woolly sedge	0	0	g	•
	5	Equisetum arvense	common horsetail	0	f	g	
	5	Equisetum variegatum		0	С	g	
	5	Festuca rubra	northern scouring-rush	f	f	g	
	5	Juncus balticus	red fescue	r			
	5	Leymus cinereus		0	C	g	
	5·	Phalaris arundinacea		0	. 0	g	
•	J	r nataris arundinacea	reed canarygrass	f	С	g	

Park/Region Abundance: C=common, F=Frequent, O=occasional, R=rare

BEC: Biogeocilmatic Ecosystem Classification

Province Abundance: Red=endangered, Biue=threatened, Yellow=management concern, G=not classified

*Non-native species

•	% of Park			Ah	undar	re	
	rark in Unit	Latin Name	Common Name		Reg		Comments
	5	Poa compressa	Canada bluegrass	0		f	g
-	5	Salix exigua	coyote willow	f		0	g
	5 .	Apocynum cannabinum	hemp dogbane	ó		0	g
	5	Rorripa palustris		0		f	g
EC: PP xh 2-	-R	· · · · · · · · · · · · · · · · · · ·				•	. 5
	2	Shepherdia canadensis	soopolallie	0		f	g
	2	Anemone multifidia		r		0	g
	2	Arctostaphylos uva-ursi	kinnikinnick	f		c	g
	2	Artemisia ludoviciana	. western mugwort	 O		f	g
	2	Aster conspicuus	showy aster	0		c	g
	. 2	Clematis ligusticifolia	white clematis	0		f	g
•	2	Galium boreale	northern bedstraw	0		f	g
	2	Mahonia aquifolium	tall Oregon-grape	f		C	g
	2	Mimulus moschatus	musk-flower	r		0	g
	2	Rosa nutkana	Nootka rose	0		0	g
	2	Rosa woodsii	prairie rose	0		c	g
	2	Vicia americana	American vetch	f		f	g
	2	Amelanchier alnifolia	saskatoon	0		c	g
	2	populus tremuloides	trembling aspen	0		c	g
	2	Salix prolixa		r		f	g
•	2	Populus balsamifera ssp. trichocarpa	black cottonwood	0		c	g
	2	Pinus ponderosa	ponderosa pine / yellow pine	0		С	g
	2	Salix bebbiana	Bebb's willow	r		f	g
	2	solidago canadensis	Canada goldenrod	0		f	g
			Sarata Sa				5

Park/Region Abundance: C-common, F=Frequent, O-ccasional, R=rare Province Abundance: Red=endangered, Blue=threatened, Yellow=management concern, G=not classified *Non-native species BEC: Biogeoclimatic Ecosystem Classification

% of					
Park in Unit	Latin Name	Common Name	Abund Prk Re		Comments
2	Prunus virginiana	choke cherry	£		
2	Cornus sericea	red-osier dogwood	1	Ĭ	g
2	Calamagrostis rubescens	-	C	С	g
,		pinegrass	f	C	g
2	Pseudotsuga menziesii	Douglas-fir	C	С	g
2	Acer glabrum	Douglas maple	f	c ·	g
2	Symphoricarpos albus	common snowberry	f	c	g g

Paris/Region Abundance: C=common, F=Frequent, O=occasional, R=rare

Province Abundance: Red=endangered, Blue=threatened, Yellow=management concern, G=not classified

*Non-native species

BEC: Biogeocilimatic Ecosystem Classification

1972.

George Sirk - Naturalist

The following lists are of species of mammals, birds, reptiles, amphibians, insects, trees and flowers identified by myself during the summer of 1972, May - September.

If an interesting observation was made on any species it will be written up after the end of that particular list.

BIRDS:

S.M Spring Migrant		F.M Fall Mi	grant
S.R Summer Resident	<u>.</u>	O Occassi	onal Wandered (on
* - Found Nesting			rec
			: {
*Common Loon ·	- S.R.	Bufflehead	- 0.
Red-Necked Grebe	- S.R.	*Ruddy Duck	- S.R.
Western Grebe	- S.R.	Common Merganser	- S.R.
Canada Goose	- 0.	Turkey Vulture	- 0.
*Mallard	- S.R.	Cooper's Hawk	- 0.
Pintail	- S.R.	Red Tailed Hawk	- S.R.
Green-winged Teal	-S.R.	Swainson's Hawk	- S.R.
*Blue-Winged Teal	- S.R.	Golden Eagle	- S.R.
*Cinnamon Teal	- S.R.	Bald Eagle	- S.R.
Baldpate, American widges	~ S.R.	Marsh Hawk	- S.R.
Shoveller	- S.R.	Osprey	- S.R.
Redhead	- S.R.	Peregrine Falcon	- F.M.
Lesser Scamp	·- O.	*Kestrel	- S.R.
Barrow's Goldeneye	- 0.	*Blue Grouse	- S.R.
California Quail	- S.R.	Hairy Woodpecker .	_ S.R.
Coot	- S.R.	Eastern Kingbird	- S.R.
Killden	- S.R.	Western Kingbird	- S.R.
Wilson's Snipe	- S.R.	Say's Phoebe	- 0.
*Song billed Curlew	- S.R.	Traill's Flycatcher	- S.R.
*Spotted Sandpiper	- S.R.	Western Wood Pewee	- S.R.
Dowitcher	- 0.	Violet-green Swallow	- S.R.

Birds (continued)

Wilson's Phalarope	- S.R.	*Tree Swallow	- S.R.
Glacous-winged Gull	- 0.	*Bank Swallow	- S.R.
Heuring Gull	- S.R.	*Rough-winged Swallow	- S.R.
California Gull	- S.R.	*Barn Swallow	- S.R.
Ring Balled Gull	- 0.	*Cliff Swallow	- S.R.
Mew Gull	- 0.	Black-billed Magpie	- S.R.
Bonaparte's Gull	- S.R.	Raven	- S.R.
Common Tern	- F.M.	Common Crow	- S.R.
Black Tern	- Š.R.	Clark's Nutcracker	- S.R.
Mourning Dove	- S.R.	Mountain Chickadee	- S.R.
Great Horned Owl	- S.R.	White-breasted Nuthate	ch-S.R.
Long-eared Owl	- 0.	Red-breasted Nuthatch	- S.R.
Short-eared Owl	- S.R.	Rock Wren	S.R.
Poorwill (late)	- S.R.	Catbird	- S.R.
%Nighthawk	- S.R.	*Robin	-S.R.
Black Swift	- S.R.	%Mountain Bluebird	- S.R.
*Vaux's Swift	- S.R.	*Townsends Solitaire	- S.R.
Rufous Hummingbird	- S.R.	Cedar Waxwing	- S.R.
Calliope Hummingbird	- S.R.	*Starling	- S.R.
Belted Kingfisher	- S.R.	Yellow Warbler	- S.R.
Red-Shafted Flicker	- S.R.	Yellowthroat	- S.R.
Lewis's Woodpecker	- 3.R.	English Sparrow	- S.R.
Yellow-bellied Sapsucker	- S.R.	Bobolink	- S.R.
Western Meadowlark	- S.R.	Cassin's Finch	- S.R.
*Yellow-headed Blackbird	- S.R.	Pine Siskin	- S.R.
*Red-winged Blackbird	- S.R.	Goldfinch	- S.R.
Bullock's Oriole	- S.R.	Savannah Sparrow	- S.R.
Brewer's Blackbird	- S.R.	Vesper Sparrow	- S.R.
Cowbird	- S.R.	Chipping Sparrow	- S.R.
Western Tanager	- S.R.	Song Sparrow	- S.R.

Golden Engle - A pair raised one young on the cliffs SW of the park. The nest can be seen with a good telescope from the Kekuli Pits. The climb is difficult and outright dangerous.

Osprey - Three nests were located approximately three miles south of the park. They are quite close together in the last irrigated fields before the park.

Glacous-winged Gull - One adult in fields near Upper Nicola.

Great-horned Owl - One resided (or at least one) at the south end of the campsite and campers heard them all summer.

<u>Poorwills</u> - Can be best heard in August north of the campsite along the lake road.

<u>Vaux's Swift</u> - A colony of these beautiful birds was found right at the north end of the parking lot in an old Ponderosa Pine. They were always around and made a good walk subject.

<u>Lewis's Woodpecker</u> - Very common two miles north of the park on the upper logging road.

Bobolink - Suspected of nesting just past Upper Nicola.

MAMMALS:

<u>Mule Deer</u> - Tracks in park, sighted once on road between Upper Nicola and park.

Moose - Scats found in marshy area above park. One has to climb over mountain parks to get there.

Porquipine - Seen at night in irrigated fields before park.

Beaver - Seen in lake.

Skunk - A couple of lucky families found these in their tent this summer.

Long-Tailed Weasel - A dead speciment was I.P. as this species one was seen crossing the road at Upper Nicola.

Yellow-bellied Marmot - Common all summer until mid August.

Red Squirrel - Common in park.

North-Western Chipmunk - Abundant in park.

White-footed Mouse - Common.

Miotis Sp. of Bat. - Common at night in park.

REPTILES:

Striped Garter Snake

Blue Racer

Western Painted Turtle

Dusky Garter Snake

Rubber Boa

Alligator Lizard

TREES:

Water Birch

Ponderosa Pine

Trembling Aspen

Douglas Fir

Lodgepole Pine

Chose Cherry

Cottonwood

SHRUBS:

Snowbrush

Soopolalli:

Rabbit Brush

Douglas Maple

Sandbar Willow

Oregon Grape

Red-osier Dogwood -

Saskatoon

Sagebrush

Wild Rose

Indian Hemp.

Spreading Dogbane

FLOWERS:

Penstemon (Blue beard Tounge)

Larkspur

Yellow Penstemon

Rosy Pussytoes

Spring Sunflower

Star-flowered Solomon's Seal

Yarrow

Fleabene

Oyster Root

Brown-eyed Susan

Great Mullein

Canada Thistle

Stonecrop

Oxeye Daisy

Prickly Pear Cactus

SCOURING RUSH Equisetum arvense

Common along the lake-shore. An abundant plant in the marsh areas behind the park.

ROCKY MOUNTAIN JUNIPER Juniperus scopulorum

Scattered throughout the area.

COMMON JUNIPER Juniperus communis

Scattered throughout the area.

PONDEROSA PINE Pinus ponderosa

One of the most common trees in the park area. Representing a very unique eco-system.

ENGELMANN SPRUCE .Picea glauca spp. engelmannii

Found at the higher elevations behind the park in the moister areas.

DOUGLAS FIR Pseudotsuga menziesii

A common tree in the park area.

NODDING ONION Allium cernuum

Throughout the park, blooming the end of July.

YELLOW BELL Fritillaria pudica

Found in the park area, blooming generally over at time of arrival.

GREEN-BANDED MARIPOSA LILY Calochortus macrocarpus

One of the most delicate flowers of this area, found blooming the beginning of July. Common.

TREMBLING ASPEN Populus tremuloides

Common in the moister areas of the park.

NORTHERN BLACK COTTONWOOD Populus trichocarpa

Along the lake-shore and drainage areas.

WİLLOW Salix spp.

Found along the lake-shore.

WATER BIRCH Betula occidentalis

Found along the lake-shore and moister higher areas behind the park.

MOUNTAIN ALDER Alnus tenuifolia

Groves of this tree are found above the park along the logging road leading to Pleasant Valley.

- STINGING NETTLE Urtica dioica

Found all along Mill Creek several miles behind the park.

- RED BANEBERRY Actaea rubra

Found along the river banks in the shade.

- WHITE CLEMATIS Clemtis ligusticifolia

Found along the roadside into the park. Just past the entrance sign.

DELPHINIUM Delphinium menziesii

Prominent in the park area in June.

OREGON GRAPE Berberis nervosa

Found in the park area where there is sufficient shade.

STONE-CROP Sedum spp.

Rocky dry slopes leading into the park.

SASKATOON BERFY Amelanchier alnifolia
Common throughout the area.

WILD STRAWBERRY Fragaria virginiana
Common along the roadsides.

WESTERN CHCKE CHERRY Prunus virginiana demissa Along the road into Kamloops.

WILD ROSE Rosa nutkana
Common along the lake-shore.

RED RASP PERRY Rubus idaeus

Found along the logging road above the park.

FLAT-TOP SPIREA Spiraea lucida Common throughout the park area.

THIMBLEBERRY Rubus parviflorus

Found in the moist shady area behind the park--Pleasant Valley.

WRETCHED MILK VETCH Astagalus.miser Throughout the park.

ور الراج الأراج المراجع
ALFALFA Medicago sativa

Common along the road-sides throughout thepark area.

LOCOWEED Oxytopus campestris

Found in the dry open areas in the park.

FOISON IVY Rhus radicans

Found on the outskirts of the park, travelling east.

DOUGLAS MAPLE Acer glabrum

Found on the entrance to the park.

SNCWBUSH Ceanothus sanguineus

Found just to the right entrance of Monck Park.

PRICKLY PEAR CACTUS Opuntia fragilis

Common in this area.

SCOPOLALLIE Shepherdia canadensis

Through-out the park area.

FIREWEED ' Epilobium angustifolium

Sparse occurrence in the park--found in the open fields of Nicola Valley Ranch.

RED OSIER DOGWOOD Cornus stolonifera

Abundant along the lake-shore.

KINNIKINNICK Arctostaphylos uva-ursi

A common plant of the forest floor in this ares.

SPREADING DOGBANE Apocynum androsaemifolium

Growing on the dry road-banks.

MILKWEED Asclepias speciasa

Road into Monck Park-junction of the paved and logging road.

CANADA MINT Mentha arvensis

Along the edges of Mill Creek, behind the park.

SCOULERS PENSTEMON Penstemon fruticosis var. scouleri

Rocky banks of the roadway into the park.

GREAT MULLEIN Verbascum thapsus

Common along the read-sides and in theopen fields.

YARROW Achillia millefolium

Found along the road-sides and the open fields.

SMCOTH AGOSERIS Agoseris glauca

Found on the left hand side of the orad into the park, on the bank tops.

WHITE PUSSYTOES Antennaria spo.

Dry exposed areas in the park.

LARGE PURPLE ASTER Aster conspicuous

A common plant along the beach walk.

SPRING BALSAMROOT Ealsamorhiza sagittata

Through-out the area.

CANADA THISTLE Cirsium arvense

Groups along the road-sides. ,

LARGE PURPLE FLEAPANE Erigeron speciosus

Found along the beach walk in the park.

BROWN-EYED SUSAN Gaillardia aristata

Along the roads in the park.

RAGWORT Senecio spp.

A plant found in the open fields, field across from the sub-division.

GOLDENROD Solidago canadensia

Common along road-sides.

OYSTER PLANT Tragopogon pratensis

Througheout the park area, especially common along the roads.

PASTUE WORM-WCOD Artemisia frigida

Found with sage and rabbit bush;

SAGE-BUSH Artemisia tridentata

Common in the park area.

RABBITBUSH. Chrysothamnus nauseosus

Common in the park area.

BURDOCK Arctium lappa

Found along the highway into Merritt from the park.