

Introduction

This project provides detailed ecosystem mapping of the Bella Vista – Goose Lake Range in the IDFxh1 subzone along the north end of Okanagan Lake and west of the city of Vernon.

This detailed ecosystem mapping will provide baseline information for land use planning products such as a Sensitive Ecosystem map. Soil sensitivity maps were produced, and wildlife habitat maps were produced for the following species: Great Basin Spadefoot, Western Rattlesnake, Long-billed Curlew, Swainson's Hawk, Western Screech-Owl, Grasshopper Sparrow, Badger, Brewer's sparrow, Yellow-breasted Chat, and Gopher Snake.

Mapping used the provincially recognised methodology in *Standard for Terrestrial Ecosystem Mapping in British Columbia* (RIC 1998). Fieldwork was completed in July and August 2002 to survey intensity level 4.

Map Unit Boundaries

Ecosection Map Unit

Biogeoclimatic Map Unit

Plot location symbol

Study area boundary

Ecosystem Map Unit





Site Modifiers			
Code	Criteria		
С	Coarse-textured soils		
f	Fine-textured soil		
g	Site occurs in a gully		
j	Gentle to moderate slope (<25%)		
k	Cool aspect (25% - 100% slope, 285° - 135°)		
n	Fan (glaciofluvial, fluvial, or colluvial fans) or cone		
р	Peaty material (15-60cm organic material over mineral soil)		
q	Very steep cool aspect (>100% slope, 285° - 135°)		
r	Ridged or ridge crest		
S	Shallow soil (20 – 100cm to bedrock)		
t	Terrace or fluvial benches		
v	Very shallow soil (<20 cm. to bedrock)		
w	Warm aspect (>25% slope, 135° - 285°)		
Z	Very steep warm aspect (>100% slope, 135° - 285°)		

Structural Stages				
Code	Structural stage			
1	Non-vegetated / sparsely vegetated			
2	Herb			
2a	Graminoid dominated			
2b	Forb dominated			
3	Shrub/Herb			
3a	Low Shrub (less than 2m tall)			
3b	Tall Shrub (between 2m and 10m tall)			
4	Pole/Sapling; dense, single layered forests			
5	Young Forest; more open than stage 4; may have a few mature trees			
6	Mature Forest; dominated by mature trees with some scattered old trees			
7	Old Forest (generally >250 years old); dominated by old trees; generally open forests			

IDFxh1 Intoricor Douglas-fir very dry hot subzone Okanagan variant Mag Ossibility Ecosystem Unit Name (Mailing) Assume Typical Conditions (Mailing) Typical Conditions (Mailing) AB 00 Nuttall's aikaligrass – Foxiali barley orgaminoid meadow d. f. j This wet meadow ecosystem commonly occurs in large, broad depro deep, medum-textured soils in grasshand areas. AB 00 Bulrush Marsh d. f. j This ecosystem commonly occurs in large, broad depro deep, medum-textured soils in grasshand areas. BN 96 Kentucky bluegrass – Stift needlegrass d. j. m This grasshand ecosystem is bypically found on deep, m toxtured soils, in small swales and depressions where n collects. BR 00 Baitic Rush Marsh-Meadow d. f. j This marsh-meadow occurs along the edges of ponds a open water. CD 00 Baitic Rush Marsh-Meadow d. f. j This forset accosystem sometimes forms a fininge around lakes. Deep, medium-textured soils are typical. CQ NA Cuttivated field An open area that is subject to human agricultural pract common Snowberry - Red oaler A steep, vertical or overhanging rock face. CX NA Cuttivated marsh d. f. j A rare marsh that occurs at finge on ponds a open water. C1 00 </th <th colspan="7">Ecosystem Units</th>	Ecosystem Units							
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SD 08 Hybrid white Spruce – Douglas-fir – Douglas maple – Dogwood d, j, m This forest ecosystem is commonly associated with gull have intermittent or subsurface water flow. Deep, mediu soils are typical.	gullies that iedium-textured							
SM 00 Sedge Marsh d, f, j This wetland ecosystem occurs on the edges of open w	en water.							
SO 00 Saskatoon – Mock orange Talus c, d This ecosystem is associated with steep, blocky talus s	us slopes.							
SP 04 Douglas-fir – Ponderosa pine – Snowbrush – Pinegrass d, j, m This forest ecosystem is associated with gently sloping shallow (s), medium-textured soils.	oing sites on							
TA NA Talus Angular rock fragments at the foot of steep rock slopes.	pes.							
UR NA Urban/Suburban An area with residences and other human development	nents.							
WB 93 Bluebunch wheatgrass – Balsamroot d, m, w This grassland ecosystem commonly occurs on modera to steep warm aspects with deep, medium-textured soil	derately steep soils.							

Seral Associations				
Ecosystem Unit	Code	Name	Description	
FW	kb	Kentucky bluegrass	Early seral sites dominated by Kentucky bluegrass.	
	kc	Knapweed - Cheatgrass	Early and very early seral sites. There are few or no native bunchgrasses remaining on these sites.	
	sb	Big sagebrush – Kentucky bluegrass	Early seral sites with a big sagebrush shrub layer and Kentucky bluegrass with Columbia needlegrass.	
	sk	Big sagebrush - Knapweed	Early and very early seral sites with few or no native bunchgrasses remaining on these sites.	
	sn	Big sagebrush – Columbia needlegrass	Mid-seral sites with a big sagebrush shrub layer and a grass cover of Columbia needlegrass and bluebunch wheatgrass.	
	sw	Big sagebrush – Bluebunch wheatgrass	Mid- to late-seral sites dominated by big sagebrush, bluebunch wheatgrass and Idaho fescue.	
	wf	Bluebunch wheatgrass – Idaho fescue	Mid- to late-seral sites dominated by bluebunch wheatgrass and Idaho fescue.	
	wk	Bluebunch wheatgrass – Knapweed	Mid- to late-seral sites dominated by bluebunch wheatgrass but also with some knapweed or cheatgrass.	
SB	cg	Cheatgrass	Mid- to early-seral sites with cheatgrass, sulphur cinquefoil, selaginella, and rusty steppe moss.	
WB	kb	Kentucky bluegrass	Early seral sites dominated by Kentucky bluegrass.	
	kc	Knapweed - Cheatgrass	Early and very early seral sites. There are few or no native bunchgrasses remaining on these sites.	
	sb	Big sagebrush – Kentucky bluegrass	Early seral sites with a big sagebrush shrub layer and Kentucky bluegrass with Columbia needlegrass.	
	sn	Big sagebrush – Columbia needlegrass	Mid-seral sites with a big sagebrush shrub layer and a grass cover of Columbia needlegrass and bluebunch wheatgrass.	
	sw	Big sagebrush – Bluebunch wheatgrass	Mid- to late-seral sites dominated by big sagebrush, bluebunch wheatgrass and Idaho fescue.	
	wk	Bluebunch wheatgrass – Knapweed	Mid- to late-seral sites dominated by bluebunch wheatgrass but also with some knapweed or cheatgrass.	

Data Sources

This mapping project is based on 1:15,000 colour stereo aerial photography from Geographic Data BC taken in 1994 and updated based on field work in 2002. Base map is from Terrain Resource Inventory Mapping (TRIM) from Geographic Data BC. Survey Intensity 4 was used. A total of 18% polygon inspection was achieved. Twelve full plots, 60 ground inspections, and 168 visual inspections were completed in the field.

Credits

Ecosystem mapping by Kristi Iverson, R.P.Bio. (Iverson & MacKenzie Biological Consulting Ltd., Lac la Hache, B.C.). **Bioterrain mapping** by Jen Shypika, P.Geo. (Nelson, B.C.).

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