

Habitat Supply Modeling – Practitioner’s Workshop
Nov. 23, 24, 25, 2004

Purpose:

Habitat Supply Modeling has significant potential as a management tool at both the stand and landscape level. Currently, a number of different approaches are being developed in BC, and there is relatively little interchange among the modeling groups. The tools are being developed for many applications in forest management (e.g. TSR, DFAM, Land Use Decisions, FSP, UWR, SARA, Certification, First Nations Stewardship Plans, Conservation Area Design). The workshop will review the modeling activities underway, discuss methods of addressing key modeling issues (both those that have been resolved by some projects and hence approaches can be shared; and those that remain unresolved), and begin to develop guidance for practitioners and decision makers regarding the building of habitat supply models.

Products:

- Exchange of information at the workshop regarding the “how to” of habitat supply modeling -- what has worked and what hasn’t
- Establish a basis for ongoing cooperation among participants; and sharing of methodologies
- Inventory of the current habitat supply modeling activities in BC
- Summary of the various methods being applied to address habitat supply modeling issues
- Discussion of the use of habitat supply modeling in TSRs, DFAMs, Land Use Decisions, FSPs, UWRs, SARA, Certification, First Nations Stewardship Plans, Conservation Area Design
- Workshop report

Location: Quaaout Lodge, Chase, BC. 250-679-3090 <http://www.quaaout.com/>

Participants: See list

Workshop Format: Project / Panel presentations and discussions

Posters of modeling projects will be invited to provide participants an opportunity to discuss model details.

Agenda:

November 23, 2004

Time	Topic	Speaker
8:30	Welcome and Introduction to the workshop	Rick Ellis (facilitator)
8:40	The role of HSM in management	Brian Nyberg
Session 1: Modeling activities in BC – Project overviews		
9:00	Biodiversity Coarse filter analysis	Don Morgan
9:20	Coarse woody debris, snags	Melissa Todd
9:40	Spatial analysis	Steve Wilson
10:00	Coffee	
10:30	Connectivity	Dan O’Brien
10:50	Connectivity and fragmentation – landscape metrics	Dave Daust
11:10	Caribou / wolf	Scott McNay
11:30	Grizzly Bear	Rob McCann
11:50	Mountain Goat	Pam Hengeveld
12:10	Lunch (poster session)	

1:30	Marbled Murrelet	Doug Steventon
1:10	Spotted Owl	Glenn Sutherland
1:50	Fisher	Rich Weir
2:10	Marten / Flying Squirrel as test spp of landscape pattern	Doug Steventon
2:30	Goshawk	Todd Mahon
3:00	Coffee	
	Session 2: How to build better HSMs	
3:30	Defining and evaluating habitat (habitat elements) – methods for sequential or additive evaluation of habitat components e.g. Food + Displacement + Predation Risk	Clayton Apps, Alton Harestad, Bruce McClellan
4:15	How to evaluate the influences and importance of juxtaposition of habitats (habitat elements) – spatial relationships of habitat units	Dave Daust, Marvin Eng, Pam Hengeveld,
5:00	Adjourn (poster session)	
7:30	Evening Speaker:	Bruce Marcot
November 24		
8:30	Determining model spatial resolution – tradeoffs of habitat unit resolution and size of area to be modeled	Clayton Apps, Laurence Turney, Steve Wilson
9:15	What to use as a basis for comparison of alternative predicted scenario outcomes. For example; use of the past range of natural variation in habitat availability as a basis for comparison	Marvin Eng, Scott McNay, Doug Steventon
10:00	Coffee	
10:30	How to predict habitat supply over time – methods of temporal forecasting; alternative scenario comparisons; results presentation	Marvin Eng, Andrew Fall, Steve Wilson
11:15	Methods of linking predicted habitat supply to animal population predictions and the determination of the relative amounts of various habitat types required	Tony Hamilton, Doug Steventon, Glenn Sutherland
12:00	Lunch (poster session)	
1:00	Using models to determine monitoring and effectiveness evaluation indicators	Don Morgan, Scott McNay, Melissa Todd
1:45	How to extend models to include ecological risk indicators, risk assessment and threshold analysis	Dave Daust, Doug Steventon, Glenn Sutherland
2:30	Quality and availability of input data - what the models need - managing and providing data (local / provincial)	Insha Khan, Rob Serrouya, Adrian Walton
3:15	Coffee	
3:45	How to design and deliver effective model results for decision-making – audiences; documentation; presenting results, interpretations, relationships and assumptions	Andrew Fall, Don Morgan, Laurence Turney
4:30	Model Quality Assurance; how much and what kind of testing, validation, and review is required prior to model use, assessing model success – measures and timing	Alton Harestad, Scott McNay, Laurence Turney
5:15	Adjourn (poster session)	

7:30	Evening Speaker:	Rob Rempel
November 25		
	Session 3: Applications – what’s needed	
8:00	Land Use Decisions	Liz Williams / Tony Hamilton
8:45	TSR and DFAM	Dave Waddell
9:30	SFMP, FSP, Certification	Ralph Wells
10:15	Coffee	
10:45	UWR, Recovery plans	Scott McNay / Mark Zacharias
11:30	Conservation Area Design	Jody Holmes
	Session 5: Where to from here?	
12:15	Recommendations, cautions, and inspiration	Mike Fenger, Don Morgan, Alton Harestad
1:15	Adjourn	

Posters Presentations:

Dave Clark - Developing standards for modeling the distribution of elements across the landscape

Pam Hengeveld - Mountain Goat Habitat Supply Modeling and Applications in the Mackenzie TSA, north-central BC

Scott McNay – Habitat supply as a paradigm for planning recovery of caribou in north-central British Columbia

Don Morgan - The Bulkley Valley Centre for Natural Resource Research and Management

Don Sachs - Expert System for making site preparation and vegetation management decisions in southern interior B.C.

Glenn Sutherland / Louise Waterhouse et. al. - A Spatially-Explicit Modeling Framework for Habitat Management and Recovery Planning for the Northern Spotted Owl in B.C.

Adrian Walton - Application of Bayesian Networks to Predictive Ecosystem Mapping