Habitat and Habitat Supply Modeling – Practitioner's Workshop
Dec. 5, 6, 7, 2006

Purpose:
Habitat and Habitat Supply Modeling has significant potential as a management tool in BC. Currently, a number of projects are underway and innovative approaches are being developed. The workshop will review the modeling activities underway, discuss methods of addressing key modeling issues, and provide a forum for increasing collaboration and cooperation. The workshop will contribute to strengthening the modeling "community of practice".

Objectives:
- Exchange of information regarding the "how to" of habitat supply modeling -- what has worked and what hasn't
- Establishment of a basis for ongoing collaboration and cooperation among participants; and sharing of methodologies
- Update the inventory of habitat supply models and modeling activities in BC
- Discussion of some of the current issues facing model development, use and application

Location: Quaaout Lodge, Chase, BC. Room and shuttle arrangements at: 1 800 663-4303
http://www.quaaout.com/

Fees: There is no fee for the workshop. Quaaout Lodge will provide a package plan that includes the costs of room, refreshment breaks and lunches

Participants: See list of practitioners

Workshop Format: Project presentations - to inform participants of current modeling work
Panel presentations (three member panel presenting ideas - 10 min each) and follow-up discussions - to explore topics of general interest
Posters - to provide an opportunity to discuss model details one-on-one

Note to Presenters: Since this workshop is a gathering of practitioners we request that presentations are NOT general talks about a project, but rather assume a technically informed audience, and focus on: problems encountered in developing or applying models; innovative techniques developed; ideas on how to move modeling and model application forward.

Agenda:

Dec. 5, 1:30 - 4:30 **Review of the growing modeling toolkit:** Special Session with Bruce Marcot (special registration required – contact Rick Ellis)

Examples of tools available:
- Systat for creating various kinds of multivariate statistical models;
- DecisionPro to create decision trees;
- Netica to create BBNs;
- NetWeaver to create fuzzy set models;
- PersonalBrian, Inspiration, and MindManager for concept mapping and diagramming
- EcoSim, Populus, Vortex, Outbreak for population models

In this technical session Bruce will review and demonstrate the growing modeling toolkit. This will be a participatory working session – not a lecture. The focus of the session will be guided by participant interest.

Dec. 6

Time	Topic	Speaker
8:30	Welcome and Introduction to the workshop	Rick Ellis (facilitator)
8:40	Workshop Theme: What's working – what isn't? How do we move forward?	Don Morgan
9:10	Timber supply modeling and forecasting of sustainability indicators - Habitat elements including CWD, snags, old/mature forest, young seral forest	Cam Brown
9:30	The cumulative distribution approach to stand structure classification: A new method for expanding the list of attributes available for describing habitats across a wide range of scales	Ian Moss
9:50	Selecting indicators for assessing LRMP implementation – models and monitoring.	Dave Daust
10:10	**Refreshments**	
10:35	Panel A: What types of indicators are best suited for inclusion in large scale multiple accounts analysis that will help to track 'habitat' in general. (Planning, TSR, etc)	Jeff Stone (L), Cam Brown, Dave Daust, Ian Moss
11:20	Struggles with connectivity	Doug Steventon
11:40	Application of Simulation Models to the Design and Analysis of Silvicultural Systems	Jim Goudie
12:00	**Lunch** (poster session)	
1:30	IDF and ESSF stand structure in relation to natural and managed disturbances	Walt Klenner
1:50	Habitat assessment in Ministry of Environment - needs and initiatives	Dave Clark
2:10	Panel B: Handling and communicating uncertainty: What are the kinds of uncertainty? What are their implications for prediction modeling and management use? How do, or can, they fit into risk management? How can we better evaluate, represent and communicate uncertainty to managers and other audiences?	Bruce Marcot (L), Glen Sutherland, Andrew Fall, Albert Nussbaum
3:00	**Refreshments**	
3:30	Spotted Owl habitat and population supply model SPOW resource location model	Dan O'Brien
3:50	Northern Goshawk habitat suitability and supply model	Erica McClaren, Jason Smith
4:10	Evolution of a Grizzly Bear Habitat Supply Model from Strategic to Operational Use	Anne-Marie Roberts
4:30	Database models of WHR that incorporate considerations of "key ecological functions" of wildlife and their "key cultural functions," in a landscape biodiversity assessment framework.	Bruce Marcot
5:00	Adjourn (poster session)	
7:30	Evening Speaker: Marbled Murrelets, models, management and research in Washington State	Weikko Jaross

Dec. 7		
Time	**Topic**	**Speaker**
8:30	A toolbox approach to modeling	Andrew Fall
8:50	Making best use of Provincial Tools (Wildlife Habitat Ratings)	Kyle Simpson
9:10	Panel C: Comparison of modeling tools: getting the right tool for the application. Comparison of the relative strengths, weaknesses and application value of: Resource selection function; Habitat suitability index; Baysian belief networks; expert panels and recommendations; concept maps, and others	Brian Nyberg (L), Bruce Marcot
10:00	**Refreshments**	
10:30	Mountain Goat Winter Range – model development and testing	Randy Sulyma
10:50	Panel D: Model quality assurance: Testing and ground verification of model inputs and outputs: Towards a model quality assurance and testing protocol: standards, transparency, documentation, publication, and peer review. What constitutes science – based?	Melissa Todd (L), Walt Klenner, Dave Clark, Weikko Jaross
12:00	**Lunch** (poster session)	
1:30	Panel E: Linking habitat models to population estimates and trends: Veracity of expert / judgment-based population interpretations versus the outputs of models.	Eric Lofroth (L), Dan O'Brien, Doug Steventon, Rich Weir
2:15	Use and value of models in adaptive management	Brian Nyberg
2:35	Panel F: Application of models in management. How successful have we been at designing species-habitat models for the purpose of better informing forest ecosystem management policies and practices? Are we really using habitat and habitat supply models (for management decisions and increases in knowledge) or are we just fooling ourselves? Why aren't HSM models being used like TSR models are? What and how can decision processes (government and management) be improved by incorporating information from habitat and habitat supply models. What are the obstacles to application/implementation? Models and monitoring	Don Morgan (L), Melissa Todd, Eric Lofroth
3:30	**Refreshments**	
4:00	Where to from here: Recommendations, cautions, and inspiration	Glen Sutherland, Art Tautz, Don Morgan
5:00	**Adjourn**	

Note: (L) indicates panel leader

Posters Presentations:

1.	Ecosystems Branch	Dave Clark
2.	Spotted Owl modeling	Cortex
3.	Stone sheep habitat supply modeling - Muskwa-Kechika Management Area	Pamela Hengeveld
4.	Northern Goshawk habitat suitability and supply model for recovery	Erica McClaren
5.	Stand structure classification	Ian Moss
6.	Stand structure classification in forest inventory	Ian Moss
7.	Seeing the forest with the trees (bark beetles)	Ian Moss
8.	www.SELES.info not just multimedia searchable hyperlinked illustrated model building documentation!	Charles Burnett