News from the Editor

Marilyn Bittman, JEM Managing Editor

In this special issue of the BC Journal of Ecosystems and Management, we are pleased to present a series of articles sponsored by the Nature Conservancy of Canada, documenting several components of their recently completed Central Interior Ecoregional Assessment. Guest Editor, Pierre Iachetti, introduces readers to some of the current complexities surrounding conservation planning as decision makers are increasingly required to balance social, economic, and environmental considerations. He emphasizes that, in formulating sustainable land use and resource management policy, politicians, regulators, environmentalists, First Nations, businesses, and members of our communities must work together. Iachetti indicates that the ecoregional assessment project owed a great deal of its uniqueness and success to a high degree of multidisciplinary and multi-agency collaboration and access to a wide range of decision-support tools and ecosystem data.

In their series introduction, **Pierre Iachetti** and **Sara Howard** explain that these types of ecoregional assessments "create a shared vision for agencies and other organizations at the regional, state, and local levels to form partnerships and to ensure efficient allocation of conservation resources." They describe the geographic nature of the ecoregion and outline the various components of the assessment presented as articles in this issue.

Timothy Kittel, Sara Howard, Hannah Horn, Gwen Kittel, Matthew Fairbarns, and Pierre Iachetti take on the challenge of incorporating climate change in conservation planning for British Columbia's Central Interior. Consulting expert opinion, they present a framework that speaks to the vulnerability of terrestrial and freshwater ecosystem change, presenting strategies for "climate change adaptation in the face of uncertainty in the future of climates, landscapes, and species."

Using Marxan site-selection software, Hannah Horn's research has been able "to identify areas of high conservation priority, targets for the representation of animal species, and those identified separately for plants and ecosystem units." Employing the information gathered, biologists can project the "best solution" for conservation planning at the least cost for protected conservation areas while increasing connectivity between animal species and plants.

Gwen Kittel, Cameron Cadrin, Dušan Markovic, and Tory Stevens' thorough investigation of the 25.7 million hectare Central Interior study site establishes "a suite of conservation areas that, once protected or managed for conservation, would represent all of the biodiversity and ecosystem functions of the Central Interior." The researchers also took into consideration climate change, animal populations, and migration patterns over the diverse topographic area, providing future researchers with a terrestrial ecological system representation of the region for conservation planning.

Sara Howard and Martin Carver discuss an ecoregional assessment of the watersheds within the Central Interior and Sub-Boreal Interior ecoprovinces and the conservation planning techniques and goals required to identify priority watersheds in this region. The purpose of their study was to identify areas that required conservation action such as land purchase and other management actions. Through their work, they identified 2257 priority watersheds.

Sarah Loos describes the use of Marxan software in the analysis and prioritization of conservation areas in the Central Interior ecoregion. Marxan enables researchers to test various scenarios and create conservation portfolios that can be used in future research, especially within terrestrial and freshwater priority areas.

Looking at costs and side-benefits of conservation planning, **Kai Chan, Lara Hoshizaki,** and **Brian Klinkenberg** summarize the need to link conservation and human well-being through ecosystem services. They explore three pertinent areas—methods, cost-effectiveness, and relationships between services—and suggest a cost-effective solution.

Nancy-Anne Rose and Philip Burton identify climate refugia to support candidate areas for conservation in the Central Interior. Through research that used Climate BC and ESRI ArcMap software, they documented data on biogeoclimatic variants, terrestrial ecological units, and plant species. This data will assist conservation planning agencies in adding the impacts of climate change into their planning frameworks.

Research done by Scott McNay, Glenn Sutherland, and Donald Morgan highlights the current mountain pine beetle infestation and gradual changes in regional climate within Central Interior lodgepole pine forests. These researchers developed habitat occupancy models focussed at both the stand and landscape levels of habitat management to represent the effects of large-scale disturbances on habitat supply. Wildlife habitat was also examined by Scott Nielsen in relation to prioritized biodiversity sites in both the Central Interior and Sub-Boreal Interior ecoprovinces. In an effort to provide a habitat model that will "prioritize areas for protection and restoration," he examined the transitional population of grizzly bears and the areas these large mammals occupy.

To conclude this Central Interior ecoregional assessment series, **Sara Howard** and **Pierre Iachetti** summarize its key messages and explain how the Nature Conservancy of Canada will use this assessment to further its work in the region. They also describe how the data compiled and developed through this research can be used by "anyone involved in conservation planning, priority setting, and decision making."

Inside this issue of *JEM*, you will also find an eclectic collection of *LINK News* articles. **Alan Wiensczyk** presents a synopsis of the 2011 Northern Silviculture Committee Winter Workshop, which focused on "New Directions in Forest Management." **Larry Joseph's** article examines the role of the Forest Stewardship Council in forest carbon management, bringing forward the continued commitment of the United Nations.

Ellen Simmons reports on the work under way throughout the South Okanagan–Similkameen region to recover species at risk through a summary of the "Fourth Annual Aboriginal Meeting for Species at Risk Meeting." Moving further north, Richard Kabzems, George Harper, and Peter Fielder pinpoint the key results of growing boreal mixedwoods.

Stepping back to winter 2010 and the Winter Southern Interior Silviculture Committee Workshop on climate change, **Kathie Swift** summarizes the meeting's focus "on climate change, sustainable forest management, and issues and concerns of small firms and operators." The workplace is also central to **Karyn Sutherland**'s article, which provides businesses with options for green heating solutions.