

Grasses of the Columbia Basin of British Columbia

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Ministry of Forests Research Program
Royal British Columbia Museum
Natural History Section

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Heather Stewart and Richard J. Hebda



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ABSTRACT

The Grasses of the Columbia Basin of British Columbia

A checklist of 152 grass species for the Columbia Basin region was developed using the specimen database at the Royal British Columbia Museum Herbarium. This represents approximately 67 percent of the grass flora in the province of British Columbia. From this study it was determined that only 25 percent of the grass flora in the Columbia Basin region are introduced species. Each record in the checklist has an associated specimen housed at the Herbarium, except in the case of several of the Red- and Blue-listed specimens described in Douglas et al. (1998). The naming follows Douglas et al. (1994) in most cases, but some genera were changed to reflect changes in taxonomic thinking. Non-technical descriptions and keys were written and maps generated for each species. The maps were generated using a Geographic Information System from the geographic coordinates in the database records. The base map is from the Watershed Atlas data available in digital format from the Ministry of Environment, Lands and Parks website. The watershed base map was clipped to the study area determined by the *Living Landscapes* program for the Columbia Basin region at the museum and the point data from the database were added. The map points represent actual specimen locations that can be traced back to a herbarium sheet. Many species that show limited distribution may prove to be more widely distributed as a result of more extensive field work. Illustrations are provided for both the key species and individual species.

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The illustrations in this publication come from two sources. One source is the collection of grass illustrations completed by Betty Stephens, retired staff illustrator at the Royal B.C. Museum. These illustrations have been used in previous RBCM publications and scientific papers. In addition, there are several illustrations completed by Peggy Frank from the RBCM publication on *Bromus* by Leon Pavlick (1994). The bulk of the illustrations in this publication are taken, with permission from the University of Washington Press, from C.L. Hitchcock, A. Cronquist, M. Ownbey, and J.W. Thompson's 1955–1969 *Vascular Plants of the Pacific Northwest*.

Scott Scholefield, a co-op student from University of Northern British Columbia, spent several months working with the database to produce the ArcView digital maps.

Base maps are from Ministry of Environment, Lands and Parks 1996 watershed data. Bruce Mackenzie, GIS Technical Analyst, provided helpful information on these.

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Joan Kerik and John Pinder-Moss, collection managers at the RBCM Herbarium helped Scott, Karen Moores and Jean MacGregor compile the original database. Tracy Coyle, RBCM, produced the HTML version of this publication, and Tara Steigenberger, RBCM, manipulated the bulk of graphics and edited the manuscript. Paul Smith assisted with close-up photography. Peter Newroth helped monitor this project and arrange for the printing of the manuscript.

This publication is web-based, and as more information comes in from the region on new and interesting grasses, we plan to update the web publication. If you have any comments or suggestions please forward these to: tsteigenberg@royalbcmuseum.bc.ca or rhebda@royalbcmuseum.bc.ca

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