

Table 1. Mixedwood themes, issues, and responses (strategic or tactical). The current level of activity and priority for each issue is identified. activities. O, an ongoing Chair activity; +, delivered by partnerships; ++, high priority partner to deliver; and +++, high priority Chair to deliver.

THEME	STRATEGIC ISSUE	STRATEGIC OUTCOME					
			03/4	04/5	05/6	06/7	07/8
<b>Timber supply:</b> <i>Growth and yield</i>	Lack of understanding of treatment effects on ecology, forest health, and growth and yield in mixedwood stands.	<b>ID and evaluation of knowledge gaps; action plan for gaps</b>	O	O	O	O	O
		Research and operational partnerships in BWBS & SBS	+++	+++	+++	+++	+++
		Description of early mixedwood stand development	O	O	O	O	O
		Development and refinement of mixedwood G&Y models	++	++	++	++	++
		Linkage of stand treatments and stand dynamics to wood quality	+++	O	O	O	O
	Lack of knowledge/expertise – most cost-effective management regimes	Relationships between stand treatments and future forest conditions	++	++	++	++	++
		Relationships between stand treatments and forest health	++	++	++	++	++
		Facilitate certification efforts	++	++	++	++	++
		Economic analyses of mixedwood management	O	O	O	O	O
	Lack of knowledge/expertise – practices and policies	Definition of free growing stands (mixedwood and coniferous)	+++	+++	++	+	+
		Definition of range use by seral stage distribution	O	+++	+++	+++	++
		Determination of utility of various mixedwood G&Y models	O	O/+	O/+	O/+	O/+
		Sub Boreal mixedwood AAC determinations	+	+	+	+	++
		Relationship between site quality and SI <sub>50</sub>	O/+	O/+	O/+	O/+	O/+
	<i>Inventory</i>	Conservation and description of biodiversity	Estimate amount and quality of mixedwoods on the landscape	++	++	++	++
Description of early mixedwood stand development			O	O	O	O	O
Relationship between stand productivity and forest health			++	++	++	++	++
Differences in stand dynamics between managed and natural stands			++	+++	++	++	++
<i>Markets</i>	Lack of understanding of structure and functional relationships among seral stages from stand to landscape levels	Describe natural disturbance patterns	++	++	++	++	++
		Impact of management activities on natural stand dynamics	++	++	++	++	++
		Describe range of natural variation (RNV) by seral stage	++	++	++	++	++
		Management success of RNV will be defined	++	++	++	++	++
<i>Markets</i>	Lack of knowledge on demand for raw materials	Description of wood quality attributes	O/+	O/+	O/+	O/+	O/+
		Location, amount, and quality of fiber available (fiber supply detail)	++	++	++	++	++
		Definition of best product use	++	++	++	++	++
Continuing education and outreach: extension	Little of awareness of existing information	Publish reviews of mixedwood management practices and policies,	O	++	++	++	++
		Establish Mixedwood Web page	O				
		Publish reviews of cost – benefits of mixedwood management	+++	+++	+++	+++	+++
		List of extension needs and detailed annual action plan	++	++	++	++	++
		Initiation of partner-approved extension projects	++	O/+	O/+	O/+	O/+
		Networking with academia, and government agencies	O	O	O	O	O
	Establish the necessary partnerships for an extension plan	O/+	O/+	O/+	O/+	O/+	
Lack of relevant ecological and	Field demonstrations of ‘best practices’	++	++	++	++	++	

	management knowledge						
	Lack of knowledge/expertise re: cost-effective management and SFM policies and practices	Incorporate results of research and operational trials into extension program	O/+	O/+	O/+	O/+	O/+
		Field demonstrations of 'best practices'	++	++	++	++	++
		Coordinate local-regional discussion-action on policy needs	O/+	O/+	O/+	O/+	O/+
	Lack of awareness of UNBC Mixedwood program	Regional information seminars-workshops	+++	+++	+++	+++	+++
		Technical presentations at national and international meetings	O	O	O	O	O
Education of professional resource managers	Ensure graduates have best and current mixedwood management knowledge and skills	Regular updates UNBC mixedwood curricula	+++	+++	+++	+++	+++
		Resource professionals participate in delivery of UNBC Mixedwood program	O/+	O/+	O/+	O/+	O/+
		Engage undergraduate students in Mixedwood research program	O	O	O	O	O
	Lack of graduates skilled in mixedwood management	Actively recruit students at the undergraduate and graduate level	O/+	O/+	O/+	O/+	O/+
		Facilitate industrial sponsorship of graduate students	+++	+++	+++	+++	+++
		Definition and utilization of all available funding sources	O/+	O/+	O/+	O/+	O/+
	Difficulties in recruiting and retaining graduates in the north	Institute studentships and internships with industrial partners	O/+	O/+	O/+	O/+	O/+
		Prepare and submit research proposal on behalf of graduate students	O	O	O	O	O
		Involve partners in delivering operational perspectives to students	O/+	O/+	O/+	O/+	O/+