February 1990

Field Note N°: General-13 Previous Reference Sheet N°: General-7, General-11

# FERIC'S LOGGING EQUIPMENT DATABANK: 1989 UPDATE

### INTRODUCTION

In 1987, the Wood Harvesting Group of FERIC's eastern division established a computerized databank on the logging machines in operation in eastern Canada. The databank was created to provide estimates of logging equipment populations, determine trends in harvesting systems and evaluate the potential market for new technology.

In October 1989, all cooperating companies were contacted and requested to update the information on file from 1988. Most companies provided detailed updates on their own and their contractors' equipment, and provided adjusted numbers for their annual volume harvested.

The 66 company divisions that currently participate in the databank harvest an annual timber volume of 36 million m<sup>3</sup>, which represents 57% of the total harvest on crown land and large industrial freehold in eastern Canada.

### DATABANK CONTENT

Following the recent update, the databank now contains 4252 different machines covering 249 makes and models of equipment involved in felling, skidding/forwarding, delimbing, processing, chipping and slashing (Table 1).

While the databank can be used to examine the regional distribution of machines and establish trends in machine ownership, it can also be used to estimate machine population. Table 2 presents estimates of machine population based on the earlier 1988 data and the updated 1989 information. These estimates were generally derived by projecting the number of machines in the databank to the total crown land and large freehold harvest for each year.

In this table, changes of less than 10% in estimated population should not be considered significant because the accuracy of the projection is probably of that order or more.

Table 1. Regional distribution of logging equipment in the databank

Area	Number of company- owned machines	Number of contractor-owned machines	Total number of machines	% coverage of total timber harvest*
Saskatchewan & Manitoba	32	112	144	34
Ontario	609	618	1227	53
Quebec	94	1359	1453	58
New Brunswick	93	772	865	83
Nova Scotia & Newfoundland	65	498	563	63
Eastern Canada	893 (21%)	3359 (79%)	4252	57

<sup>\*</sup> Based on provincial government annual reports, most recent year.

Table 2. Logging machine population trends in eastern Canada; crown land and large industrial freehold

Machine Type	1988 stimate	1989 estimate	% variation 1988-1989
Feller bunchers:			
- saw head	330	295	-11
- shears	260	280	+8
Delimbers (stroke)	630	630	0
Flail Delimber/debarkers	1	3	+200
Skidders:			
- cable	4500	4360	-3
- grapple	275	315	+15
- clambunk	20	22	+10
Forwarders	500	450	-10
Koehring Shortwood Harvesters	<b>5</b> 6	42	-25
Cut-to-length Harvesters	<b>39</b>	45	+15
Feller-forwarders	90	80	-11
Slashers & chippers	460	440	-4
Others (yarders, processors, etc.)	20	39	+75
Total	7180	7000	-3

The following trends identified in 1988 appear to continue:

- Number of small cable skidders and forwarders in manual cut systems decreasing
- Number of grapple and clambunk skidders increasing
- Number of cut-to-length harvesters increasing

As well, new machines are appearing on the market such as chain flail delimber-debarkers and delimber-debarker-chippers. The current market for stroke delimbers, feller-forwarders and slashers appears to be stabilized or slightly decreasing. A decline in the number of feller-bunchers with sawheads may be related to new forest legislation in certain regions where the protection of advance regeneration is encouraged.

## CONCLUSION

FERIC's logging equipment databank is a useful tool which can be used to provide quick estimates of machine population in eastern Canada. To maintain the quality of the data, the databank information will be updated regularly and as new machines are brought to FERIC's attention.

To obtain more information on the databank, or if you have specific requests that could be answered using this service, please contact:

J.B. McPhee or J.-F. Gingras Wood Harvesting Group FERIC, Eastern Division (514) 694-1140 FAX: (514) 694-4351

NOTE: Requests will be judged on a case-by-case basis as to their sensitivity; specific company information will be kept confidential.

### **Participating Company Divisions**

Abitibi-Price Inc. Barrette-Fortin Inc. Boise Cascade Canada Ltd. Bowater Mersey Paper Co. Ltd. Canadian Pacific Forest Products Ltd. Chaleur Pulpwood Ltd. Chapleau Forest Products Ltd. Corner Brook Pulp and Paper Ltd. Daishowa Inc. Domtar Inc. Donohue Inc. Donohue - St-Félicien Inc. E.B. Eddy Forest Products Ltd. Fraser Inc. R. Fryer Forest Products Ltd. Gaspesia Pulp and Paper Co. Ltd. Gestofor Inc. Félix Huard Inc. Industries James Maclaren Inc. Kimberly-Clark of Canada Ltd. Kruger Inc. J.E. Martel & Sons Lumber Ltd. J.D. Irving Ltd. Malette Lumber Inc. G.W. Martin Lumber Ltd. Miramichi Pulp & Paper Inc. Normick Perron Inc. Quebec and Ontario Paper Co. Ltd. Repap-Manitoba Inc. REXFOR Produits Forestiers Saucier Ltée Scierie des Outardes Inc. Scierie Gallichan Inc. Scierie St-Michel Inc. Scott Worldwide, Inc. Spruce Falls Power & Paper Co. Ltd. Stone-Consolidated Inc. Stora Forest Industries Ltd. United Sawmill Ltd. Valley Forest Products Ltd. Woodlands Enterprises Inc.

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