

Damage Reports

4

Whenever the codes for Blowdown, Fire and/or Insect damage are detected on card type 2s, damage reports are produced in addition to the normal (non-damage related) output. These reports will segregate the reported volumes into separate damage types and/or codes, as indicated. Root rot damage is reported for block summaries only and is optional.

The damage reports will be the same as the normal output, only there will be a designation of species and damage type and damage codes on the report.

Damage Type	Code	Description	Species
Blowdown	E	Down trees	All Species
	G	Down and shattered trees	All Species
Fire	A	Light fire	All Species
	B	Medium fire	All Species
	C	Heavy fire	All Species
Insect/Disease	1	Green attack	Balsam, Pine
	2	Red attack	Balsam, Pine
	3	Grey attack	Balsam, Pine
	4	Blister rust	White Pine
	5	Green attack - alive	Spruce, Douglas Fir
	6	Green attack - dead	Spruce, Douglas Fir
	7	Grey attack - dead	Spruce, Douglas Fir

Damage Type	Code	Description	Species
	8	Red attack	Douglas Fir
	X	Defoliator G live cambium	All Species
	Y	Defoliator D dead cambium	All Species
Root Rot	J	Light	All Species
	K	Moderate	All Species
	L	Heavy	All Species

4.1 List of Damage Reports

The following damage reports are required for damage types Blowdown, Fire, and Insect:

1. 006 Extended Forest Type Stand and Stock Table, one page with all trees, one page with non-damaged trees, and one page for each Blowdown, Fire, or Insect damage code.
2. 007 Stand and Stock Tables, one page for each species and damage type containing each of the damage codes for that damage type.
 - i 007a Block Stand Table.
 - ii 007b Block Stock Table.
 - iii 007c Block Basal Area.
 - iv 007d Timber Type Stand Table.
 - v 007e Timber Type Stock Table.
 - vi 007f Timber Type Basal Area.
 - vii 007g Cutting Permit Stand Table.
 - viii 007h Cutting Permit Stock Table.
 - ix 007i Cutting Permit Basal Area.
3. 009 Volume Summaries, one page for each species and damage type reporting each of the damage codes for that damage type.
 - i 009a Timber Type Summary.
 - ii 009b Block Summary.
 - iii 009c Cutting Permit Summary.
 - iv 009d Treatment Unit within Block Summary - Coast only.
4. 011 Plot Summary, damage code volumes segregated for each species.
5. 015 Harvesting Method Summary, percent net volumes will be segregated for each Harvesting Method under the headings Fire, Heavy Fire (Damage code C), Down trees, and Insect damage.

The following damage reports are optional:

1. 009b Root Rot Block Summary.

4.2 Damage Report Calculation

Trees with multiple damage codes will report each damage type in the *Damage Summary Reports*. The damage code or codes that will assign the highest risk group will be used in the calculation of the net volume for each of the damage types. If pathological indicator(s) move the risk group higher than the damage code(s) then use the risk group from the pathological indicator(s) to calculate the *Damage Summary Reports*.

Example

Cruise = 1 ha, 1 plot, 1.0 m³ mature Lodgepole Pine tree that represents 100 stems/ha with down tree code G, fire code B and insect 3:

Risk groups (RG) -Down Tree = RG3, Fire = RG2, Insect 3 = RG 2. Use RG 3 since it is the highest risk group.

Volume - Hypothetical loss factor DWB = 30% plus 20% for the grey attack breakage add-on = 50%.

Tree = 1.0 m³ - 0.5 m³. Cruise volume per hectare = 0.5 * 100 stems = 50 m³.

Damage reports -Type, Block and Cutting Permit Damage Report Net Volume = 50 m³ for Lodgepole pine Down Tree (G), Fire (B) and Insect (3).

4.3 Sample Damage Report Listings

Some of the DBH classes have been removed from these sample listing.

4.3.1 Extended Forest Type Stand and Stock Damage Report - Sample Listing

FOREST REVENUE BRANCH - 2001.0									
NOT FOR APPRAISAL PURPOSES DUE TO NON-STANDARD UTILIZATION *** DOUBLE SAMPLING CRUISE ****									
NOTE - ALL TREES GREATER THAN 275 CM ARE INCLUDED IN THE 275 CM CLASS									
LICENCE NUMBER CF7080									
CUTTING PERMIT 000									
TYPE 1 - PA H C 9 4 1									
ROAD/LANDINGS AREA - 5.0 OTHER AREA - 0.0 NO. OF PLOTS (M/C) 3. NO. OF DEAD TREES 0.									
SPECIES CEDAR									
DOWN & SHATTERED - UPROOTED DAMAGE									
LIVING TREES									
RISK RISK RISK RISK RISK									
GROUP 0 GROUP 1 GROUP 2 GROUP 3 POTENTIAL									
TOTAL									
LIVE									
VETERANS									
DEAD U LIVE U									
AVERAGE									
GROSS NET									
MERCH. MERCH.									
PER TREE PER TREE									
(M) (M3)									
DBH									
CL									
CM.									
40									
45									
50									
55									
60									
65									
70									
75									
80									
85									
90									
TOTAL OF AVERAGES									
PERCENT BY TREE CLASS									
TREES 12.5									
TREES 17.5									
TREES 22.5									
TREES 27.5									
TREES 32.5									
TOTAL OF AVERAGES									
PERCENT BY TREE CLASS									
TREES 12.5									
TREES 17.5									
TREES 22.5									
TREES 27.5									
TREES 32.5									

Figure 4.1 Extended Forest Type Stand and Stock Damage Report - Sample Listing (Partial).

4.3.2 Block Stand Damage Table - Sample Listing

FOREST REVENUE BRANCH - 2001.0		BLOCK STAND TABLE (STEMS/HA)		(007A) PAGE 42	
NOT FOR APPRAISAL PURPOSES DUE TO NON-STANDARD UTILIZATION		***** DOUBLE SAMPLING CRUISE *****		COMPUTED 2001-03-19 17:42:55	
LICENCE NO. CF7080		TOTAL MERCH AREA 12.5		INSECT DAMAGE	
CP NO. 000		AVERAGE LINE		USELESS VOLUMES EXCLUDED	
BLOCK 001		BALSAM - INSECT DAMAGE			
CLEARCUT 5.0 SELECTIVE		GRAY ATTACK DEFOL - GEN DEFOL - GRAY			
NORMAL GREEN ATTACK RED ATTACK		GRAY ATTACK DEFOL - GEN DEFOL - GRAY			
MIN DBH	12.5				
STUMP HT	30.0				
TOP DIAT	10.0				
LOG LENGTH	5.0				
DBH CL					
15					
20					
25					
30					
35					
40	12.3	29.9		29.9	
45		18.9		31.2	
50		9.1		9.1	
55					
60					
65					
70					
75					
80					
85					
90					
95					
TOTAL	12.3	57.9		70.2	
USELES					
DEAD P					
12.5 +	41.5	39.2		39.6	
17.5 +	41.5	39.2		39.6	
22.5 +	41.5	39.2		39.6	
27.5 +	41.5	39.2		39.6	
32.5 +	41.5	39.2		39.6	

Figure 4.2 Block Stand Damage Table - Sample Listing (Partial).

4.3.3 Block Volume Summary Damage Report - Sample Listing

FOREST REVENUE BRANCH - 2001.0		BLOCK SUMMARY		(009B)	PAGE 51	17:42:57
NOT FOR APPRAISAL PURPOSES DUE TO NON-STANDARD UTILIZATION *** DOUBLE SAMPLING CRUISE ****		COMPUTED 2001-03-19		AVERAGE LINE		
LICENCE NUMBER CF7080	P.S.Y.U. 34-0	USELESS VOLUMES EXCLUDED		12.5		
CUTTING PERMIT 000	F.I.Z. J	NO. OF BLOCKS 2		TOTAL MERCH AREA		
BLOCK NUMBER 001		NO. OF PLOTS USED (M/C) 6				
CLEARCUT	5.0 SELECTIVE	ALBICAULIS PINE - UPROOTED DAMAGE				
UTILIZATION	NORMAL	DOWN	SHATTERED	TOTAL		
COMPILATION TYPE	3					
MINIMUM DBH	12.5					
STUMP HEIGHT	30.0					
TOP DIAMETER	10.0					
LOG LENGTH	5.0					
VOLUME AND SIZE DATA						
GROSS MERCH VOLUME M3	1200.	81.	461.	1742.		
NET MERCH VOLUME M3	1026.	69.	390.	1484.		
NET MERCH./HECTARE M3	205.	14.	78.	297.		
% DISTRIBUTION/HECTARE	69.	5.	26.	100.		
DECAY % GROSS	9.	9.	10.	9.		
WASTE % GROSS	3.	4.	4.	3.		
WASTE(BILLING) % NET	4.	4.	4.	4.		
BREAKAGE % GROSS	2.	2.	2.	2.		
TOTAL CULL (DWB) % GROSS	15.	15.	15.	15.		
STEMS/HA (GREEN & DP)	82.9	6.9	46.6	135.5		
SNAGS/HA (DU)	12.3	0.0	0.0	12.3		
AVG. DBH (GREEN&DP) CM	0.4	0.8	0.5	0.4		
AVG. DBH (SNAGS) CM	0.6	0.0	0.0	0.6		
GROSS MERCH VOL/TREE M3	2.91	2.50	2.00	2.58		
NET MERCH VOL/TREE M3	2.49	2.13	1.69	2.20		
AVG. WEIGHT TOTAL HT M	0.0	0.1	0.0	0.0		
AVG. WEIGHT MERCH HT M	0.0	0.1	0.0	0.0		
AVG. SN LOG NET MER M3	0.48	0.44	0.38	0.45		
AVG. # OF SN LOGS/TREE	5.34	5.00	4.53	5.04		
LUMBER AND CHIPS						
% NET MERCH - STUD LOG	20	20	48	32		
% NET MERCH - SMALL LOG	80	80	52	68		
% NET MERCH - LARGE LOG	10	9	4	6		
LRF SMALL LOGS BD FT/M3	3	3	3	3		
LRF LARGE LOGS BD FT/M3	2	2	2	2		
AVG LRF BD FT/M3	.26	.26	.27	.27		
CHIP YIELD UNITS/M3						
ALGORITHM GRADE %						
#1 SNLOG	63.	94.	55.	62.		
#3 SAWLOG	10.	0.	27.	14.		
#4 CHIPPER	27.	6.	0.	19.		
#5 CHIPPER	0.	0.	18.	5.		

Figure 4.3 Block Volume Summary Damage Report - Sample Listing.