

Canada
PFRc
Pest. rept.
1982
Sept. ~~1982~~

Environment
Canada
Environnement
Canada
Forestry
Service
Service
des Forêts

LIBRARY

JUN 6 1994

NATURAL RESOURCES CANADA
PACIFIC & YUKON REGION
506 W. BURNSIDE RD.
VICTORIA, B.C. V8Z 1M5 CANADA

PEST REPORT

Pacific Forest Research Centre • 506 West Burnside Rd. • Victoria, B.C. • V8Z 1M5

September, 1982

MOUNTAIN PINE BEETLE IN MANNING PARK:

A POST-CONTROL SURVEY

R.O. Wood

Forest Insect and Disease Survey Ranger

The mountain pine beetle, Dendroctonus ponderosae, infestation in mature lodgepole pine stands near Eastgate in Manning Provincial Park (Pest Report, R.J. Andrews, March, 1982) was resurveyed September 20-24 following a sanitation control program and the 1982 beetle flight. The 65 ha area was surveyed in twelve 100 m wide by 300 m to 700 m long strips (Map).

Of 8,407 trees examined, 252 (2%) were attacked in 1982, including 47 of 48 pheromone baited trees¹ (Table 1). Attack density ranged from 1 per stem to more than 6 attacks per 15 x 15 cm bark sample at breast height. The attacked trees were distributed throughout the area surveyed with the greatest concentration towards Bonnevier Creek which roughly corresponds to the infestation pattern before the control. The 252 currently attacked trees were flagged and should be removed prior to progeny dispersal in July 1983. Broods were at the egg stage in all samples and should develop to the overwintering larval stage.

Previously killed trees, which no longer contained beetle progeny, included: 185 trees (2%) killed in 1980 but still with some red foliage; 1,003 trees (12%) killed prior to 1980; and 63 trees (0.7%) with partial, unsuccessful attacks prior to 1982, and still green (Table 1).

Removal in the early spring of 1982 of about 3,700 beetle attacked lodgepole pine and debarking of low-cut tree stumps was

¹ An experiment with pheromones was conducted by Simon Fraser University and should be reported separately by Dr. J. Borden.

thorough and contributed greatly to the reduced intensity and extent of the infestation. Only 14 unpeeled stumps and 6 trees previously marked but not removed, were observed.

Recently attacked mature lodgepole pine trees were also identified for the first time about two kilometres west of the Eastgate infestation, with eight trees in the Mule Deer Campsite and five trees in the Hampton Campsite (Table 2).

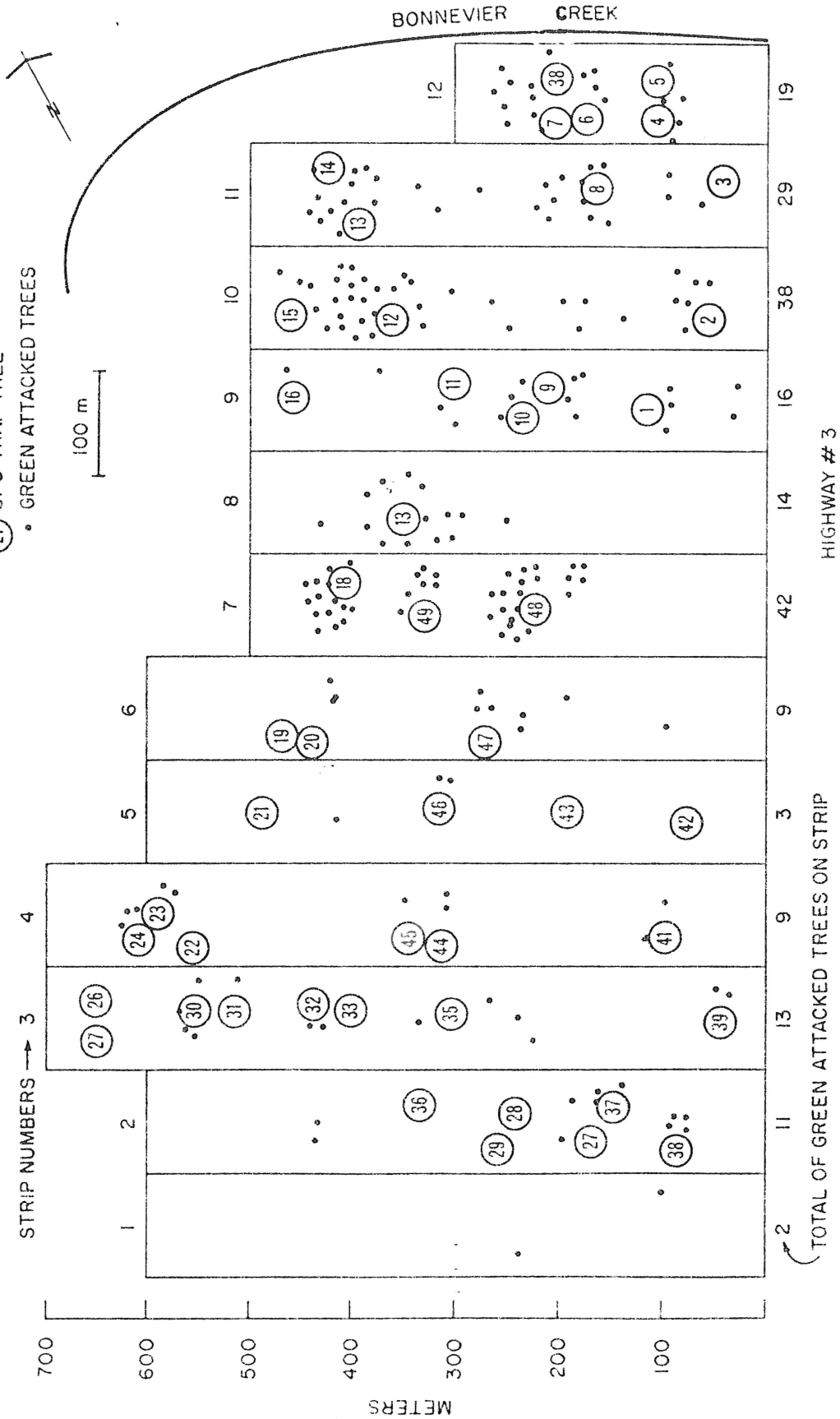
It is recommended that, because of the potential for the infestation to persist in 1983, surveys of the Eastgate area and campsites and the control cutting project be continued in 1983.

MOUNTAIN PINE BEETLE SURVEY
MANNING PARK SEPT., 1982

APPROXIMATE LOCATIONS OF:

○ SFU TRAP TREE

• GREEN ATTACKED TREES



○ TOTAL OF GREEN ATTACKED TREES ON STRIP

TABLE 1. Number of mountain pine beetle attacked lodgepole pine in cruise strips, Manning Provincial Park, 1982.

Strip No.	Healthy	Year of attack			Unsuccessful attacks prior to 1982
		1982	1980	Prior to 1980	
1	519	2	6	83	0
2	572	16	20	150	6
3	625	21	45	348	4
4	880	15	22	92	6
5	545	7	17	106	1
6	565	12	19	36	3
7	675	45	3	20	0
8	762	15	3	1	0
9	520	21	15	17	0
10	698	41	21	40	7
11	325	33	11	82	3
12	246	24	3	28	5
TOTAL	6932	252	185	1003	35

TABLE 2. Status of mountain pine beetle attacked lodgepole pine in Hampton and Mule Deer Campsites, Manning Provincial Park, 1982.

Campsite	Year of attack			Attack per tree
	1982	1981	1980	
Number of attacked trees				
<u>Mule Deer</u>				
Between #3 and #7	1	4	2	multiple
#17	1	1	1	"
opposite #24	1	-	-	single
opposite #25	1	-	-	"
west of #26	1	-	-	"
east of firewood area	1	-	-	"
at #33	1	-	-	"
east end of campsite	1	-	-	"
<u>Hampton</u>				
Opposite #67-#80	3	-	-	multiple
#70	2	-	-	"
#16	-	1	-	-