

WESTERN



AUSTRALIA

FORESTS DEPARTMENT

FOREST FIRE DANGER TABLES

A. C. HARRIS
Conservator of Forests

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TABLE A)

An alternative to Table A for calculating Basic Fire Hazard.

1. Calculate hazard from temperature and relative humidity. (Table i)
 2. Calculate hazard deduction from Table ii using overnight count of relative humidity and Table i hazard.
 3. Hazard (Table i) - Hazard deduction (Table ii)
- Basic fire hazard.

TABLE (i) Fire Hazard From Temp. and R.H.

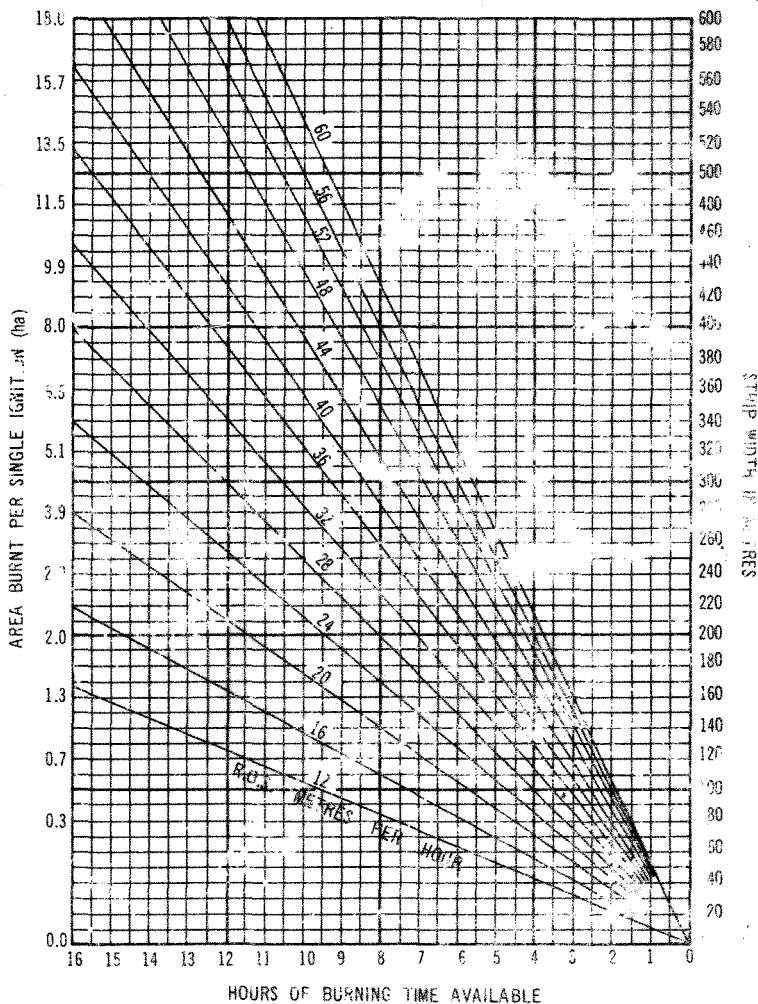
		Relative Humidity														
Air Temperature °Celsius	70	65	60	55	50	45	40	35	30	25	20	15	10	5		
	16	5.4	5.6	5.9	6.1	6.3	6.5	6.7	6.9	7.1						
	17	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.1	7.3						
	18	5.7	5.9	6.2	6.4	6.6	6.8	7.0	7.2	7.4	7.6					
	19	5.9	6.1	6.3	6.5	6.7	7.0	7.2	7.4	7.6	7.8					
	20	6.0	6.3	6.5	6.7	6.9	7.1	7.3	7.5	7.8	8.0					
	21	6.2	6.4	6.6	6.8	7.1	7.3	7.5	7.7	7.9	8.1	8.3				
	22	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.9	8.1	8.3	8.5				
	23	6.5	6.7	6.9	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6				
	24	6.7	6.9	7.1	7.3	7.5	7.7	7.9	8.2	8.4	8.6	8.8	9.0			
	25		7.0	7.3	7.5	7.7	7.9	8.1	8.3	8.5	8.7	8.9	9.2			
	26		7.2	7.4	7.6	7.8	8.0	8.3	8.5	8.7	8.9	9.1	9.3			
	28		7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0	9.3	9.5	9.7		
	29			7.7	7.9	8.1	8.4	8.6	8.8	9.0	9.2	9.4	9.6	9.8		
	30			7.9	8.1	8.3	8.5	8.7	8.9	9.1	9.4	9.6	9.8	10.0		
	31			8.0	8.2	8.5	8.7	8.9	9.1	9.3	9.5	9.7	9.9	10.2	10.4	
	32				8.4	8.6	8.8	9.0	9.3	9.5	9.7	9.9	10.1	10.3	10.5	
	33				8.6	8.8	9.0	9.2	9.4	9.6	9.8	10.0	10.2	10.5	10.7	
	34				8.7	8.9	9.1	9.3	9.6	9.8	10.0	10.2	10.4	10.6	10.8	
	35					9.1	9.3	9.5	9.7	9.9	10.1	10.3	10.6	10.8	11.0	
36					9.2	9.4	9.7	9.9	10.1	10.3	10.5	10.7	10.9	11.1		
38					9.4	9.6	9.8	10.0	10.2	10.4	10.7	10.9	11.1	11.3		
39						9.8	10.0	10.2	10.4	10.6	10.8	11.0	11.2	11.5		
40						9.8	10.1	10.3	10.5	10.8	11.0	11.2	11.4	11.6		

TABLE (ii) Deductions from Table I Value for Overnight R.H. Count.

		Count of Relative Humidity					
		0-20	21-40	41-60	61-80	81-100	101+
Fire Hazard from Table I	0	2.4	2.8	3.4	4.2	5.0	5.9
	1	2.3	2.6	3.1	3.8	4.7	5.6
	2	2.1	2.4	2.9	3.4	4.3	5.3
	3	2.0	2.3	2.6	3.2	4.0	4.8
	4	1.8	2.1	2.4	3.1	3.8	4.5
	5	1.8	2.1	2.4	3.1	3.6	4.2
	6	1.8	2.0	2.3	2.9	3.4	3.9
	7	1.7	2.0	2.3	2.9	3.2	3.6
	8	1.7	1.8	2.1	2.8	3.1	3.4
	9	1.5	1.7	2.0	2.6	3.0	3.5
	10	1.4	1.5	1.8	2.4	2.8	3.2

GRAPHS FOR LIGHTING METHOD

GRAPH A



FOR GRAPH B, SEE FOREST FIRE DANGER TABLES P.24

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B. J. BEGGS

Conservator of Forests

PERTH

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FIRE DANGER CALCULATION PROCEDURE

1. Obtain basic fire hazard from Table A. *Page 6*
2. Multiply basic fire hazard by rainfall correction factor from Table B. *Page 7*
3. Obtain rate of spread index for 7.6 to 8.5 tonnes/ha fuel from Table C, using adjustment for wind velocity, depending on forest type and topography. (Table C1) *Pages 12-15*

FOR SPECIES OTHER THAN KARRI

4. Multiply rate of spread index by fuel correction factor from Table D for relative forest type. *Page 18 or 20 for Pine*

FOR KARRI:

- 4A. Select drought index from Table D1. *Page 20*
- 4B. Multiply rate of spread index by fuel correction factor from Table D2. *Page 20*

The calculation will give a head-fire rate of spread for level ground in metres per hour.

Karri Spread Index
Tables A-B1-C1-C-D1-D2
Pages 6-8-10-12-20-20

Karri Spread Index
Tables: A-B-C1-C-D
Page: 6-7-10-12-18

Pine.

1. Hazard $\times$ rainfall correction factor from Table B = H.F. Hazard
- 2 R.O.S. Index from Table C1 and C
- 3 R.O.S. Index $\times$ fuel correction factor Table D⁵
Page 21 = adjusted R.O.S. index or fire danger

Table A

Apply temperature and relative humidity

Read basic fire hazard

Temp. °C	Relative Humidity %															
	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15
10.0	0.6	0.9	1.1	1.3	1.7	1.9	2.1	2.3	2.6	2.8	3.0					
11.0	0.8	1.1	1.3	1.6	1.9	2.2	2.3	2.5	2.9	3.0	3.2					
12.0	1.1	1.4	1.5	1.9	2.1	2.4	2.5	2.7	3.1	3.2	3.5					
13.5	1.3	1.6	1.7	2.1	2.4	2.6	2.8	3.0	3.3	3.5	3.8					
14.5	1.6	1.8	2.0	2.3	2.6	2.8	3.0	3.2	3.5	3.7	4.0					
15.5	1.8	2.0	2.2	2.5	2.8	3.0	3.2	3.5	3.7	3.9	4.2	4.4				
16.5	2.0	2.2	2.4	2.7	3.0	3.3	3.5	3.7	3.9	4.2	4.4	4.6	4.8			
18.0	2.2	2.4	2.7	2.9	3.2	3.5	3.7	3.9	4.1	4.4	4.6	4.8	5.0	5.3		
19.0	2.4	2.6	2.9	3.1	3.5	3.7	3.9	4.1	4.4	4.6	4.8	5.0	5.3	5.5	5.7	
20.0	2.6	2.8	3.1	3.3	3.7	3.9	4.1	4.3	4.6	4.8	5.0	5.3	5.5	5.7	5.9	6.2
21.0	2.8	3.0	3.3	3.6	3.9	4.1	4.3	4.6	4.8	5.0	5.3	5.5	5.7	5.9	6.2	6.4
22.0		3.3	3.6	3.9	4.1	4.4	4.6	4.8	5.0	5.2	5.5	5.7	5.9	6.2	6.4	6.6
23.5			3.9	4.1	4.4	4.6	4.8	5.0	5.2	5.5	5.7	5.9	6.2	6.4	6.6	6.9
24.5				4.4	4.6	4.8	5.0	5.2	5.4	5.7	5.9	6.1	6.4	6.6	6.8	7.0
25.5					4.8	5.0	5.2	5.4	5.7	5.9	6.1	6.4	6.6	6.8	7.0	7.3
26.5						5.2	5.4	5.7	5.9	6.1	6.3	6.6	6.8	7.0	7.3	7.5
28.0							5.4	5.6	5.9	6.1	6.3	6.6	6.8	7.0	7.3	7.5
29.0								5.7	5.9	6.1	6.3	6.6	6.8	7.0	7.2	7.5
30.0									5.9	6.1	6.3	6.5	6.8	7.0	7.2	7.5
31.0										6.1	6.3	6.5	6.8	7.0	7.2	7.4
32.0											6.3	6.5	6.7	7.0	7.2	7.4
33.5												6.5	6.7	7.0	7.2	7.5
34.5													6.8	7.0	7.2	7.4
35.5														7.0	7.2	7.4
36.5															7.2	7.4
38.0																7.4

Table B

FOR FOREST TYPES OTHER THAN KARRI

Tarrah - Pine

Select average daily temperature class within pertinent rainfall range. Read off correction factor under number of drying days since rain.

Amount of Last Rain (mms.)	Average Temp. °C	Number of drying days since rain												
		1	2	3	4	5	6	7	8	9	10	11	12	13
50 +	16.0-21.0	0.23	0.39	0.50	0.59	0.66	0.73	0.78	0.83	0.87	0.91	0.95	0.97	1.0
	21.1-26.5	0.27	0.46	0.53	0.70	0.78	0.84	0.91	0.96	1.0				
	26.6-32.0	0.32	0.54	0.70	0.82	0.92	1.0							
	32.1-40.0	0.35	0.59	0.76	0.90	1.0								
35.1 to 50.0	16.0-21.0	0.24	0.41	0.53	0.62	0.70	0.77	0.83	0.88	0.94	0.96	1.0		
	21.1-26.5	0.28	0.48	0.62	0.73	0.81	0.89	0.95	1.0					
	26.6-32.0	0.35	0.58	0.76	0.89	1.0								
	32.1-40.0	0.39	0.66	0.85	1.0									
25.1 to 35.0	16.0-21.0	0.28	0.46	0.60	0.71	0.80	0.87	0.94	1.0					
	21.1-26.5	0.33	0.56	0.70	0.82	0.92	1.0							
	26.6-32.0	0.39	0.66	0.85	1.0									
	32.1-40.0	0.46	0.77	1.0										
12.1 to 25.0	16.0-21.0	0.32	0.53	0.69	0.81	0.91	1.0							
	21.1-26.5	0.35	0.59	0.76	0.90	1.0								
	26.6-32.0	0.39	0.66	0.85	1.0									
	32.1-40.0	0.46	0.78	1.0										
5.1 to 12.0	16.0-21.0	0.39	0.65	0.85	1.0									
	21.1-26.5	0.46	0.73	1.0										
	26.6-32.0	0.59	1.0											
	32.1-40.0	0.65	1.0											
2.1 to 5.0	16.0-21.0	0.45	0.78	1.0										
	21.1-26.5	0.59	1.0											
	26.6-32.0	0.65	1.0											
	32.1-40.0	0.75	1.0											
1.1 to 2.0	16.0-21.0	0.60	1.0											
	21.1-26.5	0.70	1.0											
	26.6-32.0	0.80	1.0											
	32.1-40.0	0.90	1.0											

Basic Fire Hazard x Correction Factor = Adjusted Fire Hazard

Table B1
FOR KARRI FOREST

Select pertinent rainfall range. Read off correction

factor opposite number of drying days since rain

Amount of last rain (Millimetres)	Number						of drying days since rain									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
50 +	0.07	0.14	0.16	0.23	0.29	0.34	0.39	0.43	0.47	0.50	0.53	0.55	0.58	0.61	0.64	
35.1 - 50.0	0.10	0.19	0.27	0.33	0.39	0.44	0.50	0.54	0.58	0.61	0.64	0.67	0.70	0.73	0.75	
25.1 - 35.0	0.11	0.20	0.29	0.36	0.42	0.49	0.54	0.59	0.62	0.65	0.68	0.71	0.73	0.75	0.78	
12.1 - 25.0	0.13	0.25	0.30	0.37	0.43	0.50	0.56	0.61	0.65	0.68	0.71	0.74	0.77	0.80	0.83	
5.1 - 12.0	0.16	0.28	0.41	0.50	0.60	0.66	0.72	0.77	0.82	0.86	0.90	0.94	0.95	0.96	0.97	
2.1 - 5.0	0.24	0.43	0.59	0.68	0.77	0.85	0.90	0.94	0.98	1.0						
1.1 - 2.0	0.40	0.70	0.90	1.0												
0 - 1.0	0.70	1.0														
50 +	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
35.1 - 50.0	0.66	0.68	0.71	0.74	0.77	0.80	0.83	0.86	0.88	0.90	0.92	0.94	0.96	0.98	1.0	
25.1 - 35.0	0.77	0.79	0.81	0.83	0.85	0.87	0.89	0.91	0.93	0.95	0.97	0.98	1.0			
12.1 - 25.0	0.81	0.84	0.86	0.88	0.90	0.92	0.94	0.96	0.98	1.0						
5.1 - 12.0	0.86	0.89	0.92	0.94	0.96	0.98	1.0									
2.1 - 5.0	0.98	1.0														
1.1 - 2.0																
0 - 1.0																

Basic Fire Hazard x Correction

Factor = Adjusted Fire Hazard

Table C1

Wind Velocity Ratios For Table C

Forest Type	Height of Tower Above Canopy (metres)		
	0	15	30
(a) Jarrah			
(i) 60% Canopy			
Ridge	3 : 1	4 : 1	5 : 1
Lower Slope	4 : 1	5 : 1	6 : 1
(ii) 30% Canopy			
Ridge	2 : 1	3 : 1	4 : 1
Lower Slope	3 : 1	4 : 1	5 : 1
(iii) Flats	1 : 1	2 : 1	2 : 1

Select appropriate wind ratio for Table C from topography and forest canopy over the area and height of tower above the general forest canopy.

LITTER ACCUMULATION TABLES - 1970
KARRI (tonnes/ha)

No. of Annual Leaf Falls	CANOPY COVER PER CENT									
	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1	2.5	3.2	4.0	5.0	6.0	7.0	8.2	9.5	11.0	12.5
2	4.2	5.2	6.2	7.2	8.5	9.7	11.2	12.7	14.2	16.0
3	6.0	7.0	8.2	9.5	10.7	12.2	13.7	15.5	17.2	19.0
4	7.5	8.7	10.0	11.5	13.0	14.5	16.2	18.0	19.7	21.7
5	9.0	10.5	11.7	13.2	15.0	16.7	18.5	20.2	22.2	24.2
6	10.5	12.0	13.5	15.2	16.7	18.7	20.5	22.5	24.7	26.7
7	12.0	13.5	15.2	17.0	18.7	20.7	22.7	24.7	27.0	29.2
8	13.5	15.2	17.0	18.7	20.3	22.5	24.7	26.7	29.0	31.5
9	15.0	16.7	18.5	20.5	22.5	24.5	26.7	29.0	31.2	33.7
10	16.5	18.2	20.2	22.2	24.2	26.2	28.5	31.0	33.2	36.0

JARRAH

No. of Annual Leaf Falls	CANOPY COVER PER CENT									
	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1	0.2	1.0	1.5	1.7	2.2	2.5	2.7	3.0	2.2	3.5
2	0.7	1.7	2.2	2.7	3.2	3.5	4.0	4.2	4.5	4.7
3	1.5	2.5	3.2	4.0	4.5	4.7	5.2	5.5	5.7	6.2
4	2.2	3.5	4.5	5.2	5.7	6.2	6.7	7.0	7.5	7.7
5	3.2	4.7	6.0	6.7	7.2	8.0	8.2	8.7	9.2	9.5
6	4.5	6.2	7.5	8.2	9.0	9.7	10.2	10.7	11.2	11.5
10				10.0			15.0			

Table C

Apply adjusted fire hazard and open wind velocity (tower wind). Read off RATE OF SPREAD INDEX for 7.6 to 8.5 tonnes/ha of litter fuel in metres per hour.

SURFACE MOISTURE CONTENT		Wind Ratio	Wind Velocity - Kilometres/Hour						
		1:1	0.0	1.0	1.7	2.5	3.3	4.1	5.0
60+ 50 40 35 30 28- 26- 24- 22- 20- 19- 18- 17- 16- 15- 14- 13- 12- 11- 10-	60+	0.0	0.9	1.6	2.4	3.2	4.0	4.9	5.6
		2:1	0.0	1.7	3.3	4.9	6.5	8.1	9.7
	50	1.6	3.2	4.8	6.4	8.0	9.6	11.2	
		3:1	0.0	2.5	4.9	7.3	9.8	12.1	14.5
	40	2.4	4.8	7.2	9.7	12.0	14.4	16.8	
		4:1	0.0	3.3	6.5	9.7	12.9	16.1	19.3
	35	3.2	6.4	9.6	12.8	16.0	19.2	22.4	
		5:1	0.0	4.1	8.1	12.1	16.4	20.1	24.1
	30	4.0	8.0	12.0	16.0	20.0	24.0	28.0	
		6:1	0.0	4.9	9.7	14.5	19.3	24.1	29.0
	28-	4.8	9.6	14.4	19.2	24.0	28.8	33.6	
		Adjusted Fire Hazard	0.8	0.4	0.4	0.4	0.4	0.4	0.4
	26-	0.8	1.1	1.4	1.6	1.8	2.2	2.5	3.2
		1.0	2.0	2.4	2.8	3.2	3.7	4.5	5.6
	24-	1.2	2.4	2.7	3.2	3.8	4.4	5.2	6.2
		1.4	2.7	3.2	3.8	4.4	5.2	6.2	7.4
	22-	1.6	3.1	3.6	4.2	5.0	6.0	7.2	8.6
		LOW	1.8	3.5	4.2	4.8	5.6	6.5	7.8
2.0	4.0		4.5	5.4	6.4	7.6	9.0	10.8	
2.2	4.4		5.0	5.8	6.8	8.0	9.7	11.7	
2.4	4.7		5.5	6.6	7.9	9.3	11.1	13.3	
2.6	5.2		6.0	6.8	8.1	9.5	11.3	13.7	
2.8	5.6		6.3	7.2	8.6	10.1	12.3	14.5	
3.0	6.0		6.7	7.7	9.2	10.4	12.9	15.1	
3.2	6.4		7.2	8.3	9.7	11.1	13.5	15.5	
3.4	6.8		7.7	8.5	10.3	11.5	14.1	16.3	
3.6	7.2		8.1	9.0	10.7	12.1	14.5	16.9	
MODERATE	3.8	7.6	8.5	9.5	11.1	12.7	15.1	17.5	
	4.0	8.1	9.0	10.3	11.7	13.5	15.7	18.3	
	4.2	8.7	9.9	11.1	12.7	14.7	17.1	20.1	
	4.4	9.7	10.7	12.3	14.1	16.3	18.9	22.1	
	4.6	10.5	11.7	13.3	15.1	17.8	20.1	23.5	
	4.8	11.3	12.7	14.3	16.3	18.6	21.7	25.3	
	5.0	12.1	13.5	15.3	17.5	20.1	23.2	27.3	
	5.2	13.3	15.1	16.9	19.3	22.1	25.5	29.6	
	5.4	15.1	16.7	18.5	21.1	24.1	27.8	32.0	
	5.6	16.7	18.3	20.1	23.1	26.2	30.2	36.4	
11- 10-	5.8	18.1	19.9	21.9	25.1	28.2	32.6	38.2	
	6.0	20.1	21.9	24.1	26.9	30.4	34.6	39.8	
	6.2	22.1	24.1	26.6	29.8	33.6	38.1	44.0	

Table C - continued

Apply adjusted fire hazard and open wind velocity (tower wind). Read off RATE OF SPREAD INDEX for 7.6 to 8.5 tonnes/ha of litter fuel in metres per hour.

Wind Velocity - Kilometres/Hour								
5.7	6.3	7.3	8.3	8.9	9.7	10.3		
6.2	7.2	8.0	8.8	9.6	10.2	11.2		
11.3	12.9	14.5	16.1	17.7	19.3	21.0		
12.8	14.4	16.0	17.6	19.2	20.8	22.2		
16.9	19.3	21.7	24.1	26.3	28.9	31.3		
19.2	21.6	24.0	26.2	28.8	31.2	33.6		
22.3	25.7	28.9	32.1	35.3	38.3	41.7		
25.6	28.8	32.0	35.2	38.2	41.6	44.8		
28.1	32.1	36.1	41.1	44.1	49.3	52.3		
32.0	36.0	40.0	44.0	48.0	52.2	56.0		
33.7	38.3	43.3	48.1	52.9	57.7	62.3		
36.2	43.2	48.0	52.8	57.6	62.2	67.2		
0.6	0.8	1.0	1.4	1.8	2.4	3.2		
4.0	5.0	6.4	8.4	11.3	15.3	20.7		
6.7	8.5	11.1	14.5	19.5	26.4	35.6		
7.7	9.7	12.3	16.1	21.5	29.2	39.4		
9.3	11.7	14.9	19.5	26.1	35.4	47.9		
10.6	13.3	17.1	22.3	28.8	40.4	54.5		
11.7	14.7	18.7	24.5	33.0	44.5	60.0		
13.3	16.7	21.3	28.0	37.4	50.5	68.2		
14.5	17.9	22.9	30.0	40.2	54.3	73.4		
16.3	20.2	25.9	32.9	42.9	61.8	83.5		
16.5	20.6	26.6	34.6	46.5	62.8	84.7		
17.1	21.2	27.3	35.6	47.7	64.4	87.1		
17.7	21.8	28.2	36.6	48.9	66.0	89.5		
18.3	22.4	28.9	37.4	50.3	67.6	92.0		
18.9	23.1	29.8	38.4	51.5	69.2	94.4		
19.8	23.8	30.6	39.4	52.7	70.8	96.8		
20.6	24.6	31.4	40.8	53.9	72.4	99.0		
21.4	25.6	32.2	41.8	55.3	74.6	100.8		
23.6	28.6	35.8	46.5	61.4	82.9	111.9		
26.2	31.4	39.2	51.1	67.4	90.9	122.7		
27.8	33.4	41.8	54.3	71.6	96.8	130.6		
30.0	36.0	45.1	58.5	77.3	104.2	140.6		
32.4	38.8	48.5	63.0	83.1	112.3	151.5		
35.0	42.2	52.7	68.0	85.3	120.1	162.6		
37.7	45.9	57.1	73.6	88.1	128.6	174.2		
40.6	49.5	61.6	79.3	91.1	137.2	185.9		
43.7	52.7	66.0	84.9	94.4	146.5	197.6		
46.7	55.9	70.0	89.5	116.5	153.7	207.2		
51.6	61.8	77.3	99.0	128.8	170.2	229.4		

Table C - continued

Apply adjusted fire hazard and open wind velocity (lower wind). Read off
RATE OF SPREAD INDEX for 7.5 to 8.5 tonnes/ha of litter
fuel in metres per hour.

Table C - continued

Apply adjusted fire hazard and open wind velocity (lower wind). Read off
RATE OF SPREAD INDEX for 7.5 to 8.5 tonnes/ha of litter
fuel in metres per hour.

SURFACE MOISTURE CONTENT	Wind Ratio	Wind Velocity - Kilometres/Hour						Wind Velocity - Kilometres/Hour									
		1:1	2:1	3:1	4:1	5:1	6:1	5.7	6.3	7.3	8.3	8.9	9.7	10.3	11.2	12.2	13.2
10- 9 { 8 { 7 { 6 { 5 { 4 { 3 {	AVERAGE	0.0	1.0	1.7	2.5	3.3	4.1	5.0	5.7	6.3	7.3	8.3	8.9	9.7	10.3	11.2	13.2
		0.0	1.6	2.4	3.2	4.0	4.9	5.6	6.2	7.2	8.0	8.8	9.6	10.2	11.2	12.2	13.2
		0.0	1.7	3.3	4.0	6.5	8.1	9.7	11.3	12.9	14.5	16.1	17.7	19.3	21.9	24.5	27.1
		1.6	3.2	4.8	6.4	8.0	9.6	11.2	12.8	14.4	16.0	17.6	19.2	20.8	22.4	24.0	25.6
		0.0	2.5	5.9	7.3	9.8	12.1	14.5	16.9	19.3	21.7	24.1	26.5	28.9	31.3	33.7	36.1
		2.4	4.8	7.2	9.7	12.0	14.4	16.8	19.2	21.6	24.0	26.2	28.6	31.2	33.6	36.0	38.4
		0.0	3.3	6.5	9.7	12.9	16.1	19.3	22.3	25.7	28.9	32.1	35.3	38.3	41.7	44.8	47.8
		3.2	6.4	9.6	12.8	16.0	19.2	22.2	25.6	28.8	32.0	35.2	38.2	41.6	44.8	48.0	51.2
		0.0	4.1	8.1	12.1	16.1	20.1	24.2	28.1	32.1	36.1	41.1	44.1	49.3	52.3	56.0	59.0
		4.0	8.0	12.0	16.0	20.0	24.0	28.0	32.0	36.0	40.0	44.0	48.0	52.2	56.0	60.0	64.0
10- 9 { 8 { 7 { 6 { 5 { 4 { 3 {	HIGH	0.0	4.9	9.6	14.5	19.2	24.1	29.0	33.7	38.3	43.3	48.1	52.9	57.7	62.3	67.2	72.1
		4.8	9.6	14.4	19.2	24.0	28.9	33.6	38.2	43.2	48.0	52.8	57.6	62.2	67.2	72.1	77.1
		24.1	26.4	29.0	32.4	36.6	41.8	43.1	56.3	67.6	84.5	108.25	140.6	185.7	251.5	321.0	401.0
		26.2	28.4	31.2	34.8	39.2	44.5	51.3	59.8	71.6	89.3	113.88	148.5	195.2	265.6	341.0	431.0
		Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
		28.2	30.4	33.6	36.8	41.2	46.7	53.3	62.0	73.8	91.1	116.0	151.7	198.4	273.6	353.6	443.6
		30.2	32.8	35.6	39.2	43.7	48.9	55.7	64.6	76.2	92.9	118.9	155.7	205.2	285.7	365.7	455.7
		32.2	34.8	38.0	41.8	46.5	52.1	59.3	68.8	81.3	99.2	127.0	166.4	223.3	303.3	383.3	473.3
		36.2	39.0	42.7	46.9	52.1	58.3	66.6	77.3	91.1	111.3	142.4	186.7	249.5	329.5	419.5	509.5
		Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
10- 9 { 8 { 7 { 6 { 5 { 4 { 3 {	SEVERE	40.2	43.3	46.7	51.1	56.5	63.4	72.4	84.1	98.6	121.9	156.7	205.2	277.7	363.3	463.3	573.3
		44.3	44.9	49.9	54.3	59.9	67.0	76.5	89.3	106.4	131.6	170.4	223.3	303.3	432.6	562.6	702.6
		48.3	50.3	53.3	57.5	63.4	71.0	80.9	94.5	113.5	141.8	184.5	243.4	332.0	462.8	592.8	732.8
		50.3	50.3	55.5	60.0	66.0	73.8	84.1	98.4	118.1	147.7	191.9	253.5	344.0	482.9	622.9	772.9
		52.3	54.3	57.5	62.2	68.4	76.7	87.3	102.2	122.7	153.5	199.6	263.6	358.1	501.0	641.0	791.0
		54.3	56.5	60.0	64.8	71.2	79.9	91.1	106.6	128.0	159.9	207.2	273.6	374.0	523.1	673.1	833.1
		58.3	60.8	64.4	69.6	76.7	85.9	98.0	114.7	137.6	172.0	223.3	295.8	402.4	563.4	723.4	893.4
		62.4	64.8	68.6	74.0	81.5	91.3	104.2	121.9	146.3	182.9	237.4	313.9	426.5	597.6	768.6	948.6
		66.4	69.2	73.8	80.1	87.3	97.6	111.3	130.18	156.3	196.0	255.5	336.0	458.7	641.8	824.8	1014.8
		Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
10- 9 { 8 { 7 { 6 { 5 { 4 { 3 {	EXTREME	70.4	73.6	78.7	84.9	92.8	103.4	118.0	138.0	165.8	207.2	269.6	358.0	496.9	682.1	867.1	1052.1
		74.4	78.1	83.5	90.1	98.2	109.4	124.5	145.9	175.2	221.3	285.7	378.2	515.1	720.3	905.3	1110.3
		80.5	84.5	88.3	95.4	103.6	115.5	131.2	153.7	184.7	233.4	301.8	400.4	543.2	760.5	977.5	1214.5
		86.5	89.1	93.6	100.2	108.7	121.3	138.2	161.8	194.2	245.5	317.9	420.5	571.4	798.8	1026.2	1263.2
		92.5	95.4	100.2	107.2	116.9	129.8	147.7	173.0	207.2	261.6	340.0	448.7	609.6	855.1	1100.6	1345.6
		98.6	101.6	106.6	114.1	124.3	138.0	157.3	184.1	221.3	277.7	362.2	478.9	649.9	909.4	1164.4	1419.4
		104.6	107.8	113.3	121.1	132.0	146.5	167.0	195.4	233.4	295.8	384.3	507.0	690.1	965.8	1240.8	1516.8
		112.7	116.1	121.9	130.4	142.0	157.7	177.5	211.3	253.5	317.9	414.5	545.2	742.4	1026.1	1310.1	1594.1
		120.7	124.3	130.6	138.6	152.3	169.0	192.7	225.3	269.6	342.0	442.6	585.5	796.7	1114.6	1432.6	1744.6
		Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
10- 9 { 8 { 7 { 6 { 5 { 4 { 3 {	DANGEROUS	128.7	132.6	139.2	148.9	162.4	180.3	205.2	239.4	287.7	364.2	472.8	623.7	845.1	1187.1	1529.1	1871.1
		138.8	140.8	147.9	158.7	173.0	192.1	219.3	255.5	307.8	388.3	505.0	666.0	905.4	1267.6	1629.6	1991.6
		146.8	151.3	158.9	170.0	185.3	205.2	235.4	273.6	330.0	414.5	539.2	712.2	967.8	1354.1	1740.6	2126.6
		156.9	161.6	169.6	181.5	197.8	219.3	249.5	293.7	352.1	442.6	575.4	760.5	1034.1	1446.6	1858.6	2270.6
		165.0	170.0	178.5	190.9	207.2	231.4	263.6	307.8	370.2	466.8	605.6	800.8	1088.5	1523.1	1935.1	2347.1
		Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink
		128.7	132.6	139.2	148.9	162.4	180.3	205.2	239.4	287.7	364.2	472.8	623.7	845.1	1187.1	1529.1	1871.1
		138.8	140.8	147.9	158.7	173.0	192.1	219.3	255.5	307.8	388.3	505.0	666.0	905.4	1267.6	1629.6	1991.6
		146.8	151.3	158.9	170.0	185.3	205.2	235.4	273.6	330.0	414.5	539.2	712.2	967.8	1354.1	1740.6	2126.6
		156.9	161.6	169.6	181.5	197.8	219.3	249.5	293.7	352.1	442.6	575.4	760.5	1034.1	1446.6	1858.6	2270.6
		165.0	170.0	178.5	190.9	207.2	231.4	263.6	307.8	370.2	466.8	605.6	800.8	1088.5	1523.1	1935.1	2347.1

OVERSEERS' BURNING TABLES

1. From Table C, using HAZARD and WIND SPEED determine RATE OF FORWARD SPREAD for 5-year-old fuel (7.6-8.5 tonnes/ha)
2. From Table 2, using RATE OF FORWARD SPREAD and FUEL AGE or FUEL QUANTITY determine COLOUR of burn being attempted.
3. From Table 3, determine HOURS OF BURNING AVAILABLE.
4. From Table 4, using C.F.S. from Table 2 and HOURS OF BURNING AVAILABLE determine WIDTH OF STRIPS.

E.G., Adjusted fire hazard 7.0
 Wind at nearest Tower and 5:1 Ratio 12.9 Km/Hours
 Rate of spread from Table C 39.2 metres/Hr
 Burn being attempted Green
 Weight of fuel 4.3 tonnes/ha
 Rate of spread from Table 2 (C.F.S.) 27.0 metres/hr
 Temperature from forecast 26.0 °C
 Hours of burning 10 hours
 Strip width C.F.S. = 27; 10 hours.... 250 metres
 Distance between spots $270 \times \frac{1}{2}$ 135 metres

Obtain WINDSPEED from tower and re-adjust STRIP and SPOT WIDTH every two hours.

Table 4

ESTIMATION OF STRIP WIDTH

(In metres)

Forward Spread C.F.S. from C & 2	Hours of burning time available									
	1 Hr	2	3	4	5	6	7	8	9	10
12	10.0	20.0	30.0	40.0	50.0	60.0	70.0	80.0	90.0	100.0
14	12.0	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0
16	14.0	28.0	42.0	56.0	70.0	84.0	98.0	112.0	126.0	140.0
18	16.0	32.0	48.0	64.0	80.0	96.0	112.0	128.0	144.0	160.0
20	18.0	36.0	54.0	72.0	90.0	108.0	126.0	144.0	162.0	180.0
22	20.0	40.0	60.0	80.0	100.0	120.0	140.0	160.0	180.0	200.0
24	22.0	44.0	66.0	88.0	110.0	132.0	154.0	176.0	198.0	220.0
26	24.0	48.0	72.0	96.0	120.0	144.0	168.0	192.0	216.0	240.0
28	26.0	52.0	78.0	104.0	130.0	156.0	182.0	208.0	234.0	260.0
30	28.0	56.0	84.0	112.0	140.0	168.0	196.0	224.0	252.0	280.0
32	28.0	56.0	84.0	112.0	140.0	168.0	196.0	224.0	252.0	280.0
34	30.0	60.0	90.0	120.0	150.0	180.0	210.0	240.0	270.0	300.0
36	32.0	64.0	96.0	128.0	160.0	192.0	224.0	256.0	288.0	320.0
38	34.0	68.0	102.0	136.0	170.0	204.0	238.0	272.0	306.0	340.0
40	36.0	72.0	108.0	144.0	180.0	216.0	252.0	288.0	324.0	360.0
42	38.0	76.0	114.0	156.0	190.0	228.0	266.0	304.0	342.0	380.0
44	40.0	80.0	120.0	160.0	200.0	240.0	280.0	320.0	360.0	400.0
46	42.0	84.0	126.0	168.0	210.0	252.0	294.0	336.0	378.0	420.0
48	44.0	88.0	132.0	172.0	220.0	264.0	308.0	352.0	396.0	440.0
50	46.0	92.0	138.0	184.0	230.0	276.0	322.0	368.0	414.0	460.0
52	46.0	92.0	138.0	184.0	230.0	276.0	322.0	368.0	414.0	460.0
54	48.0	96.0	144.0	192.0	240.0	288.0	336.0	384.0	432.0	480.0
56	50.0	100.0	150.0	200.0	250.0	300.0	350.0	400.0	450.0	500.0
58	52.0	104.0	156.0	208.0	260.0	312.0	364.0	416.0	468.0	520.0
60	54.0	108.0	162.0	216.0	270.0	324.0	378.0	432.0	486.0	540.0

Table 2

Correction of FORWARD SPREAD for fuel age or quantity for JARRAH CONTROL BURNING.

LOW and MODERATE						FIRE HAZARD		AVERAGE and HIGH					
10.5	9.0	8.0	6.0	5.5	4.0	{ Fuel Quantity tonnes/ha Fuel Age No. of Leaf Falls		10.5	9.0	8.0	6.0	5.5	4.0
7	6	5	4	3	2			7	6	5	4	3	2
Forward Spread Metres/Hour						COLOUR INDEX		Forward Spread Metres/Hour					
12		8				PURPLE Max. Scorch: Spring 4.5m Autumn 8.0m		12		8			
14	12	12						14	12	10			
16	14	14	12					16	14	12			
18	16	16	14	12				18	16	14	12		
20	18	18	16	14	12			20	18	16	14	12	
22	20	20	18	16	14			22	20	18	16	12	12
24	22	22	20	18	16			24	22	20	18	14	12
26	24	24	22	20	18			26	24	22	20	16	14
28	26	26	24	22	20			28	26	24	22	18	14
30	28	28	26	24	22			30	28	26	24	18	16
32	30	30	28	26	24	GREEN Max. Scorch: Spring 6.0m Autumn 10.5m		32	30	28	26	20	18
34	32	32	30	28	26			34	32	30	28	22	18
36	34	34	32	30	28			36	34	32	28	22	20
40	36	36	34	32	30			40	36	34	30	24	22
42	40	40	38	36	34			42	40	38	32	26	24
44	42	42	40	38	36			44	42	40	34	28	26
46	44	44	42	40	38			46	44	42	36	30	28
48	46	46	44	42	40			48	46	44	38	34	30
50	48	48	46	44	42			50	48	46	40	34	32
52	50	50	48	46	44			52	50	48	42	36	34
54	52	52	50	48	46	BLUE Max. Scorch: Spring 9.0m Autumn 13.5m		54	52	50	44	36	34
56	54	54	52	50	48			56	54	52	46	38	36
58	56	56	54	52	50			58	56	54	48	40	36
60	58	58	56	54	52			60	58	56	50	42	38
	60	60	58	56	54				60	58	52	46	40
		62	60	58	56					62	54	46	42
		64		60	58					64	56	48	42
		66			60					66	58	48	44
		68								68	60	50	44
		70								70		52	46
		72				Fuel age is only applicable where forest canopy density approxi- mates 60% (see Table C1)				72		54	48
		74								74		56	48
		76								76		58	50
		78								78	60	52	
		80								80		54	
		82								82		56	
												58	

JARRAH

Table D

FUEL QUANTITY CORRECTION FACTORS IN A.F.H. CLASSES

Select appropriate hazard class. Read off FUEL CORRECTION FACTOR opposite relative fuel weight.

Fuel age – years No. of Leaf Falls	Fuel Quantity tonnes/ha	Low & Moderate.	Aver. & High	Severe & Dangerous
2	3.5 – 5.0	0.88	0.71	0.61
3	5.1 – 6.5	0.92	0.77	0.74
4	6.6 – 7.5	0.96	0.88	0.87
5	7.6 – 8.5	1.00	1.00	1.00
6	8.6 – 10.0	1.04	1.12	1.17
7	10.1 – 11.5	1.08	1.21	1.30
8	11.6 – 12.5	1.1	1.3	1.6
8 +	12.6 – 12.5	1.2	1.5	1.8
8 +	15.1 – 17.5	1.3	1.7	2.1
8 +	17.6 – 20.0	1.4	1.9	2.4
8 +	20.1 – 22.5	1.5	2.1	2.7
8 +	22.6 – 25.0	1.6	2.3	3.0

Table 3

HOURS OF BURNING TIME AVAILABLE

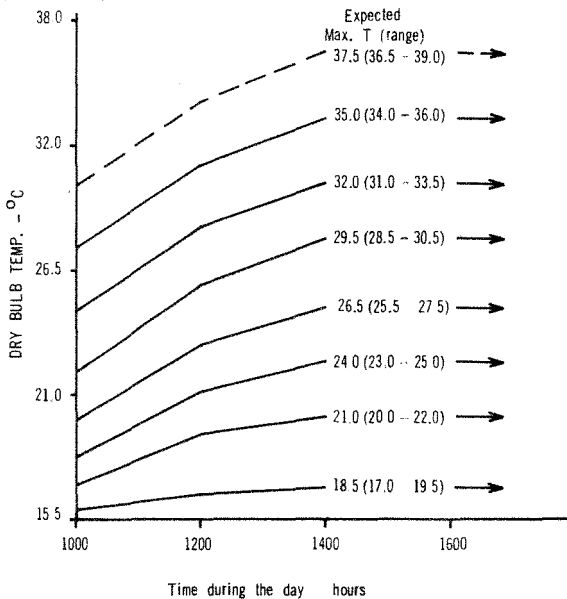
Daily Maximum Temp. °C	SPRING		AUTUMN	
	Start Time	Hours	Start Time	Hours
16.0 – 18.5	12.00	3	11.30	4
18.6 – 21.0	10.30	7	10.00	8
21.1 – 24.0	10.00	8	09.00	10
24.5 – 27.0	09.30	10	08.00	12
27.1 – 29.5	09.00	11	07.00	14
29.6 – 32.0	08.00	14	06.00	18

STRIP WIDTH = Rate of Spread in metres per hour x Hours Available.
Deduct difference between start time and time of lighting from total hours available to obtain remaining hours of burning time.

ADJUSTED RATE OF SPREAD = Rate of Spread Index x Fuel Correction Factor.

JARRAH

TIME AND TEMPERATURE GRAPH



Apply temperature and the time it was taken. Read off the expected maximum temperature from the arrowed line nearest which the data plots. This graph applies to clear skies.

KARRI

TABLE D1 DROUGHT INDEX

Select pertinent rainfall range. Read off drought index opposite number of drying days since rain	
Amount of rain in mm	Number of drying days since rain
50.1 +	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36
35.1 - 50.0	B
25.1 - 35.0	B
12.1 - 25.0	B
5.1 - 12.0	B
2.1 - 5.0	B
1.1 - 2.0	B
0 - 1.0	B

HOURS OF BURNING TIME

Daily Maximum Temperature °C	Start Time	Hours
16.0 - 18.5	12.00	2
18.6 - 21.0	11.00	5
21.1 - 24.0	10.30	7
24.5 - 27.0	10.00	9
27.2 - 29.5	09.30	11
29.6 - 32.0	09.00	14

Adjusted Rate of Spread Rate of
Spread Index x Fuel Correction Factor.

Karri
Table D2

FUEL QUANTITY CORRECTION

Fuel Age No. of leaf falls	Fuel Quantity tonnes/ha	Low and Moderate Less than 6.0			Average and High 6.1 to 8.0			Severe and Dangerous Greater than 8.0		
		A	B	C	A	B	C	A	B	C
1	5.0 - 6.0	0.0	0.9	1.0	0.0	0.8	1.2	0.4	0.7	1.4
2	6.1 - 8.5	0.6	1.0	1.2	0.7	1.0	1.4	0.5	1.0	1.6
3	8.6 - 13.5	0.7	1.1	1.5	0.7	1.4	2.2	0.6	1.7	3.0
4	13.6 - 16.5	0.9	1.2	1.6	0.8	1.6	2.3	0.7	2.0	3.3
5	16.6 - 18.5	0.9	1.3	1.7	0.8	1.8	2.5	0.9	2.3	3.6
6	18.6 - 21.0	1.0	1.4	1.8	0.9	2.1	2.7	1.0	2.7	3.9
7	21.1 - 24.0	1.0	1.5	1.9	1.0	2.3	2.9	1.1	3.0	4.2
8	24.1 - 25.0	1.1	1.6	2.0	1.1	2.4	3.1	1.2	3.2	4.6
9	25.1 - 26.5	1.1	1.7	2.1	1.2	2.5	3.3	1.4	3.3	4.8
10	26.6 - 27.5	1.2	1.8	2.2	1.3	2.6	3.5	1.5	3.5	5.2
11	27.6 - 28.5	1.2	1.9	2.3	1.3	2.7	3.6	1.6	3.7	5.5
12	28.6 - 30.0	1.3	2.0	2.4	1.4	2.8	3.8	1.7	3.9	5.8
12 +	30.1 - 35.0	1.3	2.3	2.8	1.5	3.5	4.2	1.8	4.7	6.5

Select the appropriate hazard class. In the drought index column indicated from Table D1 read off the fuel correction factor opposite the relative fuel age or weight.

Select appropriate hazard class. Read off the fuel correction factor opposite the relative fuel weight.

Age in years	Fuel Quantity tonnes/ha	Hazard Classes																	
		0-1.3	1.4-2.5	2.6-3.2	3.3-4.0	4.1-4.6	4.7-5.1	5.2-5.7	5.8-6.3	6.4-7.1	7.2-7.5	7.6-7.9	8.0-8.3	8.4-8.9	9.0-9.2	9.3-9.4	9.5-9.6	9.7-9.8	9.9-10.0
10	10.0-11.5	1.0	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.5
15	11.6-20.0	1.0	1.3	1.4	1.4	1.5	1.6	1.6	1.7	1.8	1.9	2.0	2.1	2.1	2.2	2.3	2.4	2.5	2.5
20	20.1-29.0	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1
25	29.1-36.0	1.8	1.8	1.9	2.0	2.1	2.2	2.3	2.5	2.7	2.9	3.1	3.3	3.5	3.7	3.8	3.9	4.0	4.2
30	36.1-40.0	2.0	2.0	2.1	2.1	2.3	2.4	2.5	2.6	3.0	3.3	3.4	3.7	3.9	4.1	4.2	4.4	4.5	4.7
35	40.1+	2.1	2.1	2.2	2.3	2.5	2.7	2.9	3.1	3.4	3.7	4.0	4.2	4.4	4.7	4.8	4.9	5.2	5.3

For prescribed burning under pines use fire dangers uncorrected by fuel factors in the range 0 to 12 m/hr.

$$\text{Adjusted ROS} = \text{P.C.F.} \times \text{R.O.S.I.}$$

PRELIMINARY DESPATCHER

JARRAH

Fire Danger	Time Between Detection and Attack															
	½ hour				1 hour				1½ hours				2 hours			
	G.	H.D.	L.T.	B.D.	G.	H.D.	L.T.	B.D.	G.	H.D.	L.T.	B.D.	G.	H.D.	L.T.	B.D.
White	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
Purple	1	1	0	0	1	1	0	0	1	1	1	0	1	1	1	0
Green	1	1	0	0	1	1	1	0	2	2	1	0	2	2	1	0
Blue	2	2	0	0	2	2	1	0	3	2	2	0	3	3	2	0
Brown	2	2	1	0	3	3	1	1	4	4	2	1	4	4	2	1
Yellow	3	3	1	0	3	3	2	1	4	4	3	1	5	5	3	2
Orange	3	3	1	1	4	4	2	2	5	5	3	2	6	6	4	3
Pink	4	3	2	1	5	5	3	3	6	6	3	3	7	7	5	5
Red	4	4	2	2	6	6	3	4	7	7	4	4	8	8	5	6

KARRI

Fire Danger	Time Between Detection and Attack															
	½ hour				1 hour				1½ hours				2 hours			
	G.	H.D.	L.T.	B.D.	G.	H.D.	L.T.	B.D.	G.	H.D.	L.T.	B.D.	G.	H.D.	L.T.	B.D.
White	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
Purple	1	1	1	0	1	1	1	0	1	1	1	1	2	1	1	1
Green	1	1	1	0	2	1	1	1	2	2	1	1	3	2	2	2
Blue	2	1	1	1	2	2	2	1	3	2	1	2	4	3	3	3
Brown	2	2	2	1	3	3	2	1	4	4	3	3	5	5	4	4
Yellow	2	3	2	1	3	4	3	2	4	5	3	4	6	6	5	5
Orange	3	3	2	1	4	5	3	2	5	6	4	4	6	6	5	5
Pink	4	3	3	2	5	6	4	3	6	7	4	5	7	7	6	7
Red	4	4	3	2	6	6	4	4	7	7	5	5	8	8	7	7

G. Gang

H.D. Heavy Duty

L.T. Light Tractor (wheel blade or equivalent)

B.D. Bulldozer

TABLES

PINE

Fire Danger	Time Between Detection and Attack														
	10 minutes			½ hour			1 hour			1½ hours			2 hours		
	G.	H.D.	B.D.	G.	H.D.	B.D.	G.	H.D.	B.D.	G.	H.D.	B.D.	G.	H.D.	B.D.
White	1	0	0	1	0	0	1	0	0	1	1	0	1	1	0
Purple	1	1	0	1	1	0	1	1	0	2	2	0	3	3	1
Green	1	1	0	2	1	0	2	2	1	3	3	1	5	5	2
Blue	1	2	0	2	2	1	2	2	2	5	5	3	7	7	4
Brown	2	2	0	2	2	1	3	3	2	7	7	4	9	9	5
Yellow	2	2	0	4	3	1	5	4	2	9	8	4			
Orange	2	2	1	5	4	1	7	5	2						
Pink	3	3	1	6	5	2	8	7	3						
Red	3	3	1	7	6	2	11	8	3						

G Gang

H.D. Heavy Duty

B.D. Fuel separating machine,
viz., bulldozer or tractor and plough

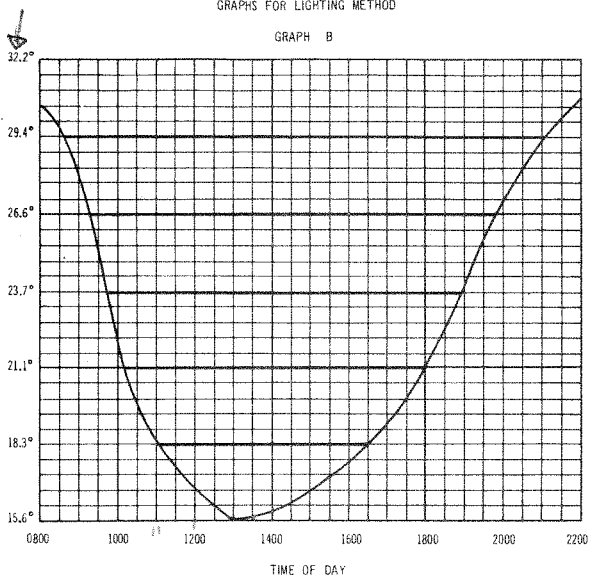
McARTHUR SLOPE CORRECTIONS

Slope in degrees	Spread Factor
- 10 degrees	0.6
5	0.8
Level	1.0
+ 2	1.1
+ 4	1.3
+ 6	1.5
+ 8	1.7
+ 10	2.0
+ 15	2.8
+ 20	4.0

The factor is 1.0 for level ground and doubles for every 10 degree increase in slope.

GRAPHS FOR LIGHTING METHOD

GRAPH B



Graph A supplied separately.

DEFINITIONS

AVERAGE DAILY TEMPERATURE mean of temperature recorded at 10.00, 12.00, 14.00 and 16.00.

AVERAGE DAILY TEMPERATURE CLASS the appropriate range in which falls the mean of average daily temperatures of drying days in the period since rain.

A DRYING DAY one on which the average daily temperature exceeds 15.5 C and on which no rain fell after 09.00 hrs.

WHEN TO ACCUMULATE RAINFALL falls of rain over a period not broken by a drying day. If recent rain falls are separated by drying days giving more than one possible correction factor accept the numerically lowest factor.

NUMBER OF DAYS SINCE RAIN the total of drying days since rain, including the day for which the fire danger is being calculated.

FIRE DANGER INDEX the maximum rate of spread predicted from forecasted weather for level topography, 60% crown cover and standard fuel conditions for each forest type, namely

JARRAH		7.6 to 8.5 tonnes/ha
KARRI		30.1 to 35.0 tonnes/ha
PINE		36.1 to 40.0 tonnes/ha

FIRE DANGER CLASSES

Colour Code		Rate of Spread	Type of Burn
WHITE		0.0 to 11.9 Metres/Hour	Coppice & Pine
PURPLE		12 to 20	} Prescribed Burning Range
GREEN		21 to 40	
BLUE		41 to 60	
BROWN		61 to 140	
YELLOW		141 to 240	} Large Fire Organization
ORANGE		241 to 320	
PINK		321 to 400	
RED		401 +	

FLAME HEIGHT = Rate of Spread divided by 30.

SCORCH HEIGHT = Flame Height x 5 approximately or divide rate of spread by 6.

USEFUL CONVERSION FACTORS

1. To convert R.O.S. in feet per minute to metres per hour multiply ft/min by 20.
e.g. 3 ft/min $\times$ 20 = 60 m/hr.
2. To convert miles per hour of wind to Kilometres per hour multiply by 1.6.
e.g. 5.0 m.p.h. $\times$ 1.6 = 8 Km/hr.
3. To convert miles to kilometres multiply miles by 1.6.
4. One chain equals 20 metres.
5. To convert acres to hectares multiply acres by 0.4.
e.g. 10 acres $\times$ 0.4 = 4 hectares
6. To convert tons per acre to tonnes per hectares multiply by 2.5.
e.g. 5 tons per acre $\times$ 2.5 = 12.5 tonnes/ha.
N.B. One tonne equals 1000 Kilogrammes.
7. To convert points of rain to millimetres divide by 4.
e.g. 100 points $\div$ 4 = 25mm.
8. To convert degrees Fahrenheit to Celsius
 $^{\circ}\text{C} = 5/9 (F - 32)$.

