

REPORT ON COLLIER FIRE OF SUNDAY  
JANUARY 5TH, 1969.

1. Summary.

Overseer J. Feast reported a smoke at 1300 hours to Asst. Forester O'Grady who on arrival at 1310 found approximately 2 square chains alight on the east side of the main N and S track in Compartment 10.

In the meantime a Red Action had been called because of the extremely dangerous fire hazard and rapid growth of the fire.

On arrival at fire, A/F O'Grady noted that the ground fire was under control so immediately called off Red Action. This was 11 minutes after the fire was sighted.

The running fire was stopped 10 minutes after the fire was first reported. However, hop-overs were still frequent for up to 2 chains from the cultivated fire line forming the front edge of the burnt area.

It appears that the fire had been deliberately lit in an open patch on the edge of the track. Car tracks were partly visible but had been almost obliterated by the passage of the fire truck.

A/F O'Grady took the name of a young man who had followed the Victoria Park Fire Brigade in. As the name seemed familiar it was checked and proved to be that of the person who had eventually been apprehended in 1957 for lighting fires in the plantation when over a 100 acres were burnt.

The Victoria Park Police were notified and they are at present making enquiries.

2. Sequence of Events.

- 1300 Overseer Feast notifies A/F O'Grady that there is a fire in Compt. 26. Actually the fire was in Compt. 10 which is almost adjacent to Compt. 26.
- 1301 Somerville Tower notified by O/Feast.
- 1302 Collier units left for fire. 3 men  
Victoria Park Fire Brigade notified, by O'Grady.  
Forest Workman Wilkes called in from standby.  
Employee A. Lawrence called in from standby.
- 1307 Mr. Ashcroft notified.
- 1307 Wanneroo notified.
- 1306 Both Collier units at fire.
- 1306 Red Action called by O/Feast from fire.
- 1306 Both Somerville units left for fire.
- 1303 Insp. Lejuene left Wanneroo.
- 1307 Wanneroo unit left for fire.
- 1312 Gang truck ready to leave.
- 1311 A/F O'Grady at fire calls off Red Action as the fire edges had been contained.

Sequence of Events continued.

1314 Victoria Park Fire Brigade at fire. + 3 men  
1315 B. Wilkes and Lawrence at Fire. + 2 men  
1325 Somerville H/D (Bedford) returned to Somerville.  
1325 Central Fire Brigade with 4 wheel drive unit at fire. + 4 men  
1340 Somerville H/duty at fire - transferred water to Collier unit. + 2 men  
1351 Somerville H/D returned to Somerville.  
1356 Mr. Ashcroft left fire.  
1530 A/F O'Grady left fire - Instructions left that fire had to be completely extinguished.  
1830 Main gang left fire.  
1900 Patrol by A/F O'Grady.  
20 -  
2400 Patrol by O/Feast.

6/1/69.

530 Inspection by overseer.  
800 Inspection by A/F O'Grady - dead out.

3. Suppression and Mopping up:

When suppression started the flames were whirling up and around the trees to a height of approx. 30 ft. Ground fuel was comparatively light as the Compt. had been burnt over in 1968 winter. The fire tanker arrived at approx 10 minutes after ignition but approx. 2 square chains were already in flames. The Head fire 1 chain in width was attacked first and with the ground fuel being cut off by a 10ft. cultivated strip it was possible to reduce the heat and flames and obtain control in approx. 6 minutes.

Mopping up was continued until 1830, 2,000 gallons of water were used before the fire was completely extinguished.

Numerous hop-overs occurred over the cultivated strip to approx. 2 chains in front of the Head fire. These were contained by spraying from the light duty outfit and spraying the needles from the H/D outfit. Smoking spots were removed with shovels and deposited on the burnt area.

The tail fire did not present any difficulty as it was against a clear track.

Some spotting occurred on both flanks but penetrated only to about 1 chain on either side of the fire.

Most of the mopping up was concentrated on putting out the burning organic matter in the ground.

Report on Collier fire on 5/1/69 continued.

4. Area Burnt:

Total burnt is 2 square chains of Pinus pinaster approx. 60 - 70 ft. tall planted in 1929. Three trees are scorched to their full height, while six trees have severe butt scorch. It is estimated that six trees have been killed.

5. Fuel Types:

The fuel consisted of light branches and needles remaining after the 1968 winter burn. The amount of fuel was practically the minimum to which it is possible to reduce it by winter burning. There was no fuel on the cultivated strip and this strip was probably a decisive factor in obtaining quick control of the fire.

6. Weather Conditions.

Time:	Temp.:	R/H.	Wind.	F.D.I.
1200 hrs.	110.2°	8%	NW 10mph	20.00 Pink
1300 hrs.	99.0°	21%	W 15mph	7.56 Yellow
1400 hrs.	97.0	21%	W 15 mph	6.45 Brown

7. Fire Behaviour:

An estimate at rate of spread - ground fuel 2 chains 5 minutes, i.e. 20 ft. per minute. Overhead spread i.e. hop-overs - 40 ft. per minute. Fire whirled around trees to approx. 30 ft. high fanned by a light westerly breeze and self induced draughts. When the ground fuel was cut off by the ploughed strip and the flaming trees behind hosed down the wind and fire induced draughts fell in strength enabling the firefighters to obtain complete control.

8. Observations:

The overseer being on the tower with the lookout man when the fire started, immediately rushed to the fire and thus saved several minutes. I would say that about 10 minutes elapsed between the lighting of the fire and the arrival of the tanker. In this time approx. 2 square chains had burnt with flames 20 - 30 ft. high. Owing to the dangerous fire weather I had kept R. Ritchie on standby at Como Headquarters to drive the light duty outfit if need he said that when the tanker went on to the cultivated strip to attack the head of the fire it was completely obscured by flames and smoke. I am sure that the clear cultivated strip by making a break in the ground fuel contributed largely to getting control of the fire before it crowned. Winter burning is highly effective, but still leaves sufficient fuel on the ground to allow hot summer fires under extreme fire hazards.

Report on Collier fire on 5/1/69 continued.

9. Recommendations:

Winter burning and cultivation of extraction tracks at 1 chain intervals. Cultivation is relatively cheap as a light tractor travelling say at 6 miles per hour would strip out approx. 250 miles per week or 2,000 acres per week. If this was reduced to 1,00 acres per week it would still be very useful in fire control.

I also feel that a more efficient type of shut off nozzle is essential. The operator should be able to control the water output from the nozzle more positively from plus to minus.

10. Appendices:

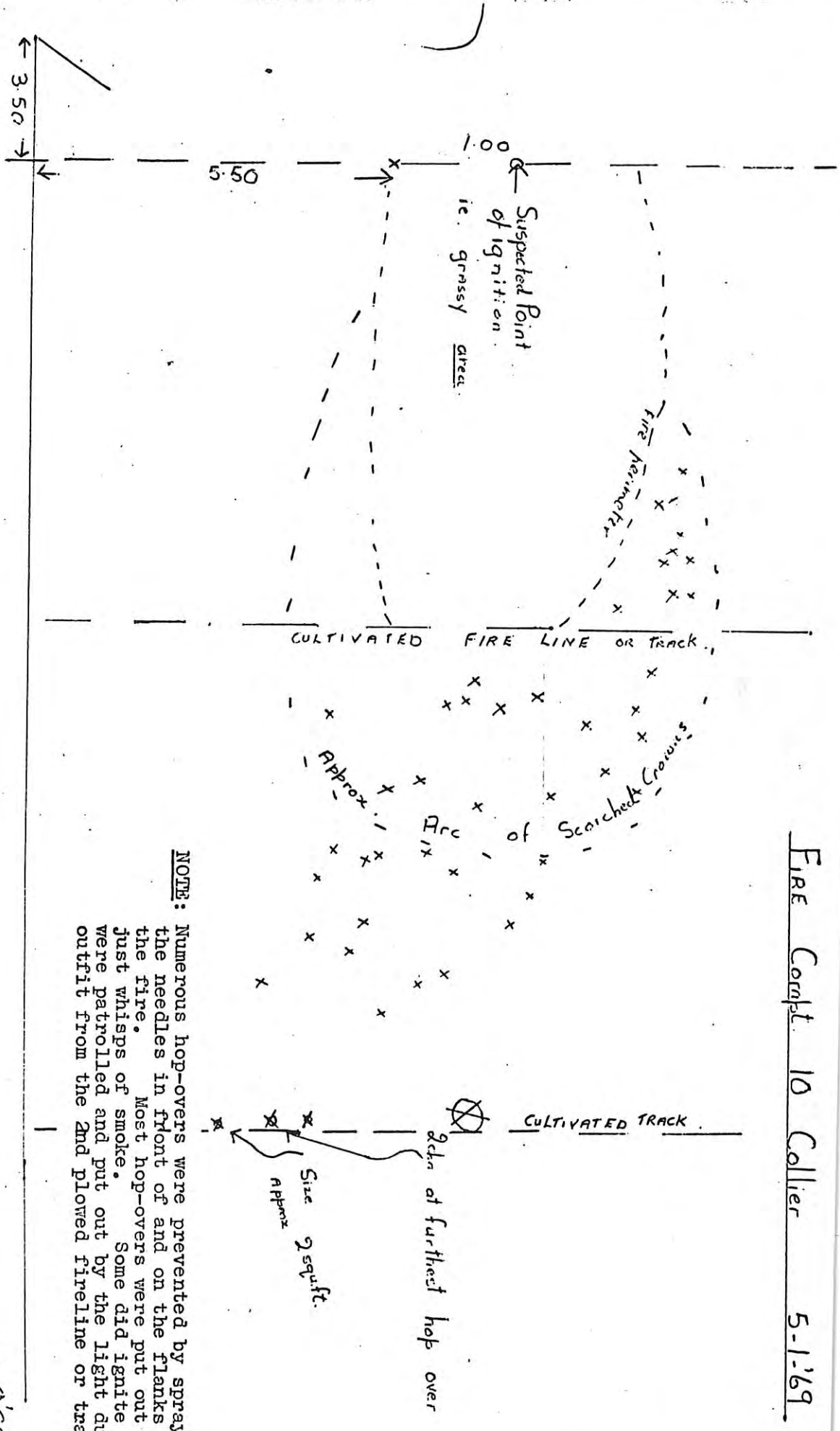
- (a) Plans
- (b) Costs

Collier Gang	-	\$60.00
Somerville & Gnangara	-	<u>40.00</u>
		<u>\$100.00</u>

This fire demonstrates the type of fire to be expected on days of extreme fire hazard, in stands that have previously been controlled burned during Winter months.

It is also interesting that crown scorch was most severe on trees in the front arc of the fire front, but not within the burnt area. 15 trees suffered butt and crown scorch within the fire perimeter, while 19 trees (10 seriously) were affected outside the fire area.

Fire Compt. 10 Collier 5-1-69



NOTE: Numerous hop-overs were prevented by spraying the needles in front of and on the flanks of the fire. Most hop-overs were put out when just whiffs of smoke. Some did ignite but were patrolled and put out by the light duty outfit from the 2nd plowed fireline or track.

L.D. O'GRADY  
2.1.69