1985

Damage report of the west coastal wildfire Wongonderrah area 31st January - 5th February 1985 and its effects on the Western Australian beekeeping industry

R C. Burking

Follow this and additional works at: http://researchlibrary.agric.wa.gov.au/ac_researchrpts

Part of the Apiculture Commons, and the Environmental Indicators and Impact Assessment Commons

Recommended Citation

This report is brought to you for free and open access by the Apiculture research collection at Research Library. It has been accepted for inclusion in Apiculture research reports by an authorized administrator of Research Library. For more information, please contact jennifer.heathcote@agric.wa.gov.au, sandra.papenfus@agric.wa.gov.au.
IMPORTANT DISCLAIMER

This document has been obtained from DAFWA's research library website (researchlibrary.agric.wa.gov.au) which hosts DAFWA's archival research publications. Although reasonable care was taken to make the information in the document accurate at the time it was first published, DAFWA does not make any representations or warranties about its accuracy, reliability, currency, completeness or suitability for any particular purpose. It may be out of date, inaccurate or misleading or conflict with current laws, polices or practices. DAFWA has not reviewed or revised the information before making the document available from its research library website. Before using the information, you should carefully evaluate its accuracy, currency, completeness and relevance for your purposes. We recommend you also search for more recent information on DAFWA's research library website, DAFWA's main website (https://www.agric.wa.gov.au) and other appropriate websites and sources.

Information in, or referred to in, documents on DAFWA's research library website is not tailored to the circumstances of individual farms, people or businesses, and does not constitute legal, business, scientific, agricultural or farm management advice. We recommend before making any significant decisions, you obtain advice from appropriate professionals who have taken into account your individual circumstances and objectives.

The Chief Executive Officer of the Department of Agriculture and Food and the State of Western Australia and their employees and agents (collectively and individually referred to below as DAFWA) accept no liability whatsoever, by reason of negligence or otherwise, arising from any use or release of information in, or referred to in, this document, or any error, inaccuracy or omission in the information.
"DAMAGE REPORT OF THE WEST COASTAL WILDFIRE
WONGONDERRAH AREA 31ST JANUARY - 5TH
FEBRUARY, 1985 AND ITS EFFECTS ON THE WESTERN
AUSTRALIAN BEEKEEPING INDUSTRY"

DIVISION OF ANIMAL PRODUCTION
INTENSIVE INDUSTRIES BRANCH
APICULTURE SECTION

MAY 1985
"Damage Report of the West Coastal WildFire
Wongonderra Area 31st January - 5th February 1985,
and its effects on the Western Australian Beekeeping
Industry."

Compiled by:

R.C. Burking (Technical Officer)

May 1985
CONTENTS

1. Summary

2. Introduction

3. Survey-Report Method

4. The Wildfire

5. The Effects on the Western Australian Beekeeping Industry

6. Proposals and Recommendations

7. Acknowledgements

8. References
"Damage Report of the West Coastal Wildfire in the Wongonderrah Area
31st January - 5th February 1985, and its Effects on the Western Australian
Beekeeping Industry."

Compiled by R.C. Burking (Technical Officer)
May 1985

1. SUMMARY

Wildfire damage to some 3500 ha of Banksia woodland and associated
understory including honey and pollen producing species in the
Wongonderrah area of the West Coast occurred during the period 31st Jan
- 5th February 1985 as a result of a lightning strike.

Included in this area were four registered apiary sites used by
commercial beekeepers. As a result of the wildfire damage to
vegetation, the estimated production loss to industry over a 5 year
period has been assessed at $28,250.

Proposals for assistance to industry are discussed.

2. INTRODUCTION

During the period 31st January - 5th February 1985, an area of some 3500
ha was devastated by wildfire originally caused by lightning. The area
is vacant Crown Land between the Wongonderrah and Woolka-Woolka Roads
north-west of Cataby and west of the Brand Highway.

This area is used by commercial beekeepers during autumn and spring
honey flow seasons.

In order to evaluate the situation, the Beekeepers' Section of the
Primary Industry Association requested that the Department of
Agriculture survey the area and produce a report providing information
of the effects of the wildfire on the industry.

The delay between the wildfire and the publication of this report is due
to a late advise from affected beekeepers. Normally surveys and reports
are undertaken as soon as possible after the wildfire occurrence.

3. REPORT METHOD

The wildfire area is well known to the Agriculture Section in relation
to vegetation types and Beekeeping Production. From observations made
during the survey at the North Lancelin Fire Mary 31st - April 4 1985
(Burking and Kessell 1985) and a damage report method established the
effects to industry could be estimated without a ground survey.

The wildfire area map as prepared by the Bush Fires Board of Western
Australia, established the number of registered apiary sites affected
and the estimated production loss to industry calculated.
4. THE WILDFIRE

It was established by Bush Fire Board that the wildfire was caused by lightning strikes during the afternoon of January 31st 1985, approximately one kilometre north of the northern boundary of the Woolka-Woolka pastoral lease.

Local volunteer fire brigade units brought the fire under control that day but on the 3rd February a further outbreak occurred. Fanned by south-east to south-west winds the fire travelled north where it was stopped by back burning from a buffer strip south of the Wongonderra Road and contained in a fire break network.

Some protective strip burning was undertaken around the Wongonderra Native Reserve 2624B. A small section of approximately one square kilometer of the reserve was scorched due to a "jump" during the strip burning.

5. THE EFFECTS ON THE WESTERN AUSTRALIAN BEEKEEPING INDUSTRY

The vegetation of the wildfire area is dominantly banksia woodland with an associated understory including the important honey and pollen producing species of Hakea trifurcata, Dryandra sessilis and Acacias. The area affected is used by beekeepers in the late winter-early spring period for hive build up. Queen raising and honey and pollen production.

A total of four apiary sites are located within the wildfire damage area.

An average production of 40 kg of honey per hive has been used to estimate the loss to the beekeepers involved. The average number of hives located on each apiary site is about 100. Based on these figures and the latest available price of $0.62 per kilogram, losses are estimated at $2,500 per site. Estimated losses of honey production for each apiary site are listed in Table 1.

Table 1: Estimated loss of honey production according to apiary site number and percentage of vegetation fire damage (figures rounded).

<table>
<thead>
<tr>
<th>Site No.</th>
<th>Estimated Site Loss %</th>
<th>Estimated Loss of Honey Production $</th>
</tr>
</thead>
<tbody>
<tr>
<td>2550</td>
<td>100</td>
<td>2,500</td>
</tr>
<tr>
<td>2578</td>
<td>75</td>
<td>1,500</td>
</tr>
<tr>
<td>2579</td>
<td>50</td>
<td>1,200</td>
</tr>
<tr>
<td>1773</td>
<td>75</td>
<td>1,900</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>87,500</strong></td>
<td></td>
</tr>
</tbody>
</table>

Further to this loss of financial return from honey production, consideration must be given to pollen production and queen bee raising.
It has been estimated that 50% of hives would be re-queen each year at $6.00 per queen. Of the 200 queens some 60% would be raised in the area.

i.e. 120 queens at $6.00 each = $720.

Pollen production per hive is estimated at 5.2 kg per hive. Approximately 50% of these hives normally produce pollen therefore 200 hives at 5.2 kg per hive at a price of $3.00 per kg = $3120.

Financial Summary (estimated)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of honey production</td>
<td>$7,506</td>
</tr>
<tr>
<td>Queen bee production loss</td>
<td>$720</td>
</tr>
<tr>
<td>Pollen production loss</td>
<td>$3,120</td>
</tr>
<tr>
<td>Total loss</td>
<td>$11,340</td>
</tr>
</tbody>
</table>

It is estimated that it could take up to five years for this area to regenerate sufficiently to provide production potential at a normal level. The estimated loss of production and the projected loss over the five year period is provided in Table 2 utilising the rounded figure at $11,300 from Table 1.

Table 2: Projected production loss over the five year period.

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated % Recovery</th>
<th>Estimated Production Loss $</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>0</td>
<td>11,300</td>
</tr>
<tr>
<td>1986</td>
<td>25</td>
<td>8,475</td>
</tr>
<tr>
<td>1987</td>
<td>50</td>
<td>5,650</td>
</tr>
<tr>
<td>1988</td>
<td>75</td>
<td>2,825</td>
</tr>
<tr>
<td>1989</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>$28,250</td>
</tr>
</tbody>
</table>

6. PROPOSALS AND RECOMMENDATIONS

Following the west coastal wildfires of January 1984 and March-April 1985 (Burking and Kessel 1984-85), a number of proposals were listed to provide assistance to beekeepers affected by the wildfires. The following are listed for consideration by the Primary Industry Association in relation to the fires described in this report.

- Rental payments for a fire affected apiary sites to be waived for up to a period of 5 years on an annual review basis until full production from flora species return.

- Existing apiary site holders to retain these sites rent free until full production returns to the area.
Consider the possibilities of increasing the number of apiary sites in areas not affected by fire for a period of five years. This would involve negotiations between beekeepers and the following Government Departments - Agriculture and Conservation and Land Management.

7. **ACKNOWLEDGEMENTS**

Appreciation is expressed to the following, who assisted in providing information for this report.

Mr P. Saint - Bush Fires Board of Western Australia.
Mr S. Cook - Primary Industry Association.

8. **REFERENCES**


APPENDIX

Map - Wongonderra Wildfire Area.