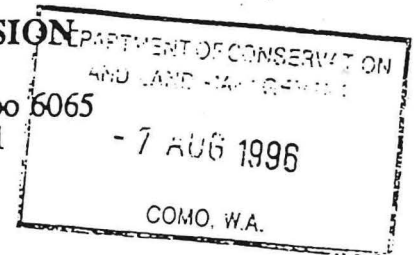


DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

SCIENCE AND INFORMATION DIVISION

Wildlife Research Centre, PO Box 51, Wanneroo 6065
Tel: (09) 405 5100 Fax: (09) 306 1641



To: Greg Leaman
Regional Manager, Midwest region

From: Allan Burbidge and Greg Keighery

Subject: BIOLOGICAL SURVEY - BEEKEEPERS RESERVE

We refer to your memo of 24 October 1994 and subsequent discussions concerning vesting of coastal areas in the Shires of Irwin and Carnamah, and your request for a survey. Earlier this month, we carried out a brief survey of relevant areas of coastline in the Shires of Irwin, Carnamah, Coorow and Dandaragan. The southern-most areas were inspected to provide a regional context for our observations in the two northern shires. As discussed previously, a fauna survey was not possible within the required time frame. A fauna survey detailed enough to provide relevant and useable data would cost at least \$8000 plus salaries/consultancy fees, and would take some time to arrange. The following notes are therefore a summary based primarily on our observations of vegetation types together with our interpretation of information in reports by Griffin (1993) and Tinley (1992). Should you require further detail on vegetation types or specific boundaries, please contact us directly.

We found no DRF in the area but our survey was not conducted at the best time of year for finding DRF. It is unlikely that there are any DRF in the study area.

Shire of Irwin

Our observations and those of Griffin (1993) and Beard (1976) suggest that the mallee vegetation dominated by *Eucalyptus obtusiflora* near Cliff Head is unusual, in very good condition, and should be included in the conservation reserve system. Of the seven priority plant species possibly occurring in the area, we found four in mallee vegetation near Cliff Head. These four were *Eucalyptus foecunda* ssp. "Coolimba", *E. zopherophloia*, *Grevillea olivacea* and *Lasiopetalum lineare*. Of these, *E. foecunda* ssp. "Coolimba" is only known from coastal limestones between Cliff Head and Coolimba, and therefore has a very restricted known distribution. These factors suggest that the area should definitely be included in the Beekeepers Reserve.

Limestone headlands in this area have been subjected to some disturbance but are in much better condition than most of those south of Coolimba. Vegetation in this area consists of *Acacia rostellifera* shrublands and heath dominated by *Thryptomene*



Decided - Please see Beekeepers Reserve (24486?) Please
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baeckeacea and are uncommon south of this area. If possible, these headlands should be incorporated in the Beekeepers Reserve.

If the Shire wishes to maintain a settlement at Cliff Head, more detailed work may be warranted in this vicinity to define a mutually acceptable boundary, which should be clearly signposted, but as much as possible of the headlands and mallee vegetation should be included in the reserve system.

Vegetation in the coastal strip adjacent to the private land between about Freshwater Point and the southern boundary of the Shire is, in places, fairly disturbed by shacks or 4WD tracks and the dominant vegetation types are represented either to the north or the south of this area. Much of the area is low heath dominated by *Melaleuca acerosa*. The area does have conservation value but in view of the above considerations there would seem to be no reason why this area should not be vested in the Shire, provided that areas to the north were included in the Beekeepers Reserve.

Shire of Carnamah

In the area south of Coolimba to Leeman, low limestone cliffs and headlands are common, whereas they are uncommon north and south of this area. Because most of this limestone is overlain with sand, the vegetation is not as different from adjacent areas as one would otherwise expect, being heaths dominated by *Melaleuca acerosa* or *M. huegelii*. Unfortunately, all the limestone areas inspected showed obvious signs of disturbance from vehicles and/or frequent fire, and grassy weeds were common. If the coast south of Coolimba is not included in the conservation reserve system, then it would be important to ensure that the small limestone area immediately to the north of Coolimba be included (we assume this is the area referred to as "Beagle Ridge" in the Shire Coastal Plan). This site has a good stand of relatively undisturbed *Melaleuca lanceolata* woodland; most such coastal stands have been severely disturbed. The area from here north to the Shire boundary should be retained in the Beekeepers Reserve.

The area from the Beagle Ridge headland inland contains a diversity of landforms including tall dunes, interdunal flats and gypsiferous lagoons (Tinley 1992) and provides a good transect of vegetation from the beach to the inland *Casuarina obesa* and *Melaleuca* spp. woodlands of the lagoons. Such landforms and vegetation types seem to be absent north of here and are rarely incorporated in reserves.

Shire of Coorow

Tinley (1992) has noted that limestone headlands between Green Head and Leeman and in the Sandy Point-North Head area are the only two occurrences of this limestone headland coast type in the region. The former (which is in the Shire of Coorow) has been seriously disturbed by shacks, 4WDs and is the site of Green Head townsite. Although the area has conservation and scenic values, it is perhaps best to be managed by the Shire.

Consideration of the situation with respect to limestone cliff and headland areas in the Shires of Carnamah and Coorow, noted above, highlights the need to remove squatters shacks from the North Head-Sandy Point area, rehabilitate the area and ensure that as much as possible of these coastal limestone cliffs and headlands are included in the Beekeepers Reserve. This is consistent with Tinley's recommendation, which we would strongly support.

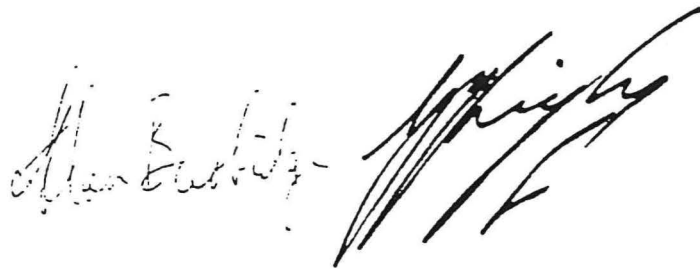
Conclusions

The retention of the following areas in the Beekeepers Reserve would greatly enhance the conservation value of this reserve and would help conserve several priority plant species, several unusual plant communities and limestone headland landforms and their associated dune systems:

- 1) Cliff Head area south to the private land (Shire of Irwin)
- 2) from the northern boundary of Shire of Carnamah south to Coolimba
- 3) as much as possible of the North Head - Sandy Point headland system.

References

- Beard, J.S. (1976) Dongara. Vegetation Survey of Western Australia. Map and Explanatory Memoir. Vegmap Publications, Perth.
- Griffin, E.A. (1993) Flora of the Quindalup Dunes between Swan and Irwin Rivers, Western Australia. Unpublished report to Coastal Planning Branch, DPUD, and Heritage Council of WA.
- Tinley, K. (1992) Central west Coast Environmental Audit: Stage 1. Prepared for Central Coast Planning Study Steering Committee for DPUD and SPC.



Allan Burbidge and Greg Keighery
Community Resources Section
Science and information Division
09/12/94

- c. Dr N. Marchant, A/HOG, Bio-Resources Group,
Science and Information Division.

ENVIRONMENTAL PROTECTION AUTHORITY

INFORMAL REVIEW WITH ADVICE GIVEN

The EPA will not formally assess these projects but will give publicly available advice to help the developers and relevant agencies to ensure the projects are environmentally acceptable.

1. Rural subdivision P1 Lot 26 and Lot 28 Hopkinson Road, **Oakford**.
2. Rural subdivision, Lot 101 Hicks Road, **Esperance**.
3. Olive farm - olive processing, Lot 1 Sussex Loc 4013 Brockman Highway, **Karridale**.
4. Three poultry sheds on existing poultry farm, 2840 (Lot 56) Bunning Road, **Mt Helena**.
5. Mahimahi land-based small-scale aquaculture research and development next to Rous Head Harbour near **Fremantle**.
6. Casuarina plantation Blue Lake, Whitfield Springs & Whitfield Lake properties, Brand Highway, **Gingin**.
7. Aquaculture - abalone ranching north of **Two Rocks**.

INFORMAL REVIEW WITH ADVICE GIVEN — (Managed under Part V of the EP Act)

8. Stratham West Project - mining and processing of heavy mineral sands 6km north of **Capel**.
9. Greenwaste and chicken manure composting plant, Lot 1 Bingham Road, **Bullsbrook**.

DIEBACK

10. Protocol for the Identification and Management of *Phytophthora cinnamomi* (dieback) 'Protectable Areas' in Western Australia. Public comment is invited prior to the EPA reporting to the Minister under s16e of the Environmental Protection Act. Submissions must be received no later than 14 July 2000. Copies of the document are available from the DEP library on (08) 9222 7010. Submissions should be addressed to the Executive Officer, Environmental Protection Authority, 141 St Georges Tce, Perth WA 6000.

SUBMISSIONS CLOSE

11. Draft Environmental Protection Guidance for the Assessment of Environmental Factors No. 49: "Assessment of development proposals in Shark Bay World Heritage Property" (Copies are available from Chris Cornish, telephone 9222 7105) (18.8.00).
12. Draft Environmental Protection Guidance for the Assessment of Environmental Factors No. 1: "Guidance for the protection of tropical arid zone mangroves along the Pilbara coastline" (Copies are available from Chris Cornish, telephone 9222 7105) (4.8.00).
13. Review of the Environmental Protection (Ozone Protection) Policy 1993 was released for public comment on 30.6.00. Copies are available from DEP. Comments to the Chairman, Environmental Protection Authority, Westralia Square, 141 St Georges Tce, Perth, At: Geoff Fulford, no later than 5pm 28.7.00.

For more information on projects before the DEP or EPA, or should you wish to present your views on new proposals to the EPA or one of its committees, please call ANNA BOGDANOWSKI on (08) 9222 8692 or visit Department of Environmental Protection offices in Kwinana, Bunbury, Geraldton, Karratha, Kalbarrie, or Westralia Square, 141 St Georges Tce, Perth. PO Box 8822, Perth, WA 6842.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

NEW OR AMENDED LICENCES/WORKS APPROVALS FOR EXISTING OPERATIONS

14. Abattoir, Nebru Exports Pty Ltd, Lakes Road, **Namboolup** (W/A.No.2899).
15. Chemical manufacturing, Ciba Specialty Chemicals, **Kwinana** (Lic.No.6728/4).
16. Livestock saleyard or holding pen, Jetty Dip Yards, **Broome** (Lic.No.6757/4).
17. Livestock saleyard or holding pen, Colin A Clarke, Lot 1 Wellington Loc 1374 Mitchell Road, **Newlands** (Lic.No.7218/3).
18. Mineral sands mining or processing, North Capel Yearly Road site, Iluka Resources Ltd, **Capel** (W/A.No.03086).
19. Processing or beneficiation of metallic ore, Radio Hill Nickel Mine, Australian Nickel Mines NL, **Karratha** (Lic.No.7372/2).
20. Processing or beneficiation of metallic or non-metallic ore, Tarmoola Operations, **Leonora** (W/A.No.03093).
21. Processing or beneficiation of metallic and non-metallic ore, Commercial Minerals Talc Pty Ltd, Mt Seabrook Talc Mine, **Meekatharra** (W/A.No.3073).
22. Putrescible landfill, Wiluna Refuse Disposal Site, Rubbish Tip Road, **Wiluna** (Lic.No.7023/4).
23. Putrescible landfill, Leonora Waste Facility, 3km east of Town Centre, Leonora/Laverton roads, **Leonora** (Lic.No.6810/45).
24. Putrescible landfill, Coral Bay Landfill Site, Sanctuary Road, **Coral Bay** (Lic.No.7066/4).
25. Putrescible landfill, Ledge Point Waste Management Facility, Part of Reserve No.36447, **Ledge Point** (Lic.No.6898/4).
26. Putrescible landfill, Browns Range Waste Management Facility, Tip Road, **Camaron** (Lic.No.7065/4).
27. Putrescible landfill, Needilup Waste Management Facility, Shire of Jerramungup, **Needilup** (Lic.No.7112/4).
28. Putrescible landfill, Bremer Bay Waste Management Facility, Shire of Jerramungup, **Bremer Bay** (Lic.No.7111/4).
29. Putrescible landfill, Gairdner Waste Management Facility, Shire of Jerramungup, **Gairdner** (Lic.No.7115/4).
30. Sewage treatment facility, Water Corporation, Horrocks Townsite sewers, **Northampton** (W/A.No.3107).

LICENCE/WORKS APPROVALS FOR NEW FACILITIES

31. Metal finishing, Zinc Coaters, **Welshpool** (Lic.No.7450/1).
32. Timber preserving, Pinetel, **Bassendean** (Lic.No.7446/1).

Draft Environmental Protection Act Enforcement and Prosecution Guidelines are available for comment until Friday 29 September, 2000. Copies of the draft Guidelines will be available from the DEP Library or call 9222 7179.

RIGHT TO APPEAL: For information on appeal rights call the Appeals Convenor (08) 9221 8711

Your views are welcome on any of these matters

Internet: www.environ.wa.gov.au Email: dep_info@environ.wa.gov.au

Library Email: dep-library@environ.wa.gov.au

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This notice will be moved from
Saturday to Monday editions of The West Australian
from Monday August 7, 2000