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Conservation and Attractions

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*GETTING
BushED
WITH
CALM*

A Directory of Educational Resources
of the
Department of Conservation
and Land Management

PRINTED ON RECYCLED PAPER



DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT WA
September 1990

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SOUTHERN FOREST

Regional and District Office

Brain Street
MANJIMUP 6258
Phone (097) 71 1988
Fax 71 2855

District Offices

Kennedy Street
PEMBERTON 6260
Phone (097) 76 1107
Fax 76 1410

South Western Highway
WALPOLE 6398
Phone (098) 40 1027
Fax 40 1251

WHEATBELT

Regional and District Office

Hough Street PO Box 100
NARROGIN 6312
Phone (098) 81 1113
Fax 81 1645

District Offices

56 Clive Street
PO Box 811
KATANNING 6317
Phone (098) 21 1296
Fax 21 2633

104C Barrack Street
PO Box 332
MERREDIN 6415
Phone (090) 42 1488
Fax 41 2454



Department of Conservation and Land Management WA

SCHOOL AND GROUP REQUESTS

Thank you for your enquiry about

- an excursion to this area
- a talk to your group

We want to help your group gain the maximum benefit from the experience. To do this, we need to know your plans and objectives well in advance.

So, could you please complete this form and return it to us soon?

We need at least 4 weeks notice.

NAME OF
GROUP/SCHOOL

CONTACT PERSON

ADDRESS

POST CODE

 POST CODE

TELEPHONE NO

DATE(S) OF
PROPOSED VISIT(S)

TIMES

AGE/LEVEL

NO. OF
PARTICIPANTS

SUBJECT AREA(S)

Where applicable please answer the following:

Learning objective(s) (i.e. what do you want your students to be able to do at the end of the session?)

What pre-visit activities have you planned?

What follow-up activities have you planned?

How would you like us to help?

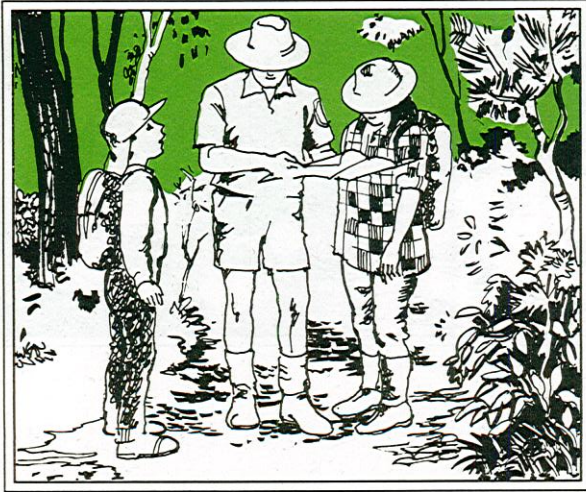
After this form has been returned we will confirm further details by phone or letter. Thanks for your help - we hope your excursion will be enjoyable and educational.

PLEASE RETURN THIS FORM TO:

Community Education Officer
Department of Conservation and Land Management
P O Box 104
COMO WA 6152

*CALM encourages groups to seek field experiences to
enrich the learning program.*

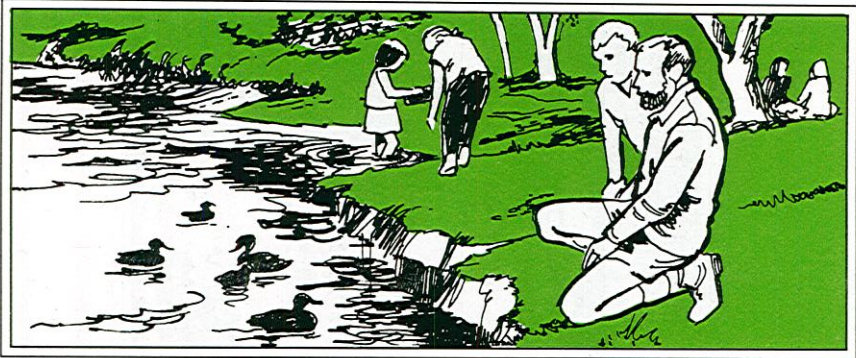
*Our message is: Get BushED for your best educational
experiences.*



CALM AND COMMUNITY EDUCATION

THE Department of Conservation and Land Management (CALM) through its Community Education and Interpretation programs fosters awareness, appreciation and understanding of the natural environment. CALM encourages attitudes and behaviour compatible with conservation of wildlife and the management of forests, parks and reserves.

CALM applies a number of strategies towards achieving these objectives of community education. These include provision of training programs for teachers, group leaders and CALM staff; activities programs (summer holiday park activities; and others on request); facilities (such as field study centres, visitor centres, display shelters, and interpretive trails); talks, workshops and seminars; liaison with Government and non-government organisations; and a wide range of publications.



CALM TRAINING PROGRAMS FOR TEACHERS GROUP LEADERS AND CALM STAFF

❖ Earth Education Workshops

Earth Education Workshops introduce natural awareness exercises, concept-building activities, interpretive techniques, and value-building experiences. They are designed to help educators and group leaders use Earth Education in their own programs.

CONTACT: Community Education Officer:
(09) 367 0333

❖ **Outback Safety And Bushcraft Courses**

Practical preparation for safe and enjoyable minimal impact trips to the bush.

CONTACT: CALM
(09) 367 0333

❖ **Environmental Education Workshops**

As requested.

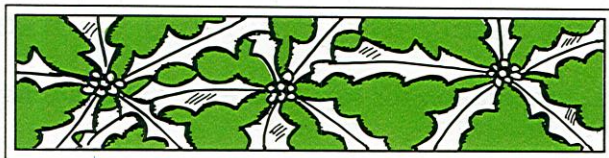
CONTACT: Community Education Officer
(09) 367 0333

Details on training courses are included in the Education Circular issued monthly by the Ministry of Education.

❖ **Expedition Skills and Leadership Courses**

CALM staff assist in the preparation and conducting of these courses for group leaders in outdoor skills.

CONTACT: Ministry of Sport and Recreation
Outdoor Recreation Branch
(09) 387 9700



ACTIVITIES PROGRAMS

A range of activities planned to coincide with seasonal programs and special events are provided by CALM and in collaboration with others.

Holiday programs

- ◆ Yanchep National Park [school holidays] Ph 561 1004
- ◆ Leeuwin-Naturaliste National Park [summer] Ph (097) 52 1255
- ◆ Walpole-Nornalup National Park [summer] Ph (098) 40 1027
- ◆ Shannon-D'Entrecasteaux National Park
[easter and summer] Ph (097) 71 1367
- ◆ The Hills Forest Go-Bush Activities Mundaring Ph 295 1955

Special Events

Contact CALM offices for information (see directory)

- ◆ Seniors Week [spring]
- ◆ Sea Week [autumn each year]
- ◆ World Environment Day [June 5]
- ◆ Arbor Day [on Friday of the first week in June each year]

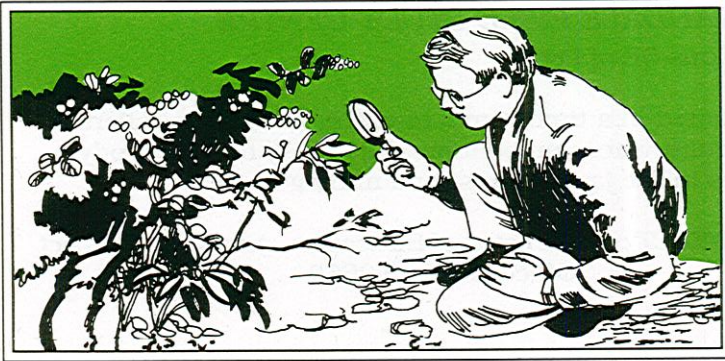
University Extension Programs

Ph 380 2433

- ◆ Perup forest ecology course
- ◆ others as advertised

Other Programs

- ◆ Bold Park (City of Perth) Ph 265 3341
- ◆ Whiteman Park (Dept of Planning & Urban Development)
Ph 249 2446
- ◆ Royal Australian Ornithologist Union Programs (Broome, Eyre)
Ph 364 6202



FIELD STUDY CENTRES AND CALM

CALM provides a number of centres from which environmental studies can be conducted. Each centre offers ready access to an environment that encourages students to consider management issues such as:

- ◆ conservation
- ◆ recreation
- ◆ resource management and use e.g. timber,
- ◆ fire protection
- ◆ pest, weed and disease control e.g. dieback
- ◆ catchment water quality
- ◆ extractive industries e.g. bauxite mining and mine rehabilitation

Details concerning facilities and equipment provided, booking procedure and suitable programs are available from the CONTACT PERSON indicated.

◆ *JARRAHDALÉ FIELD STUDY CENTRE*

50 kms SE of Perth

Situated in a timber-mill township, the centre offers dormitory accommodation and access to good study sites in the jarrah forest and mining areas.

CONTACT: Ministry of Education, Armadale District
Office (09) 399 0666

◆ *MUNDARING FIELD STUDY CENTRE*

40 kms E of Perth

This original forester's cottage is available as a day use centre with the option of overnight camping. Walking access to study sites in jarrah forest and the Mundaring Dam Catchment.

Administered by Belmont Senior High School YEO and AUS coordinators

CONTACT: (For Bookings) CALM Mundaring
(09) 295 1955

◆ *ICY CREEK BUSH CAMP*

115 kms S of Perth, 12 kms S of Dwellingup

A secluded site on Icy Creek, a tributary of Nanga Brook. Camping facilities and study sites along the Murray River and in jarrah forest within the Lane Poole Reserve. A resource centre is available.

CONTACT: Youth Education Officer Morley
Senior High School
(09) 276 5766

◆ *DRYANDRA FIELD STUDY CENTRE*

140 kms SE of Perth, 26 kms NW of Narrogin

Ample dormitory and cottage accommodation in a wandoo woodland setting.

CONTACT: Lions Dryandra Forest Village
(098) 83 6020 or (098) 84 5231

◆ *DONNELLY RIVER FIELD STUDY CENTRE*

294 kms S of Perth, 15 kms from Bridgetown

Former timber mill workers cottages in a karri forest setting. Walks and safe swimming opportunities. Classroom available.

CONTACT: Donnelly Forest Centre Village
(09) 383 2094 or (097) 72 1292

◆ *PERUP FIELD STUDY CENTRE*

300 kms S of Perth, 50 kms E of Manjimup

Suitable for small groups wishing to study forest animals and their management within karri, jarrah, and wandoo communities. An active research area. Group leaders must have attended a CALM Perup Forest Ecology Course (offered through University Extension)

CONTACT: CALM
(097) 71 1988

◆ **TWERTUP FIELD STUDY CENTRE**

Fitzgerald River National Park, 520 kms SE of Perth,
150 kms E of Albany

Limited camping accommodation in heathland of Fitzgerald River National Park. Water restrictions apply.

CONTACT: Fitzgerald River National Park Association
(098) 35 5043

◆ **BROOME BIRD OBSERVATORY**

(ROYAL AUSTRALIAN ORNITHOLOGIST UNION - RAOU)

18 kms E of Broome

Cabin accommodation for small groups only, in pindan vegetation behind dunes, mudflats and mangroves of Roebuck Bay. Resident RAOU leader.

CONTACT: RAOU Broome (091) 93 5600

◆ **EYRE BIRD OBSERVATORY (RAOU)**

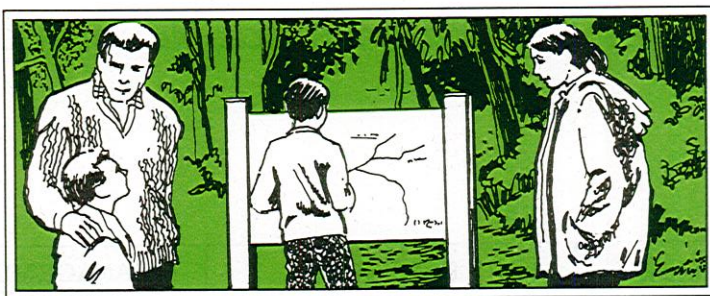
500 kms E of Norseman 300 km W of Eucla.

Accommodation for up to 16 people in mallee woodland setting 1 km from the beach. Resident RAOU leader.

CONTACT RAOU Eyre (090) 39 3450

The many other centres that can facilitate environmental education are included in the booklet: "Recreational Campsite Directory 1988/89" published by the Camping and Outdoor Education Association of Western Australia.

Contact Outdoor Education and Camp Schools Officer, Ministry of Education (09) 420 4111.



CALM INTERPRETATION FACILITIES

CALM is progressively establishing interpretive displays, signs and trails in national parks, marine parks, nature reserves and state forests. They are designed to assist understanding and encourage direct experience of the environment, and can be used as a teaching aid.

Visitor centres are established at Milyering (Cape Range National Park Exmouth), Penguin Island, Manjimup Timber Park, Millstream Homestead, Northcliffe and Walpole. CALM offices also provide displays.

Display shelters are found in most major national parks and forest recreation areas. Interpretive trails are being established in each major ecosystem and include walk, drive, boat and dive trails. Enquire at regional offices for specific details.

CALM Educational Resources

CALM RESOURCE	ECOLOGY					MANAGEMENT			
	Sth Wst Forests	Rain Forest	Semi-Arid	Marine	Wet Land	Wild Life	Endangered Species	NatPks and Reserves	Forest Production
Resource Notes	◆		◆	◆	◆	◆	◆	◆	
Resource Directories	◆			◆					
Information Sheets/Notes	◆		◆		◆	◆			◆
Exploring Series	◆		◆		◆	◆			
Explorer Series	◆		◆		◆	◆			
Discovering Series	◆		◆			◆			◆
Wildlife Series	◆	◆	◆	◆		◆	◆		
Posters	◆		◆	◆	◆	◆	◆	◆	◆
Landscape	◆	◆	◆	◆	◆	◆	◆	◆	◆
Video/Film	◆		◆	◆	◆	◆	◆	◆	◆



CALM EDUCATIONAL RESOURCES

A range of materials are available and you are invited to visit CALM offices to view them.

Resource Notes:

21 Notes providing information for students and teachers on the ecology, conservation and management of the natural resources of Western Australia.

Resource Directories:

2 comprehensive lists of CALM resources by topic and include publications, audio-visual materials, facilities and services (Marine, Trees)

Information Sheets:

10 notes covering a range of topics of interest to the general public and land managers.

Exploring Series:

2 booklets that investigate the ecology of natural environments of Western Australia. Suitable for upper primary students and older. (Granite Outcrops Coastal Wetlands)

Explorer Series: 3 story booklets for primary children with activities that focus on ecological concepts essential to our wildlife's survival. (Forest Explorer, Wetland Explorer, Granite Explorer)

Discovery Series: direct learning experiences written around walk trails that explore our interrelationships with the natural environment. (Sanford Rock, Mundaring Forest)

Wildlife Series: plants and animals found in W A and their relationship with their environment and ourselves.

Posters: (saleable item) on wildlife (3), forest lands, granite outcrops, bush corridors, minimal impact bushwalking, and greening your neighbourhood. Also Geikie Gorge and Shannon-D'Entrecasteaux National Parks.

Landscape: (saleable item) 4 issues per year, featuring articles on WA's conservation lands and wildlife. A useful library acquisition.

Videos and films for loan: Covering a range of topics from a variety of sources: wildlife, conservation, forest management, national parks, marine parks, wilderness, minimal impact bushwalking.

This information is current as of June 1990.

Resource Notes

- No. 1 Marsupials in the Forests of South-West W.A.
- No. 2 Birds you are likely to see or hear in the Jarrah Forest of W.A.
- No. 3 Some Frogs in the South-West of W.A.
- No. 4 Snakes and Lizards of W.A.'s South-Western forests.
- No. 5 Red-capped Parrots, Marri and Apple Orchards - adaptation and pre-adaptation.
- No. 6 The Tammar Wallaby and Fire.
- No. 7 Effect of Fire on reptiles of arid and semi-arid areas.
- No. 8 Seabird Islands.
- No. 9 The Noisy Scrub-bird.
- No. 10 The Reasons for Rarity.
- No. 11 What is Dieback.
- No. 12 Controlling Dieback in W.A.'s National Parks and Forests.
- No. 13 Western Swamp Tortoise.
- No. 14 Parallel Adaptations - Numbat and Echidna.
- No. 15 Seed Dispersal in Macrozamia.
- No. 16 Prescribed Burns: Fighting fire with fire.
- No. 17 Some Trees of the Jarrah Forest.
- No. 18 The Geology of the Jarrah forest.
- No. 19 Possums, Habitat Trees and Fire.
- No. 20 Genetic Diversity and Conservation of the Grass Wattle.
- No. 21 Eucalypts of Perth: Field Key.

Information Sheets

- No. 1-87 Natural Regeneration of Bush Areas in W.A.
- No. 2-87 Pine Trees for Timber under W.A. Conditions.
- No. 3-87 Tree Planters Guide.
- No. 4-87 Mistletoe in South-Western Australia - Identification.
- No. 5-87 Native Seed Collection and Storage.
- No. 6-87 Caring for Waterbirds - with Algae Poisoning or Botulism.
- No. 1-88 Trees and Tall Shrubs of Perth.
- No. 2-88 Broadscale Direct Seeding of Trees on Farms.
- No. 1-89 Plants Resistant to Dieback.
- No. 2-89 Protecting our Flora - a Guide to the Legislation and Licencing



GUIDELINES FOR FIELD EXCURSIONS

Like any group activity, field excursions to national parks, state forests, marine parks or nature reserves need planning.

Given plenty of lead time and a clear statement of learning objectives, CALM may be able to assist. This can be in the form of advice on best study sites, provision of maps and background information, suggestions on suitable study topics, and possibly input into your field excursion. Remember: our field officers have many competing duties, some of which may override even the best plans e.g. fire emergencies. We ask you to establish contact with the nearest District Manager, then send in the completed form titled: "School and Group Requests" in this booklet.

Here are some hints to plan your excursion to make it a more rewarding and enjoyable experience.

BEFORE

Start planning at least four weeks before your excursion by:

- ◆ Contacting your local CALM office to find out which sites meet your needs
- ◆ Obtaining the appropriate brochures, maps and background information.

- ◆ Booking camping areas and field study centres
- ◆ Organising CALM officers to be involved in your activities or to give talks
- ◆ Checking on walk trails.
- ◆ Designing worksheets that encourage observation and participation. Discuss them with CALM officers.
- ◆ Planning a series of lessons leading up to the excursion so students understand what a national park, marine park, state forest or nature reserve classification represents.
- ◆ Giving your students a 'things to bring' list to suit the conditions to be experienced and to ensure their safety and comfort.
- ◆ Attending any in-service training on field-based studies provided by the Ministry of Education and CALM.

DURING

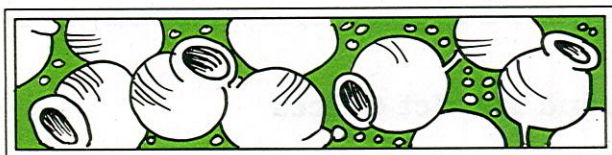
- ◆ Conduct activities that highlight an area's significance and the importance to leave the site as you would like to find it.
- ◆ As many sites are fragile, organise small groups that will make less of an impact and to gain a more rewarding experience.
- ◆ Aim for personal experiences with the natural environment which will provide enjoyment, understanding and care for the environment.
- ◆ Inform CALM officers of your itinerary and always consider emergency procedures.

- ◆ Enjoy the experience and knowledge of CALM officers.
- ◆ Be aware of other people using the site and respect their privacy.

AFTER

- ◆ Reinforce your students' field experiences with activities in the classroom.
- ◆ Design activities that develop an ability to live in an environmentally conscious way.
- ◆ Consider a return visit or select another excursion site for comparison.

Contact your local CALM office or Community Education Officer on (09) 367 0333 for further information on educational visits.



REQUESTING CALM ASSISTANCE

- ◆ CALL PERSONALLY to collect resources
(Front Counter): 50 Hayman Road, Como
- ◆ PHONE FRONT COUNTER to request a mail-out:
(09) 367 0481 or (09) 367 0437
- ◆ For VIDEOS AND FILMS
phone (09) 367 0333
- ◆ For FURTHER ENQUIRIES
phone Community Education Officer (09) 367 0333
- ◆ TALKS OR FIELD EXCURSIONS:
submit 'School and Group Requests' form.



Department of Conservation and Land Management

Regional and District Offices

The Department of Conservation and Land Management directly manages National Parks and Marine Parks, State Forests and Timber Reserves and Marine Nature Reserves, and any associated wildlife and forest produce. It is also responsible for conserving wildlife throughout the State.

The Department manages public lands on behalf of the people of WA, and is committed to the principle of public participation.

It is therefore in the Department's interest that the public have a greater awareness and understanding of nature conservation and management issues.

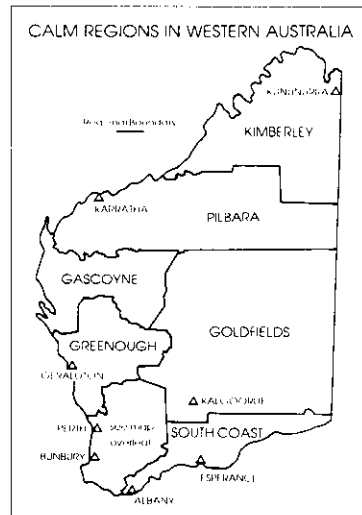
For further information please contact your nearest District Office.

POLICY DIRECTORATE

Hackett Drive
CRAWLEY 6009
Phone (09) 386 8811
Fax 386 1578

OPERATIONAL HEADQUARTERS

50 Hayman Road
PO Box 104 COMO 6152
Phone (09) 367 0333
Fax 367 0466



KIMBERLEY

Regional Office

Messmate Way
PO Box 942
KUNUNURRA 6743
Phone (091) 68 2000
Fax 68 2179

District Office

Herbert Street
PO Box 65
BROOME 6725
Phone (091) 92 1036
Fax 93 5027

PILBARA

Regional Office

SGIO Building
Welcome Road
PO Box 835
KARRATHA 6714
Phone (091) 86 8288
Fax 44 1118

GREENOUGH / GASCOYNE

Regional Office

7th Floor Town Towers
PO Box 72
GERALDTON 6530
Phone (099) 21 5955
Fax 21 5713

District Offices

Main Roads Dept Bldg
PO Box 328
MOORA 6510
Phone (096) 51 1424
Fax 51 1698

Local office

Small Boat Harbour
Fisherman's Wharf
PO Box 500
CARNARVON 6701
Phone (099) 41 1801
No Fax

Lot 391 Thew St
PO Box 201
EXMOUTH 6707
Phone (099) 49 1676
Fax 49 1580

Knight Tce
DENHAM 6537
Phone (099) 48 1208
Fax 48 1024

GOLDFIELDS

Regional Office

Hannan Street
PO Box 366
KALGOORLIE 6430
Phone (090) 21 2677
Fax 21 7831

SOUTH COAST

Regional Office

44 Serpentine Road
ALBANY 6330
Phone (098) 41 7133
Fax 41 7105

District Office

93 Dempster Street
PO Box 234
ESPERANCE 6450
Phone (090) 71 3733
Fax 71 3657

METROPOLITAN

Regional Office

5 The Esplanade
MOUNT PLEASANT 6153
Phone (09) 364 0777
Fax 364 3192

District Office

Marmion Marine Park
c/- Dept of Marine and
Harbours Bldg
West Coast Highway
HILLARYS 6025
Phone (09) 448 5705
Fax 447 8713

NORTHERN FOREST

Regional Office

3044 Albany Highway
KELMSCOTT 6111
Phone (09) 390 5977
Fax 390 7059

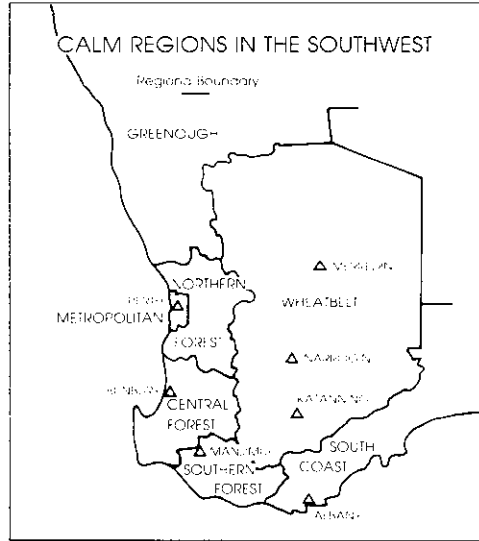
District Offices

Banksiadale Road
DWELLINGUP 6213
Phone (09) 538 1001
Fax 538 1203

Mundaring Weir Road
MUNDARING 6073
Phone (09) 295 1955
Fax 295 2404

George Street
JARRAHDALE 6203
Phone (09) 525 5004
Fax 525 5547

5 Dundee Road
WANNEROO 6065
Phone (09) 405 1222
Fax 306 1769



CENTRAL FOREST REGION

Regional Office

North Boyanup Road
PO Box 733
BUNBURY 6230
Phone (097) 25 4300
Fax 25 4351

Local Office

Bussell Highway
MARGARET RIVER 6285
Phone (097) 57 2322
Fax 57 2930

District Offices

14 Queen Street
BUSSELTON 6280
Phone (097) 52 1255
Fax 52 1432

147 Wittenoom Street
COLLIE 6225
Phone (097) 34 1533
Fax 34 4539

64 Weir Road
HARVEY 6220
Phone (097) 29 1104
Fax 29 1868

South Western Highway
KIRUP 6251
Phone (097) 31 6232
Fax 31 6366

Warren Road
NANNUP 6275
Phone (097) 56 1101
Fax 56 1242