



Department of Environment, Land, Water and Planning

PO Box 500 East Melbourne
Victoria 8002 Australia
www.delwp.vic.gov.au
ABN 90 719 052 204

File: FF383356

Mr Robert B McCormack
Australian Aquatic Biological Pty Ltd
PO Box 3
Karuah 2324

Dear Rob

I refer to your application for a research permit under the **National Parks Act 1975** to undertake research in All Parks. Permit number **10007099** (expiry date **16 April 2018**) has been granted. If this project is to continue after that date please write to me at the address below requesting a renewal. You are required to submit a copy of your final report. The permit was referred to Parks Victoria to ensure that this project is consistent with park management objectives.

The granting of this research permit is based on the premise that the work will potentially contribute to scientific knowledge, is supported by both the Department of Environment, Land, Water and Planning and broadly by the community. Researchers should note that the issue of this permit is a privilege not available to the general community and therefore the probity reflected in this research permit indicates the responsibility researchers have to properly undertake their authorised work. Close attention must be paid to all conditions on the permit, failure to do so can result in non-compliance.

You are reminded that you **must** contact the Ranger in Charge or delegate (contactable via 13 19 63) at **least five days** prior to commencing any research in parks.

Please note this permit is only valid when signed and dated by the permit holder (see final page of permit).

Should you require further information, please email: environmental.research@delwp.vic.gov.au or telephone 9450 8746. Please quote the file number and permit number in all correspondence relating to this permit.

Yours sincerely,



Dr Sue Hadden

Environmental Research Co-ordinator

Privacy Statement

Any personal information about you or a third party in your correspondence will be protected under the provisions of the Information Privacy Act 2000. It will only be used or disclosed to appropriate Ministerial, Statutory Authority, or departmental staff in regard to the purpose for which it was provided, unless required or authorised by law. Enquiries about access to information about you held by the Department should be directed to the Manager Privacy, Department of Environment, Land, Water and Planning, PO Box 500, East Melbourne, 8002



Department of Environment, Land, Water and Planning
NATIONAL PARKS ACT 1975 and
FLORA AND FAUNA GUARANTEE ACT 1988
RESEARCH PERMIT

Pursuant to the provisions of the National Parks Act 1975 and the Flora and Fauna Guarantee Act 1988, permission is hereby

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And Jo Edwards, Tegan Moylan, James Fetzner Jr and James Moylan in order to

- i) Live capture using hand-capture, removal from burrows, dip nets, shovel, bait with string, box traps and drop nets all freshwater crayfish, fish, amphipod, snail, macroinvertebrate, mussel and crab species in Victoria;
- ii) Keep up to six (6) total of a given species for voucher specimens and release remaining individuals at point of capture if species is listed as rare or threatened (listed on Schedule 1.)
OR
- iii) Keep up to all twelve (12) of a given species for voucher specimens if species is not listed as rare or threatened;
- iv) Transport live individuals to Australian Aquatic Biological Pty Ltd office and retain in glass aquarium for photography session

Throughout Victoria and within ALL PARKS & RESERVES, managed by Parks Victoria, **excluding Reference Areas** for the purpose of producing a full colour field guide to all the freshwater crayfish in Australia and taxonomic revision.

Permission is given subject to the following particular conditions:

1. **Arrangements for access and authorisation to conduct research on land managed by Parks Victoria must be made at least five days in advance with the Area Chief Ranger or local delegate. He/ she is to be advised, in advance, of each visit to the park made in connection with the provisions of this permit. The permit holder should contact the Parks Victoria Information Centre on 13 19 63 and ask for the contact number of the Area Chief Ranger for the park where the research is to be undertaken. This contact is critical to:**
 - a. determine jointly, where necessary, specific fieldwork locations that do not overlap with existing research projects,
 - b. ensure tracks are accessible and that track conditions are safe for vehicle access,
 - c. confirm there are no prescribed burns scheduled for your specific fieldwork location and any access points to that specific location,
 - d. confirm there are no bush fires currently burning in or near your specific fieldwork location and any access points to that specific fieldwork location, and
 - e. allow for an on-site induction by Parks Victoria staff if required.
2. The researchers are required to notify the local Biodiversity officer of their proposed activities at least three days in advance. He/she is to be advised, in advance, of each visit made in connection with the provisions of this permit. Contact the Department of Environment Primary Industries (DELWP) Customer Service Centre on 136 186 and ask for the contact number for the Biodiversity officer of the nearest DELWP office where the research is to be undertaken.
3. The above animals may only be subjected to procedures as outlined in the proposal approved by the Wildlife and Small Institutions Animal Ethics Committee under approval number 03.14 "Australian Crayfish Project".
4. Any collecting of wild specimens must comply with the Fisheries Act 1995 and the Fisheries Regulations 2009 except where exemption is specifically provided for in this permit.
5. A clear label is to be fixed to every trap/retaining vessel used in connection with this permit, showing "Flora and Fauna permit number 10007099".
6. Any traps or nets must be checked at two hourly intervals during the day and at five hour intervals overnight. All traps must be securely covered. Soil excavation for the purposes of laying traps must be undertaken without machinery. Where possible, soil layers should be preserved and re-layered following the removal of traps.
7. All protected fish captured are to be released immediately following completion of approved procedures at the precise point of capture.

Bryan Welch

Acting Environment and Natural Resources, Regional Manager
(Delegate of the Secretary)

20 APR 2015

8. This permit gives no approval for marking of live crayfish, fish or crabs.
9. Collection of voucher specimens is limited to six specimens for rare and threatened species and twelve for all other species. At each site no more than two specimens of rare and threatened species and six specimens of all other species should be collected. Collection sites must be located at least 2km apart within any single stretch of a watercourse. Collection is not permitted at sites where collection occurred under permit no. 10005887, at sites subject to bushfire in the previous year and in parks and reserves where drought has been declared in the broader region.
10. As far as is possible, areas where burrows have been excavated should be rehabilitated to reduce disturbance to the environment, watercourses and drainage and to reduce safety risks to park visitors.
11. All nets and equipment must be hygienically cleaned before sampling to reduce the potential spread of organisms between sampling sites within and between catchments and watercourses. This can be done with domestic bleach mixed 1 part bleach to 4 parts water.
12. Hygiene protocols intended to minimise the risk of introduction and spread of Amphibian Chytrid Fungus must be complied with for all people / vehicles / equipment / activities. DELWP recommends that you follow the guidelines in Murray et al. (2011)*.

*Murray, K., Skerratt, L., Marantelli, G., Berger, L., Hunter, D., Mahony, M. and Hines, H. 2011. Hygiene protocols for the control of diseases in Australian frogs. A report for the Australian Government Department of Sustainability, Environment, Water, Population and Communities.
13. Vehicles must remain on existing public roads and tracks and, subject to agreement with local Parks Victoria staff, Management Vehicles Only roads and tracks. Applicant's vehicles and research equipment should be clearly identifiable as belonging to the research organisation. The associated project and permit number should also be identifiable to avoid misunderstanding by Rangers and the public.
14. It is essential that researchers ensure that vehicles travelling on management vehicle tracks are free of soil, gravel and plant material prior to travel/entry to the park. They must also ensure that when going off-track all boots and any tools used are free of soil, gravel and plant material, and must be disinfected. This can be done with either Phytoclean mixed 1 part Phytoclean to 10 parts water, or with domestic bleach mixed 1 part bleach to 4 parts water.
15. Vehicle access past locked gates requires prior approval on each occasion. It is preferable that work requiring access past locked gates and/or walking off track is conducted between Monday and Friday. Weekends should be avoided wherever possible. Access behind closed gates on public holidays may not be possible.
16. Research activities are **not permitted** within Parks on Fire Danger Rating days of **CODE RED** where **the safest option is to leave the night before, or early in the morning. Notify the relevant Parks Victoria Office of your departure.** It is the researchers' responsibility to keep themselves aware of fire danger forecasts at all times during field work.
17. This permit does not convey the right of entry into or upon any property or any private or public land or the right to capture or collect wildlife or the right to use or place any trap, net or other device for capturing wildlife, without the prior permission of the owner or controlling authority of such land.
18. **Prior to commencing the research, approval of the managing authority of the land must be obtained.** (For State Forest a Forest Research Permit may be required – please contact your local district Forest Manager for advice. Access to State Forests is conditional subject to a separate permit being issued under Section 52 of the *Forests Act 1958*.)
19. All material collected as a result of the activity authorised under this permit will remain the property of the State Government and must be lodged and registered with Museum Victoria (as the relevant State Government institution).
20. Specimens may not be given, sold, traded, displayed, offered for hire or disposed of, except as provided for in this permit. Note: the definition of trading is to sell, swap, give or barter.
21. Provisions of the National Parks Act 1975 and National Parks Regulations 2013 and the Flora and Fauna Guarantee Act 1988 and the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes are to be fully observed, except where exemption is specifically provided for in this permit. All signage in National Parks must be complied with, except where exemption is specifically provided for in this permit.
22. The direction of any authorised officer of the Department of Environment, Land, Water and Planning in relation to this permit must be followed. On land managed by Parks Victoria the direction of any authorised officer of Parks Victoria must also be followed.
23. Any sites or artefacts of indigenous cultural significance located in the course of this research must not be disturbed. In addition, the location of any sites and/or artefacts must be recorded and reported immediately to the Ranger-in-Charge of the park in which they occur and to Aboriginal Affairs Victoria (contactable via 1800 762 003) to be recorded on the Victorian Aboriginal Heritage Register (VAHR). For more information on Aboriginal artefacts, please view the Aboriginal Affairs Victoria website at <http://www.dpcd.vic.gov.au/aboriginal-affairs>



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24. Work involving authorised site manipulation or specimen collection is to be conducted, where possible, away from public view.
25. Data on size and abundance, including capture information (stream name, location description, date, lat/long and AMG coordinates and capture method(s)) should be electronically forwarded within one month of expiry of this permit to Tarmo Raadik, Freshwater Ecology, ARI, DELWP (tarmo.raadik@delwp.vic.gov.au) for inclusion on the Aquatic Fauna Database.
26. The permit holder must provide specific reports identified and requested by the Environment and Water, Regional Manager, Department of Environment, Land, Water and Planning, within 7 working days of the request in both hard copy and electronic format.
27. Within 30 days of the expiration of this permit, a return is to be provided to the Environmental Research Co-ordinator, Department of Environment, Land, Water and Planning giving details of specimens trapped and/or collected, including: species; numbers; dates; and localities, to the nearest one hundred metres (AMG). The data must be sent to the Victorian Biodiversity Atlas (VBA).
28. Where any rare or threatened species, as listed in the *Flora and Fauna Guarantee Act 1988*, or listed on the DELWP website advisory lists (www.delwp.vic.gov.au), are identified, the exact location should be noted and reported to biodiversity.info@delwp.vic.gov.au, as well as the relevant Biodiversity Officer of the Department of Environment, Land, Water and Planning, and the Ranger In Charge of the Park, at the earliest possible convenience.
29. **A short research summary of results outlining the key findings and completed on the attached template must be provided to both the Environmental Research Co-ordinator, DELWP, PO Box 137, Heidelberg, 3084 and Dr John Wright, Parks Victoria, Level 10, 5353 Bourke St, Melbourne VIC 3000 (john.wright@parks.vic.gov.au), within 30 days of the expiration of this research permit.** The publication of any results in connection with this research permit must refer to the fact that they were collected or obtained under the terms of this permit and copies of any reports, theses or published articles must also be provided.
30. Where a research project involves more than one worker or a group activity, all work is to be directly controlled and supervised by the permit holder who shall be deemed responsible for the conduct of all workers involved with specimen collection.
31. **The research permit must be carried by the permit holder** whilst undertaking any work in any area named on the permit and shown on demand to any Authorised Officer of the Department of Environment, Land, Water and Planning.
32. **Requests for the renewal of a research permit will be considered only after these permit requirements are met**

This permit shall, unless revoked, remain in force until **16 April 2018**.

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(Delegate of the Secretary)

Date of issue:

20 APR 2015

I, the permit holder (as named above) have read and fully understand the conditions of this permit.

.....
Permit holder

Date of signature:

**** This permit is only valid when signed and dated by the permit holder**

SCHEDULE 1 (OF 1)

Scientific Name Common Name

Fish

<i>Ambassis agassizii</i>	Agassiz's Chanda Perch
<i>Bidyanus bidyanus</i>	Silver Perch
<i>Craterocephalus fluviatilis</i>	Murray Hardyhead
<i>Craterocephalus stercusmuscarum fulvus</i>	Unspecked Hardyhead (listed as Non-specked Hardyhead)
<i>Edelia obscura</i>	Yarra Pygmy Perch
(also known as <i>Nannoperca obscura</i>)	
<i>Galaxias aequipinnis</i>	East Gippsland Galaxias
<i>Galaxias fuscus</i>	Barred Galaxias
(listed as <i>Galaxias olidus</i> var. <i>fuscus</i>)	Brown Galaxias)
<i>Galaxias gunaikurnai</i>	Shaw Galaxias
<i>Galaxias lanceolatus</i>	Tapered Galaxias
<i>Galaxias longifundus</i>	West Gippsland Galaxias
<i>Galaxias mcdowalli</i>	McDowall's Galaxias
<i>Galaxias mungadhan</i>	Dargo Galaxias
<i>Galaxiella pusilla</i>	Dwarf Galaxias
<i>Galaxias terenus</i>	Roundsnout Galaxias
<i>Gobiomorphus coxii</i>	Cox's Gudgeon
<i>Hypseleotris compressa</i>	Empire Gudgeon
<i>Maccullochella macquariensis</i>	Trout Cod
<i>Maccullochella peelii</i>	Murray Cod
<i>Macquaria australasica</i>	Macquarie Perch
<i>Melanotaenia fluviatilis</i>	Murray-Darling Rainbowfish (listed as Murray Rainbowfish)
<i>Mogurnda adspersa</i>	Southern Purple-spotted Gudgeon
<i>Mugilogobius paludis</i>	Pale Mangrove Goby
<i>Nannoperca variegata</i>	Variegated Pygmy Perch (listed as Ewens Pigmy Perch)
<i>Neochanna cleaveri</i>	Australian Mudfish
<i>Potamalosa richmondia</i>	Freshwater Herring
<i>Prototroctes maraena</i>	Australian Grayling
<i>Tandanus tandanus</i>	Freshwater Catfish

Crustaceans

<i>Athanopsis australis</i>	Southern Hooded Shrimp
<i>Australatya striolata</i>	Eastern Freshwater Shrimp
<i>Austrogammarus australis</i>	Dandenong Freshwater Amphipod
<i>Austrogammarus haasei</i>	Sherbrooke Amphipod
<i>Engaeus curvisuturus</i>	Curve-tail Burrowing Crayfish
<i>Engaeus mallecoota</i>	Mallacoota Burrowing Crayfish
<i>Engaeus phyllocercus</i>	Narracan Burrowing Crayfish
<i>Engaeus rostrogaleatus</i>	Strzelecki Burrowing Crayfish
<i>Engaeus sternalis</i>	Warragul Burrowing Crayfish
<i>Engaeus urostrictus</i>	Dandenong Burrowing Crayfish
<i>Euastacus armatus</i>	Murray Spiny Cray

<i>Euastacus bispinosus</i>	Glenelg Spiny Cray
<i>Euastacus crassus</i>	Alpine Spiny Cray
<i>Euastacus diversus</i>	Orbost Spiny Cray (listed as Orbost Spiny Freshwater Crayfish)
<i>Euastacus neodiversus</i>	South Gippsland Spiny Cray
<i>Eucalliax tooradin</i>	ghost shrimp species
<i>Gramastacus insolitus</i>	Western Swamp Cray

Insects

<i>Archaeophylax canarus</i>	caddisfly
<i>Hemiphlebia mirabilis</i>	Hemiphlebia Damselfly
<i>Hygrobia australasiae</i>	water beetle species
<i>Leptoperla kallistae</i>	Kallista Flightless Stonefly
<i>Riekoperla darlingtoni</i>	Mt Donna Buang Wingless Stonefly
<i>Riekoperla intermedia</i>	stonefly
<i>Riekoperla isosceles</i>	stonefly
<i>Thaumatoperla alpina</i>	stonefly
<i>Thaumatoperla flaveola</i>	Alpine Stonefly

Molluscs

<i>Allocharopa erskinensis</i>	land snail species
<i>Austropyrgus grampianensis</i>	Dairy Creek Austropyrgus Snail
<i>Geminoropa scindocataracta</i>	land snail species
<i>Hyridella glenelgensis</i>	Glenelg Freshwater Mussel
<i>Notopala sublineata</i>	river snail species
<i>Pernagera gatliffi</i>	land snail species
<i>Victaphanta compacta</i>	Otway Black Snail