5. REFERENCES


Bennett, G., 1834. Wanderings in New South Wales, Batavia, Pedir Coast, Singapore and China. Being the journal of a naturalist in these countries during 1832, 1833 and 1834. Richard Bentley, London. 2 volumes.


Helman, C. E., Gilmour, P. M., Osborne, W. S. and Green, K. 1988. An ecological survey of the upper Cotter catchment wilderness area, Namadgi National Park, ACT. A report to the Conservation Council of the South-east Region and Canberra.


Lintermans, M. 2001a. Fish Monitoring Program to Assess the Effectiveness of Environmental Flows in the Cotter and Queanbeyan rivers. Consultancy report to Ecowise Environmental Ltd, Canberra.


Lintermans, M. 2001a. Fish Monitoring Program to Assess the Effectiveness of Environmental Flows in the Cotter and Queanbeyan rivers. Consultancy report to Ecowise Environmental Ltd, Canberra.


78 Fish in the Upper Murrumbidgee Catchment: A Review of Current Knowledge


O’Connor, J. P., Raadik, T. A. and Mahoney, J. C. 2001. Spawning and habitat requirements of threatened forest-dependant fish species likely to be sensitive to potentially threatening processes in forest ecosystems. Final Report to Parks Flora and Fauna, Department of Natural Resources and Environment, Victoria.


Appendix 1: Annotated bibliography of reports containing information on fish of the Upper Murrumbidgee Catchment.

This bibliography predominantly lists those reports which contain primary data on fish distribution, abundance or ecology in the upper Murrumbidgee Catchment. Included also are some reports which contain anecdotal or historical information on local fish. As with all bibliographies, there will inevitably be omissions and readers are asked to contact the author and provide details of omitted reports which can then be included in any subsequent versions of this bibliography.


ACT Government 1997. Fish Stocking Plan for the Australian Capital Territory. Environment ACT, Canberra. Contains details of the fish stocking program for the ACT.


Anon, 1907. The Fisheries of New South Wales. New South Wales Government Printer. Includes information for what is now the ACT.


Bennett, G. 1834. Wanderings in New South Wales, Batavia, Pedir Coast, Singapore and China. Being the journal of a naturalist in these countries during 1832, 1833 and 1834. Richard Bentley, London. 2 volumes. Includes records of Murray River Crayfish from the local region.


Reproduces a 1974 unpublished report, originally to Australian Department of Construction, on fish of the upper Murrumbidgee catchment. Original author probably B. H. Pratt, and based largely on anecdotal records.


Cowden, K. 1988. Aspects of biology of the Mountain galaxid, Galaxias olidus, Gunther in Pierces Creek, ACT. Unpubl B Sc (Hons) thesis, Department of Zoology, Australian National University. Study site at Pierces Creek.


Lake, J. S. 1967. Freshwater Fish of the Murray Darling River System. State Fisheries Research Bulletin Number 7, Chief Secretary's Department, New South Wales. Includes information on growth rate of Macquarie Perch from Lake Burrinjuck.


Lintermans, M. 2001. Fish Monitoring Program to Assess the Effectiveness of Environmental Flows in the Cotter and Queanbeyan rivers. Consultancy report to Ecowise Environmental Ltd, Canberra. Contains info on fish populations in the Queanbeyan River below Googong, Macquarie Perch in the Queanbeyan, Goodradigbee, Cotter and upper Murrumbidgee rivers, and Two-spined Blackfish in the Cotter and Goobarragandra rivers, and Mountain Creek.


Lintermans, M., Jekabsons, M and Morris, B. 2001. A Survey of Fish in the lower Queanbeyan River. Consultancy report to Queanbeyan City Council. Results of a fish survey of three sites in the lower Queanbeyan River


National Environmental Consulting Services 1997. Queanbeyan River Corridor Study. Includes limited information on fish in the Queanbeyan River.


## GLOSSARY OF TERMS

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Adipose fin</td>
<td>a small fin on trout and smelt, between the dorsal and caudal fins</td>
</tr>
<tr>
<td>Alien</td>
<td>species not native to Australia</td>
</tr>
<tr>
<td>Alpine</td>
<td>above the treeline (~1800 m)</td>
</tr>
<tr>
<td>Anal fin</td>
<td>a single fin on the underside of a fish just behind the anus</td>
</tr>
<tr>
<td>Aquatic</td>
<td>associated with water</td>
</tr>
<tr>
<td>Barbel</td>
<td>slender, fleshy, finger-like appendage ('whisker') usually around the mouth of fish, used in detecting food</td>
</tr>
<tr>
<td>Benthic</td>
<td>associated with the bottom of rivers or lakes</td>
</tr>
<tr>
<td>Billabong</td>
<td>a cutoff river meander that is isolated from the river channel except in floods</td>
</tr>
<tr>
<td>Biomass</td>
<td>the weight of living organisms in an area</td>
</tr>
<tr>
<td>Carnivore</td>
<td>an animal that eats other animals</td>
</tr>
<tr>
<td>Cascade</td>
<td>section of stream or habitat with turbulent, broken water including small waterfalls</td>
</tr>
<tr>
<td>Catchment</td>
<td>the land drained by a stream</td>
</tr>
<tr>
<td>Caudal fin</td>
<td>the tail of a fish</td>
</tr>
<tr>
<td>Caudal peduncle</td>
<td>the thin, hind-part of the body of a fish, between the back of the anal fin and the start of the tail</td>
</tr>
<tr>
<td>Cladoceran</td>
<td>small, free-swimming crustacean ('water flea')</td>
</tr>
<tr>
<td>Copepods</td>
<td>a group of small, planktonic crustaceans which lack walking legs and are usually free swimming; one species is parasitic on fish</td>
</tr>
<tr>
<td>Crepuscular</td>
<td>active at dawn and dusk</td>
</tr>
<tr>
<td>Crustacean</td>
<td>animals with a hard exoskeleton. Highly variable body form, but containing two pairs of antennae (Yabbies, prawns, shrimps crayfish, water fleas, copepods)</td>
</tr>
<tr>
<td>Cumbungi</td>
<td>rushes of the genus Typha, bullrushes</td>
</tr>
<tr>
<td>Demersal</td>
<td>sinking, as in fish eggs</td>
</tr>
<tr>
<td>Detritivore</td>
<td>an animal that eats detritus from the bottom of streams or lakes</td>
</tr>
<tr>
<td>Detritus</td>
<td>dead or decaying organic matter</td>
</tr>
<tr>
<td>Diurnal</td>
<td>active during daylight</td>
</tr>
<tr>
<td>Dorsal, dorsum</td>
<td>relating to the top surface of an animal, its back</td>
</tr>
<tr>
<td>Dorsal fin(s)</td>
<td>fin(s) located on the top of a fish</td>
</tr>
<tr>
<td>Dorso-ventrally</td>
<td>flattened from top to bottom, like a flounder</td>
</tr>
<tr>
<td>compressed</td>
<td></td>
</tr>
<tr>
<td>Ecosystem</td>
<td>an interdependent biological system involving interactions and linkages between living organisms and their physical, chemical and biological components</td>
</tr>
<tr>
<td>Emergent</td>
<td>protruding out of the water, not floating or submerged</td>
</tr>
<tr>
<td>Ephemeral</td>
<td>transient or temporary, not permanent</td>
</tr>
<tr>
<td>Eurythermal</td>
<td>lives in a wide range of water temperatures</td>
</tr>
<tr>
<td>Family</td>
<td>a group of similar genera</td>
</tr>
<tr>
<td>Fishway</td>
<td>a man-made structure to enable fish to move over a physical barrier such as a weir</td>
</tr>
<tr>
<td>Genus (plural: genera)</td>
<td>a group of similar species</td>
</tr>
<tr>
<td><strong>Habitat</strong></td>
<td>where an animal lives, grows and breeds (includes physical and biological components)</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Headwaters</strong></td>
<td>the small streams at the top of a catchment or drainage system</td>
</tr>
<tr>
<td><strong>Herbivore</strong></td>
<td>an animal that eats plants</td>
</tr>
<tr>
<td><strong>Hibernation</strong></td>
<td>a period of minimal activity induced by low temperature</td>
</tr>
<tr>
<td><strong>Invertebrates</strong></td>
<td>animals without backbones such as insects, spiders, crayfish, worms etc</td>
</tr>
<tr>
<td><strong>Lateral</strong></td>
<td>relating to the sides of an animal</td>
</tr>
<tr>
<td><strong>Laterally compressed</strong></td>
<td>flattened from side to side, like a knife blade</td>
</tr>
<tr>
<td><strong>Macroinvertebrates</strong></td>
<td>invertebrates that can be seen with the naked eye (with a length &gt; 1 mm)</td>
</tr>
<tr>
<td><strong>Macrophytes</strong></td>
<td>literally ‘big plants’, usually used to describe water plants other than microscopic algae</td>
</tr>
<tr>
<td><strong>Migratory</strong></td>
<td>has a regular pattern of movements, can be seasonal, altitudinal, international</td>
</tr>
<tr>
<td><strong>Molluscs</strong></td>
<td>animals with a hard outer shell</td>
</tr>
<tr>
<td><strong>Montane</strong></td>
<td>mountainous environments</td>
</tr>
<tr>
<td><strong>Nocturnal</strong></td>
<td>active at night</td>
</tr>
<tr>
<td><strong>Omnivore</strong></td>
<td>an animal that eats both plants and animals</td>
</tr>
<tr>
<td><strong>Pectoral fins</strong></td>
<td>a pair of fins on a fish, usually just behind the gill openings</td>
</tr>
<tr>
<td><strong>Pelagic</strong></td>
<td>lives in the upper part of the water column, not benthic</td>
</tr>
<tr>
<td><strong>Pelvic fins</strong></td>
<td>a pair of fins on a fish, usually below and behind the pectoral fins</td>
</tr>
<tr>
<td><strong>Plankton</strong></td>
<td>microscopic animals and plants that float or drift in the water</td>
</tr>
<tr>
<td><strong>Pool</strong></td>
<td>section of stream or habitat with still or slow flow, usually deep</td>
</tr>
<tr>
<td><strong>Riffle</strong></td>
<td>section of stream or habitat with shallow, fast-flowing, broken water, usually over rocks or stones</td>
</tr>
<tr>
<td><strong>Riparian vegetation</strong></td>
<td>growing beside a river, often water dependent</td>
</tr>
<tr>
<td><strong>Run</strong></td>
<td>section of stream with fast-flow but an unbroken water surface, usually deep</td>
</tr>
<tr>
<td><strong>Sedge</strong></td>
<td>any of the rush or grass-like plants of the family Cyperaceae, often growing in wet places</td>
</tr>
<tr>
<td><strong>Sedimentation</strong></td>
<td>the process of silt and sediment addition to waterbodies</td>
</tr>
<tr>
<td><strong>Snag</strong></td>
<td>a fallen tree or log in the river</td>
</tr>
<tr>
<td><strong>Spawning</strong></td>
<td>shedding of eggs and sperm for breeding, usually in fish</td>
</tr>
<tr>
<td><strong>Species</strong></td>
<td>a group of animals that can breed and produce fertile offspring</td>
</tr>
<tr>
<td><strong>Sub-alpine</strong></td>
<td>the ecological zone immediately above the winter snowline (~1500 m) but below the treeline (~1800 m on the mainland of Australia)</td>
</tr>
<tr>
<td><strong>Substrate</strong></td>
<td>the base, or material on the bottom of a waterbody (rocks, pebbles, sand, silt, etc.)</td>
</tr>
<tr>
<td><strong>Translocated</strong></td>
<td>native animals which have been moved outside of their normal range</td>
</tr>
<tr>
<td><strong>Turbidity</strong></td>
<td>a measure of the transparency or muddiness of water</td>
</tr>
<tr>
<td><strong>Truncate</strong></td>
<td>square-ended (shape of tail in fish)</td>
</tr>
<tr>
<td><strong>Ventral</strong></td>
<td>relating to the under-side of an animal, its belly</td>
</tr>
<tr>
<td><strong>Vertebrates</strong></td>
<td>animals with backbones (birds, fish, fogs, reptiles, mammals, etc.)</td>
</tr>
<tr>
<td><strong>Zooplankton</strong></td>
<td>animal plankton</td>
</tr>
</tbody>
</table>