# APPENDIX I

## FRESHWATER FISHES WITH FOSSIL OCCURRENCES EXTENDING INTO TERTIARY

| Species | Location | Age | Reference |
|---|---|---|---|
| Dipnoi | | | |
| †*Archaeceratodus djelleh* (Kemp) | Duaringa Basin | Tertiary | Kemp (1982a, 1982b, 1997b) |
| | Lake Pitikanta | Late Oligocene-Mid Miocene | Kemp (1982a, 1997b) |
| | Lake Pinpa | Late Oligocene-Mid Miocene | Kemp (1982a, 1997b) |
| †*Archaeceratodus* cf. *djelleh* | Billeroo Ck | Pleistocene or Mid Miocene | Kemp (1982b) |
| †*Archaeceratodus rowleyi* Kemp | Rundle | Eocene | Kemp (1997b) |
| †*Archaeceratodus theganus* Kemp | Lake Pinpa | Late Oligocene-Mid Miocene | Kemp (1997b) |
| | Lake Kanunka | Late Oligocene-Mid Miocene | Kemp (1997b) |
| †*Ceratodus diutinus* Kemp | Lightning Ridge | Aptian | Kemp (1993) |
| | Canary Station | Albian | Kemp (1993) |
| | Lake Pinpa | Late Oligocene-Mid Miocene | Kemp (1993) |
| †*Metaceratodus bonei* Kemp | Lake Palankarinna | Late Oligocene-Mid Miocene | Kemp (1997a) |
| | Lawson Daily Quarry | maybe Pleistocene | Kemp (1997a) |
| | Frome Downs | Late Oligocene-Mid Miocene | Kemp (1997a) |
| †*Metaceratodus ellioti* Kemp | Levelle Downs Station | Upper Cretaceous | Kemp (1997a) |
| | Manarinna Hill | Upper Cretaceous | Kemp (1997a) |
| | Chiltern Hills | Upper Cretaceous | Kemp (1997a) |
| | Babbage Peninsula | Upper Cretaceous | Kemp (1997a) |
| †*Metaceratodus palmeri* (Krefft) | King Ck, Darling Downs | Pleistocene | Kemp (1997a); Molnar & Kurz (1997) |
| | Chinchilla Sands | Early to Mid Pliocene | Kemp (1982a, 1997a) |
| | Eight Mile Plains, Brisbane | post Pliocene | Kemp (1982a, 1997a) |
| †*Metaceratodus wollastoni* (Chapman) | Lightning Ridge | Early Cretaceous | Kemp (1982a, 1997a) |
| | Winton | Upper Cretaceous | Kemp (1982a, 1997a) |
| | Lake Eyre | Upper Cretaceous | Kemp (1997a) |
| | Longreach | Upper Cretaceous | Kemp (1997a) |
| | Manarinna Hill | Upper Cretaceous | Kemp (1997a) |
| | Solitary Hill | Upper Cretaceous | Kemp (1997a) |
| | Simpson Desert | Cretaceous or Tertiary | Kemp (1997a) |
| | White Cliffs | Lower Cretaceous | Kemp (1982a, 1997a) |
| | Clarafield Station | Lower Cretaceous | Kemp (1982a, 1997a) |

| Species | Location | Age | Reference |
|---|---|---|---|
| †*Mioceratodus anemosyrus* Kemp | Riversleigh | Mid Miocene | Kemp (1992, 1997b) |
| | Bullock Ck | Mid Miocene | Kemp (1997b) |
| | Lake Pinpa | Late Oligocene-Mid Miocene | Kemp (1997b) |
| | Leaf locality | Late Oligocene-Mid Miocene | Kemp (1997b) |
| †*Mioceratodus diaphorus* Kemp | Lake Pinpa | Late Oligocene-Mid Miocene | Kemp (1997b) |
| | Frome Downs | Late Oligocene-Mid Miocene | Kemp (1997b) |
| | Bullock Ck | Mid Miocene | Kemp (1997b) |
| †*Mioceratodus gregoryi* (White) | Lower Cooper Ck | Pliocene | Kemp (1982a, 1997b) |
| | Frome Downs | Late Oligocene-Mid Miocene | Kemp (1982a, 1997b) |
| | Lake Pinpa | Late Oligocene-Mid Miocene | Kemp (1982a, 1997b) |
| | Lake Kanunka | Late Oligocene-Mid Miocene | Kemp (1982a, 1997b) |
| | Bullock Ck | Mid Miocene | Kemp (1997b) |
| | Ericmas Quarry | Late Oligocene-Mid Miocene | Kemp (1982a, 1997b) |
| | Redbank Plains | Eocene | Hills (1934); Turner (1982); Vickers-Rich & Molnar (1996); Kemp (1982a, 1997b) |
| †*Mioceratodus poastrus* Kemp | Lake Pinpa | Late Oligocene-Mid Miocene | Kemp (1997b) |
| | Lake Kanunka | Late Oligocene-Mid Miocene | Kemp (1997b) |
| | Lake Ngapakldi | Late Oligocene-Mid Miocene | Kemp (1997b) |
| | Stirton Quarry | Late Oligocene-Mid Miocene | Kemp (1997b) |
| | Cooper's Ck | | Kemp (1997b) |
| †*Neoceratodus eyrensis* (White) | Lower Cooper Ck | Pliocene | Kemp (1982a, 1997b) |
| | Riversleigh | Middle Miocene | Kemp (1997b) |
| | Lake Pinpa | Late Oligocene-Mid Miocene | Kemp (1982a, 1997b) |
| *Neoceratodus forsteri* | Lightning Ridge | Middle Albian | Kemp (1982a, 1997b) |
| | Chinchilla Sands | Early-Middle Pliocene | Kemp (1982a, 1997b) |
| | Etadunna Formation | Late Oligocene-Mid Miocene | Kemp (1982a) |
| | Wipajiri Formation | Pliocene-Quaternary | Kemp (1982a) |
| †*Neoceratodus nargun* (Kemp) | Cape Otway | Late Albian-Early Albian | Kemp (1997b) |
| | Eagle's Nest Rock | Valangian-Aptian | Kemp (1997b) |
| | Riversleigh | Middle Miocene | Kemp (1997b) |
| | Punchbowl | Valangian-Aptian | Kemp (1997b) |
| | Lake Kanunka | Late Oligocene-Mid Miocene | Kemp (1997b) |

| Species | Location | Age | Reference |
|---|---|---|---|
| Misc. Dipnoi | | | |
| lungfish | Lake Frome | Miocene | Tedford *et al*. (1977) |
| *Neoceratodus* sp. | Lake Palankarinna | Mid Miocene-Mid Pliocene | Pledge (1984) |
| *Neoceratodus* sp. | Lake Palankarinna | Miocene | Estes (1984) |
| *Epiceratodus* | Lake Kanunka | Pleistocene | Williams (1980) |
| *Epiceratodus* | Cooper Creek | Pleistocene | Williams (1980) |
| Dipnoi | Cooper Creek | Pleistocene | Williams (1980) |
| Ceratodontidae | Cooper Creek | Pleistocene | Williams (1980) |
| Dipnoi | Warburton River | Pleistocene | Williams (1980) |
| Osteoglossidae | | | |
| †*Phareodus queenslandicus* Hills | Redbank & Cooper's Plains | Eocene | Hills (1934); Turner (1982); Li (1994); Vickers-Rich & Molnar (1996) |
| *Scleropages* cf. *leichardti* | The Narrows, Gladstone | Miocene-Oligocene? | Hills (1943); Turner (1982) |
| Gonorynchidae | | | |
| †*Notogoneus parvus* Hills | Redbank Plains | Eocene | Hills (1934); Turner (1982); Vickers-Rich & Molnar (1996) |
| Ariidae | | | |
| Ariidae | Lake Palankarinna | Miocene | Estes (1984) |
| Ariidae | Lake Palankarinna | Mid Miocene-Mid Pliocene | Pledge (1984) |
| Plotosidae | | | |
| *Tandanus tandanus* | King Creek, Darling Downs | Pleistocene | Molnar & Kurz (1997) |
| *Tandanus tandanus* | Brigalow, Darling Downs | Pleistocene? | Longman (1929); Turner (1982) |
| *Tandanus tandanus* | Renmark | Pleistocene | Williams (1980) |
| Misc. Siluriformes | | | |
| Siluriformes | Warburton River | Pleistocene | Williams (1980) |
| Siluriformes | Cooper Creek | Pleistocene | Williams (1980) |
| catfish | Lake Frome | Miocene | Tedford *et al*. (1977) |
| Percichthyidae | | | |
| *Maccullochella 'macquariensis'* | Cooma | 12-21 Ma | Hills (1946); Tulip *et al*. (1982) |
| *Maccullochella 'macquariensis'* | Warrumbungles | 13.6-17.1 Ma | Hills (1946); Johnson (1989) |
| *Maccullochella 'macquariensis'* | Brigalow, Darling Downs | Pleistocene? | Longman (1929); Turner (1982) |
| *Maccullochella peelii* | Renmark | Pleistocene | Williams (1980) |
| *Macquaria ambigua* | Renmark | Pleistocene | Williams (1980) |

| Species | Location | Age | Reference |
|---|---|---|---|
| †*Macquaria* (=*Percalates*) *antiquus* | Redbank Plains | Eocene | Hills (1934); Turner (1982); Vickers-Rich & Molnar (1996) |
| *Macquaria* (=*Percalates*) | The Narrows, Gladstone | Miocene-Oligocene? | Hills (1943); Turner (1982) |
| *Macquaria* (=*Ctenolates*) *avus* (Woodward) | Nimbin | Tertiary | Woodward (1902) |
| *Macquaria* (=*Percalates*) sp. | Strathpine/Bald Hills | Oligocene? | Hills (1934); Turner (1982) |
| *Macquaria* (=*Percalates*) sp. | The Narrows, Gladstone | Miocene-Oligocene? | Hills (1943); Turner (1982) |
| *Macquaria* (=*Percalates*) sp. | Brittain's Quarry near Darra | Late Tertiary | Hill *et al.* (1970); Turner (1982) |
| Percichthyidae | Bundamba | Oligocene? | Hills (1934); Turner (1982) |
| Percichthyidae | Lake Palankarinna | Miocene | Estes (1984) |
| Percichthyidae | Lake Palankarinna | Mid Miocene-Mid Pliocene | Pledge (1984) |
| Terapontidae | | | |
| Terapontidae | Rundle | Eocene | Turner (1981, 1982); Henstridge & Missen (1982) |
| Lutjanidae | | | |
| *Lutjanus* cf. *erythropterus* | The Narrows, Gladstone | Miocene-Oligocene? | Hills (1943); Turner (1982) |
| Misc. teleosts | | | |
| unidentified | Salt Creek | Pleistocene | Williams (1980) |
| unidentified | Cooper Creek | Pleistocene | Williams (1980) |
| unidentified | Hookina Creek | Pleistocene | Williams (1980) |
| teleost | Cooper's Plains | Eocene-Oligocene? | Hills (1934); Turner (1982) |
| teleost | Parish of Wallbury | Tertiary | Hills (1943) |
| teleosts? | 'Bundah', Darling Downs | Pleistocene | Molnar & Kurz (1997) |
| teleosts | 'Gowrie Ck', Darling Downs | Pleistocene | Molnar & Kurz (1997) |
| teleosts | Pilton, Darling Downs | Pleistocene | Molnar & Kurz (1997) |
| teleosts | O'Hara's Bridge, Darling Downs | Pleistocene | Molnar & Kurz (1997) |
| teleosts | Sutton's site, Darling Downs | Pleistocene | Molnar & Kurz (1997) |
| teleosts | Lake Palankarinna | Pleistocene | Williams (1980) |
| percoid fish | The Narrows, Gladstone | Miocene-Oligocene? | Hills (1943); Turner (1982) |

# APPENDIX II

# SPECIES EXCLUDED FROM THE ANALYSIS

Mordaciidae
*Mordacia mordax* (Richardson 1846)

Geotriidae
*Geotria australis* Gray 1851

Anguillidae
*Anguilla australis* Richardson 1841
*Anguilla bicolor* McClelland 1844
*Anguilla obscura* Günther 1872
*Anguilla reinhardtii* Steindachner 1867

Clupeidae
*Potamalosa richmondia* (Macleay 1879)

Engraulidae
*Thyrssa scratchleyi* (Ramsey & Ogilby 1886)

Retropinnidae
*Retropinna tasmanica* McCulloch 1920

Aplochitonidae
*Lovettia sealii* (Johnston 1883)

Galaxiidae
*Galaxias brevipinnis* Günther 1866
*Galaxias maculatus* (Jenyns 1842)
*Galaxias truttaceus* Valenciennes (ex Cuvier) in Cuvier & Valenciennes 1846
*Neochanna cleaveri* (Scott 1934)

Prototroctidae
*Prototroctes maraena* Günther 1864

Ariidae
*Arius berneyi* (Whitley 1941)
*Arius graeffei* Kner & Steindachner 1867
*Arius leptaspis* (Bleeker 1862)
*Cinetodus froggatti* (Ramsey & Ogilby 1886)

Hemiramphidae
*Arrhamphus sclerolepis* Günther 1866

Belonidae
*Strongylura krefftii* (Günther 1866)

Pseudomugilidae
*Pseudomugil cyanodorsalis* Allen & Sarti 1983
*Pseudomugil inconspicuus* Roberts 1978

Synbranchidae
*Monopterus albus* (Zouiev 1787)
*Ophisternon gutturale* (Richardson 1845)

Tetrarogidae
*Notesthes robusta* (Günther 1860)

Latidae
*Lates calcarifer* (Bloch 1790)

Kuhliidae
*Kuhlia marginata* (Cuvier 1829)
*Kuhlia rupestris* (Lacépède 1802)

Lutjanidae
*Lutjanus erythropterus* Bloch 1790

Mugilidae
*Myxus petardi* (Castelnau 1875)

Bovichtidae
*Pseudaphritis urvillii* (Valenciennes in Cuvier & Valenciennes 1832)

Eleotridae
*Ophiocara porocephala* (Valenciennes in Cuvier & Valenciennes 1837)

Gobiidae
*Pseudogobius olorum* (Sauvage 1880)
*Redigobius bikolanus* (Herre 1927)

Soleidae
*Aseraggodes klunzingeri* (Weber 1907)
*Brachirus salinarum* Ogilby 1910
*Brachirus selheimi* (Macleay 1882)

# APPENDIX III

# SPECIES INCLUDED IN THE ANALYSIS

Mordaciidae
*Mordacia praecox* Potter 1968

Neoceratodontidae
*Neoceratodus forsteri* (Krefft 1870)

Clupeidae
*Nematalosa erebi* (Günther 1868)

Osteoglossidae
*Scleropages jardinii* (Saville-Kent 1892)
*Scleropages leichardti* Günther 1864

Retropinnidae
*Retropinna semoni* (Weber 1895)

Lepidogalaxiidae
*Lepidogalaxias salamandroides* Mees 1961

Galaxiidae
*Galaxias auratus* Johnston 1883
*Galaxias fontanus* Fulton 1978
*Galaxias fuscus* Mack 1936
*Galaxias johnstoni* Scott 1936
*Galaxias occidentalis* Ogilby 1899
*Galaxias olidus* Günther 1866
*Galaxias parvus* Frankenberg 1968
*Galaxias pedderensis* Frankenberg 1968
*Galaxias rostratus* Klunzinger 1872
*Galaxias tanycephalus* Fulton 1978
*Galaxiella munda* McDowall 1978
*Galaxiella nigrostriata* (Shipway 1953)
*Galaxiella pusilla* (Mack 1936)
*Paragalaxias dissimilis* (Regan 1906)
*Paragalaxias eleotroides* McDowall & Fulton 1978
*Paragalaxias julianus* McDowall & Fulton 1978
*Paragalaxias mesotes* McDowall & Fulton 1978

Ariidae
*Arius midgleyi* Kailola & Pierce 1988

Plotosidae
*Anodontiglanis dahli* Rendahl 1922
*Neosilurides cooperensis* Allen & Feinberg 1998
*Neosilurus ater* (Perugia 1894)
*Neosilurus brevidorsalis* (Günther 1867)
*Neosilurus gloveri* Allen & Feinberg 1998
*Neosilurus hyrtlii* Steindachner 1867
*Neosilurus mollespiculum* Allen & Feinberg 1998
*Neosilurus pseudospinosus* Allen & Feinberg 1998
*Porochilus argenteus* (Zeitz 1896)
*Porochilus obbesi* Weber 1913
*Porochilus rendahli* (Whitley 1928)
*Tandanus bostocki* Whitley 1944
*Tandanus tandanus* Mitchell 1838

Atherinidae
*Craterocephalus amniculus* Crowley & Ivantsoff 1990
*Craterocephalus centralis* Crowley & Ivantsoff 1990
*Craterocephalus cuneiceps* Whitley 1944
*Craterocephalus dalhousiensis* Ivantsoff & Glover 1974
*Craterocephalus eyresii* (Steindachner 1883)
*Craterocephalus fluviatilis* McCulloch 1912
*Craterocephalus gloveri* Crowley & Ivantsoff 1990
*Craterocephalus helenae* Ivantsoff, Crowley, & Allen 1987
*Craterocephalus lentigenosus* Ivantsoff, Crowley, & Allen 1987
*Craterocephalus marianae* Ivantsoff, Crowley, & Allen 1987
*Craterocephalus marjoriae* Whitley 1948
*Craterocephalus stercusmuscarum* (Günther 1867)
*Craterocephalus stramineus* (Whitley 1950)

Melanotaenidae
*Cairnsichthys rhombosomoides* (Nichols & Raven 1928)
*Iriatherina werneri* Meinken 1974
*Melanotaenia duboulayi* (Castelnau 1878)
*Melanotaenia eachamensis* Allen & Cross 1982
*Melanotaenia exquisita* Allen 1978
*Melanotaenia fluviatilis* (Castelnau 1878)
*Melanotaenia gracilis* Allen 1978
*Melanotaenia maccullochi* Ogilby 1915
*Melanotaenia nigrans* (Richardson 1843)
*Melanotaenia pygmaea* Allen 1978
*Melanotaenia splendida* (Peters 1866)
*Melanotaenia trifasciata* (Rendahl 1922)
*Rhadinocentrus ornatus* Regan 1914

Pseudomugilidae
*Pseudomugil gertrudae* Weber 1911
*Pseudomugil mellis* Allen & Ivantsoff 1982
*Pseudomugil signifer* Kner 1866
*Pseudomugil tenellus* Taylor 1964
*Scaturiginichthys vermeilipinnis* Ivantsoff, Unmack, Saeed, & Crowley 1991

Synbranchidae
*Ophisternon candidum* (Mees 1962)

Ambassidae
*Ambassis agassizii* Steindachner 1867
*Ambassis agrammus* Günther 1867
*Ambassis elongatus* (Castelnau 1878)
*Ambassis macleayi* (Castelnau 1878)
*Ambassis miops* Günther 1872
*Ambassis mulleri* Klunzinger 1880
*Denariusa bandata* Whitley 1948
*Parambassis gulliveri* (Castelnau 1878)

Percichthyidae
*Bostockia porosa* Castelnau 1873
*Gadopsis bispinosus* Sanger 1984
*Gadopsis marmoratus* Richardson 1848
*Maccullochella ikei* Rowland 1986
*Maccullochella macquariensis* (Cuvier in Cuvier & Valenciennes 1829)
*Maccullochella peelii* (Mitchell 1838)
*Macquaria ambigua* (Richardson 1845)
*Macquaria australasica* Cuvier 1830 in Cuvier & Valenciennes
*Macquaria colonorum* (Günther 1863)
*Macquaria novemaculeata* (Steindachner 1866)
*Nannatherina balstoni* Regan 1906
*Nannoperca australis* Günther 1861
*Nannoperca obscura* (Klunzinger 1872)
*Nannoperca oxleyana* Whitley 1940
*Nannoperca variegata* Kuiter & Allen 1986
*Nannoperca vittata* (Castelnau 1873)
N. gen. N. sp.

Terapontidae
*Amniataba percoides* (Günther 1864)
*Bidyanus bidyanus* (Mitchell 1838)
*Bidyanus welchi* (McCulloch & Waite 1917)
*Hannia greenwayi* Vari 1978
*Hephaestus carbo* (Ogilby & McCulloch 1916)
*Hephaestus epirrhinos* Vari & Hutchins 1978
*Hephaestus fuliginosus* (Macleay 1883)
*Hephaestus jenkinsi* (Whitley 1945)
*Hephaestus tulliensis* De Vis 1884
*Leiopotherapon aheneus* (Mees 1963)
*Leiopotherapon macrolepis* Vari 1978)
*Leiopotherapon unicolor* (Günther 1859)
*Pingalla gilberti* Whitley 1955
*Pingalla lorentzi* (Weber 1910)
*Pingalla midgleyi* Allen & Merrick 1984
*Scortum barcoo* (McCulloch & Waite 1917)
*Scortum hillii* (Castelnau 1878)
*Scortum neili* Allen, Larson & Midgley 1993
*Scortum parviceps* (Macleay 1883)
*Syncomistes butleri* Vari 1978
*Syncomistes kimberleyensis* Vari 1978
*Syncomistes rastellus* Vari & Hutchins 1978
*Syncomistes trigonicus* Vari 1978
*Variichthys lacustris* (Mees & Kailola 1977)

Apogonidae
*Glossamia aprion* (Richardson 1842)

Toxotidae
*Toxotes chatareus* (Hamilton 1822)
*Toxotes lorentzi* Weber 1910
*Toxotes oliglepis* Bleeker 1876

Eleotridae
*Gobiomorphus australis* (Krefft 1864)
*Gobiomorphus coxii* (Krefft 1864)
*Hypseleotris aurea* (Shipway 1950)
*Hypseleotris compressa* (Krefft 1864)
*Hypseleotris ejuncida* Hoese & Allen in Allen 1982
*Hypseleotris galii* (Ogilby 1898)
*Hypseleotris kimberleyensis* Hoese & Allen in Allen 1982
*Hypseleotris klunzingeri* (Ogilby 1898)
*Hypseleotris regalis* Hoese & Allen in Allen 1982

*Hypseleotris* sp. A Midgley's carp gudgeon
*Hypseleotris* sp. B Lake's carp gudgeon
*Hypseleotris* sp. C Murray carp gudgeon
*Hypseleotris* sp. D Katherine River carp gudgeon
*Kimberleyeleotris notata* Hoese & Allen 1987
*Kimberleyeleotris hutchinsi* Hoese & Allen 1987
*Milyeringa veritas* Whitley 1945
*Mogurnda adspersa* (Castelnau 1878)
*Mogurnda mogurnda* (Richardson 1844)
*Mogurnda* sp. 1 false-spotted mogurnda
*Mogurnda* sp. 2 Flinder's Ranges mogurnda
*Ophieleotris aporos* (Bleeker 1854)
*Oxyeleotris aruensis* (Weber 1911)
*Oxyeleotris fimbriata* Weber 1907
*Oxyeleotris gyrinoides* (Bleeker 1853)
*Oxyeleotris lineolatus* (Steindachner 1867)
*Oxyeleotris nullipora* Roberts 1978
*Oxyeleotris selheimi* (Macleay 1884)
*Philypnodon grandiceps* (Krefft 1864)
*Philypnodon* sp. dwarf flathead gudgeon

Gobiidae
*Awaous acritosus* Watson 1994
*Chlamydogobius eremius* (Zeitz 1896)
*Chlamydogobius gloveri* Larson 1995
*Chlamydogobius japalpa* Larson 1995
*Chlamydogobius micropterus* Larson 1995
*Chlamydogobius squamigenus* Larson 1995
*Glossogobius aureus* Akihito & Meguro 1975
*Glossogobius celebius* (Valenciennes in Cuvier & Valenciennes 1837)
*Glossogobius concavifrons* (Ramsey & Ogilby 1886)
*Glossogobius giurus* (Hamilton 1822)
*Glossogobius* sp. A dwarf goby
*Glossogobius* sp. B Mulgrave goby
*Glossogobius* sp. C square-blotch goby
*Stiphodon allen* Watson 1996

Kurtidae
*Kurtus gulliveri* Castelnau 1878

# APPENDIX IV

# CORRECTIONS AND INCORRECT RECORDS

In various museum catalogs and literature accounts several records exist that are considered incorrect, the population introduced, or taxonomy has changed which could result in confusion. This is a non-exhaustive list of corrections state by state. Translocations of native fish are usually only mentioned for established populations, and typically not for angling species. Many translocations have likely occurred that can never be documented. In some parts acclimatization societies were established early, and likely translocated many native fishes without any specific documentation as to the source or release location (O'Conner, 1897; Hamlyn-Harris, 1930). Where possible references first making the correction is given, determinations made by myself are shown as "(Unmack)." Many translocations are given in Wager (1993) for Queensland that are not necessarily repeated here. I use the following general format, species name, location, and source followed by an explanation. Fishes are listed in phylogenetic order by family, and then alphabetically within family.

**Australia**

Two species of *Oxyeleotris* have long been recognized in northern Australia, *Oxyeleotris lineolatus* and *Oxyeleotris herwerdenii* (or as *Oxyeleotris* sp.). However, confusion has existed as to which species was which (Allen, 1989). *Oxyeleotris herwerdenii* is presently considered a junior synonym of *Oxyeleotris selheimi.* The following corrections are made (Unmack).

*Oxyeleotris herwerdenii* (Allen, 1982) is equivalent to *O. lineolatus.*
*Oxyeleotris lineolatus* (Allen, 1982) is equivalent to *O. selheimi.*
*Oxyeleotris herwerdenii* (Merrick & Schmida, 1984) is equivalent to *O. selheimi.*
*Oxyeleotris* sp. (Larson & Martin, 1990) is equivalent to *O. selheimi.*
*Oxyeleotris* sp. A (Allen, 1989) is equivalent to *O. selheimi.*
*Oxyeleotris herwerdenii* (Allen, 1991) is equivalent to *O. selheimi.*

Both *Oxyeleotris lineolatus* and *O. selheimi* occur in New Guinea as well as Australia based on specimens collected by Roberts (1978) I examined in USNM.

**New South Wales**

*Mordacia mordax* from Richmond River (AM) is probably misidentified or in error as this is a considerable distance from its known native range (Unmack).

*Tandanus tandanus* records south of and not including Manning River are all considered non-native (Pollard, Davis & Llewellyn, 1996).

*Macquaria australasica* from Sydney Coast / Georges drainages (AM) are not considered native as no other records from this drainage exist (Unmack).

*Glossamia aprion* records in northern NSW, (Pollard, 1980, 1996; Llewellyn, 1983) are considered incorrect. The type locality is Port Jackson (NSW), and one 1868 collection from Cox River exists (AM); both are considered incorrect as no other records exist from NSW (Unmack).

**Northern Territory**

*Scleropages jardinii* from Finnis River (NTM) is an error in the catalog (Larson, pers. comm.).

*Porochilus obbesi* from Daly River (Allen, 1989) is incorrect. It appears as if Yam Creek was thought to be a tributary of Daly River, however Yam Creek is part of the Adelaide River drainage.

*Strongylura krefftii* from Finke River (AMNH) is correctly identified, but is considered incorrect as no other records exist from this drainage (Unmack).

*Craterocephalus cuneiceps* from Finke River (Allen, 1982, 1989; Merrick & Schmida, 1984; and others) are synonymous with *C. centralis* (Unmack).

*Denariusa bandata* from Finke River (AMNH) is correctly identified, but is considered incorrect as no other records exist from this drainage (Unmack).

*Parambassis gulliveri*; Allen & Burgess (1990) show two records in the NT, one east of McArthur River, the other in the vicinity of Mann River. These were apparently a typographic error as no records from these drainages were found (Unmack).

*Toxotes lorentzi* from Daly River (Allen, 1978, 1989) is incorrect. It appears as if Yam Creek was thought to be a tributary of Daly River, however Yam Creek is part of the Adelaide River drainage.

*Oxyeleotris fimbriata* from Adelaide River (NTM) is a misidentification in the catalog; the present identification is *Odonteleotris* sp., probably *macrodon* (Bleeker) (Larson, pers. comm.).

*Oxyeleotris* sp. from East Alligator and Adelaide rivers (NTM) is a misidentification in the catalog; the present identification is *Odonteleotris* sp., probably *macrodon* (Larson, pers. comm.).

**Queensland**

*Anodontiglanis dahli* from Gilbert and Flinders basins (Wager, 1993) are incorrect (Wager, pers. comm.).

*Neosilurus* sp. from Normanby River (Kennard, pers. comm.) is an additional, as yet unidentified plotosid that occurs in this drainage. However, its identity remains unknown as the specimen could not be found (Kennard, pers. comm.).

*Porochilus argenteus*; Midgley, Midgley & Rowland (1991) state this species is absent from Bulloo River based on a personal communication from McKay. However, this species is not uncommon in this drainage based on museum specimens and personal collecting (Unmack, 1995).

*Porochilus obbesi* from Watson River (near Aurukun) (Wager, 1993; QM) is a misidentification of *P. rendahli* (Johnson, pers. comm.).

*Tandanus tandanus* from Burdekin River is introduced (Hogan and Pusey, pers. comm.).

*Craterocephalus marjoriae* from Norman River (Allen, 1989; Wager, 1993) were described as *Craterocephalus munroi* (Crowley & Ivantsoff, 1988).

*Craterocephalus marjoriae* from Burdekin River (Allen, 1989; Wager, 1993); only one collection exists (AM), which is of dubious authenticity. It is not considered native (Pusey, pers. comm.) (Unmack).

*Melanotaenia duboulayi*; all records (Wager, 1993; and others) north of Mullet Creek (a separate coastal drainage just north of Baffle Creek) are equivalent to *Melanotaenia s. splendida* (Unmack).

*Melanotaenia trifasciata* from Gilbert, Mitchell, Coleman, Holroyd, and Watson basins (Wager, 1993) are considered misidentifications based on a lack of evidence for this species given considerable collecting in this region (Unmack).

*Melanotaenia trifasciata* reported by Pusey (pers. comm.) from Russell and Johnstone rivers is not considered native (Unmack).

*Rhadinocentrus ornatus* from Fitzroy River (Wager, 1993) is based upon one collection (QM), and is of dubious authenticity (Unmack).

*Pseudomugil mellis* from Little Yabba Creek (Mary drainage) (Saeed, Ivantsoff & Allen, 1989) is considered a misidentification, or in error, as no other records exist from here despite considerable sampling effort (Marshall, pers. comm.).

*Ambassis agassizii* from Normanby River (Kennard, 1992; Herbert *et al*., 1995) was listed in error, the record should be *Ambassis macleayi* (Kennard, pers. comm.).

*Ambassis agrammus* from Annan River (Hortle & Pearson, 1990; Wager, 1993) could be either *A. agrammus* or *A. agassizii* as specimens were apparently not retained and the taxonomy was confusing prior to Allen & Burgess (1990). Also, both species occur in this region (NEQ).

*Denariusa bandata* from Georgina River (Glover & Sim, 1978; Glover, 1982; Wager, 1993; and others) was based on one collection (SAM) which was re-identified by Unmack as *Ambassis mulleri* (Unmack, 1995).

*Denariusa bandata* from Gregory River (Wager, 1993) was based on one collection (SAM) which was re-identified by Unmack as *Ambassis mulleri.*

*Macquaria novemaculeata*; records north of the Noosa River are all considered translocations (Wager, 1993), however Merrick & Schmida (1984) record them from Mary River based on Midgley (pers. comm.). Noosa River is considered their northern limit in this study. Translocations may have made it impossible to determine their true natural northern limit.

*Hephaestus fuliginosus* from Annan River (Hortle & Pearson, 1990; Wager, 1993) were "…stocked by the then Queensland Fisheries Service in the Annan in May 1980 (M. McKinnon, personal communication)." (Hortle & Pearson, 1990).

*Leiopotherapon unicolor*; McKay & Johnson (1990) document their introduction into Brisbane River and North Pine Dam (Wager, 1993). All records south of Mary River are considered introduced (Unmack).

*Pingalla gilberti* from Jardine Drainage (Wager, 1993) is likely a misidentification of *Pingalla lorentzi* given their known occurrences (Unmack).

*Scortum barcoo* from Ducie Drainage (Wager, 1993) could be *Scortum hillii* (which was only recently identified from Gulf of Carpentaria drainages) or a misidentification as no one else has reported *Scortum* from this area. Considered to be erroneous (Unmack).

*Scortum hillii* from Burdekin Drainage (Wager, 1993) is likely a misidentification, no museum specimens exist and it was not collected recently despite considerable effort (Pusey, pers. comm.).

*Glossamia aprion* from Logan-Albert drainage (Wager, 1993) could be introduced; only this record exists and it was not collected by Kennard during extensive sampling (Kennard, pers. comm.).

*Hypseleotris galii*; all records north of Baffle drainage (Wager, 1993) are considered misidentifications except the known introduction into Lake Tinaroo (Barron River) (Wager, 1993). Unusual specimens that may prove to be this species were collected in Waterpark Creek by Unmack in 1997; they are yet to be re-examined. Records north of Baffle drainage are typically misidentifications of *Hypseleotris* sp. A (Unmack).

*Hypseleotris* sp. B from Burnett River (Kennard, pers. comm.; subsequently confirmed by Unmack) is considered introduced given the number of hatchery stockings in this drainage and its absence in other coastal drainages (Unmack).

*Mogurnda mogurnda*; all east coast records in Wager (1993) were ignored in this study as no specimens exist to confirm their identification.

*Oxyeleotris lineolatus*; all records in Wager (1993) were ignored in this study as the species was subsequently separated into two species (see page 144), hence these records are no longer reliable (Unmack).

*Oxyeleotris lineolatus* from Burdekin and Barron rivers (Wager, 1993) are introduced (Wager, 1993; Hogan, pers. comm.). Whether the population below Burdekin Falls is native is debated and difficult to resolve (see page 49).

*Oxyeleotris lineolatus* from Noosa River (Wager, 1993) is considered introduced, or in error, as no other records exist this far south (Unmack).

*Oxyeleotris selheimi* from Barron River (QM) is introduced (Wager, 1993; as *Oxyeleotris lineolatus*).

*Philypnodon grandiceps* from Burdekin River (QM) is considered introduced by Pusey (pers. comm.).

*Glossogobius giurus* from Georgina River (Glover & Sim, 1978; Glover, 1982; Wager, 1993; Unmack, 1995; and others), is most likely a misidentification; all specimens from this drainage examined by Hoese are *Glossogobius aureus* (Hoese, pers. comm.).

*Glossogobius giurus*; all records in Wager (1993) north and west of Normanby drainage were ignored due to difficulties with identification within this genus (Unmack). Additional *Glossogobius* spp. occurring south of here are unlikely to be confused with *G. giurus* and are considered valid records. Most *Glossogobius* spp. records in this study were based on identifications from Hoese (pers. comm.).

*Glossogobius* sp. 1 records in Herbert *et al*. (1995) are referable to *Glossogobius* sp. B (Pusey, pers. comm.).

*Glossogobius* sp. 2 records in Herbert *et al*. (1995) are referable to *Glossogobius* sp. C (Pusey, pers. comm.).

**South Australia**

*Anguilla australis* from Murray River (SAM) is considered incorrect. It is probably a misidentification or error as no other records from this drainage exist (Unmack).

*Anguilla australis* from Kangaroo Island (SAM) is considered incorrect. It is probably a misidentification or error as no other records from this drainage exist (Unmack).

*Galaxias olidus* from Kangaroo Island (SAM) is considered incorrect. It is probably a misidentification or error as no other records from this drainage exist (Unmack).

*Galaxias rostratus* from Murray River at Murray Bridge (McDowall & Frankenberg, 1981) is listed as SAM 111 by McDowall (pers. comm.). However, this catalog number is not a galaxiid; although specimen SAM 1111 is *Galaxias olidus* from the same location (Sim, pers. comm.) and is shown on the distribution map for that species (McDowall &

Frankenberg, 1981); hence the original record appears most likely incorrect in McDowall & Frankenberg (1981) (McDowall, pers. comm.).

*Gadopsis marmoratus* from Kangaroo Island (SAM) is considered incorrect. It is probably a misidentification or error as no other records from this drainage exist (Unmack).

*Hypseleotris klunzingeri* from Millicent Coast drainage (Atkins, Lloyd & Gray, 1988) is considered introduced probably along with sport fish purchased from hatcheries (Unmack).

**Tasmania**

*Macquaria colonorum* from Blackman River at Dunalley (Frankenberg, 1974) is based on "…heads collected on the bank near the mouth (B.C. Mollison, personal communication)." (Frankenberg, 1974). No specimens were retained, hence the record cannot be confirmed and is not considered valid (Unmack).

*Gadopsis marmoratus* from southern TAS are all considered introduced (Frankenberg, 1974).

**Victoria**

*Potamalosa richmondia* from Warrnambool (MoV) is likely in error as this is beyond their known range (Unmack).

*Macquaria australasica* from Glenelg, Barwon, and Yarra drainages are all introduced (Cadwallader, 1981).

*Macquaria novemaculeata* from Yarra River (MoV) is considered introduced (Unmack).

*Hypseleotris klunzingeri* from Lake Charlegrark (MoV) is considered introduced given historical fish introductions to this lake (Cadwallader & Backhouse, 1983).

*Hypseleotris* sp. 4 (tentatively) from Glenelg drainage (Jackson & Davies, 1983; MoV) is considered introduced (Cadwallader & Backhouse, 1983).

*Hypseleotris* sp. 4 from Bunyip drainage (MoV) is considered introduced as the farm dam they came from was recently stocked with *Macquaria ambigua* (based on information provided with the specimens) (Unmack).

**Western Australia**

*Arius* sp. A records listed by Hutchins (1981) are synonymous with *Arius midgleyi*.

*Craterocephalus* sp. from Carson River (AM); specimens are on loan, but could not be located, hence identification remains unknown. No other craterocephalids are recorded from this drainage. Frozen material also exists (AM).

*Melanotaenia gracilis* from Berkeley River (Hutchins, 1981) appears incorrect as no specimens could be located in WAM (Allen, pers. comm.).

*Ambassis agrammus* records in Hutchins (1981) are referable to *Ambassis mulleri* (Allen & Burgess, 1990).

*Glossogobius aureus* records in Hutchins (1981) are referred to *Glossogobius giurus* as this is the most common *Glossogobius* spp. there, and *Glossogobius aureus* is absent west of the vicinity of Ord River (Hoese, pers. comm.).

**New Guinea**

*Arius midgleyi*; Allen (1989) incorrectly states it is found in New Guinea. It is only known from Australia (Kailola, pers. comm.).

# APPENDIX V

# BATCH FILES USED WITH NTSYS

**Cluster analysis batch file for Jaccard's Coefficient**

```
" Compute a distance matrix
*simqual o=fish2.nts c=j r=outj.nts d=col
" Do a cluster analysis of the distance matrix
*sahn o=outj.nts r=outjupgmatr.nts cm=upgma
*sahn o=outj.nts r=outjsingletr.nts cm=single
*sahn o=outj.nts r=outjcompletetr.nts cm=complete
" Compute cophenetic values
*coph o=outjupgmatr.nts r=outjupgmacoph.nts
" Compute the cophenetic correlation
*mxcomp x=outjupgmacoph.nts y=outj.nts
" Display phenogram
*tree o=outjupgmatr.nts
" do a consensus tree of single and complete trees
*consens o1=outjsingletr.nts o2=outjcompletetr.nts r=jconssincom.nts
" Display phenogram
*tree o=jconssincom.nts
```

**Ordination analysis batch file for Jaccard's Coefficient**

```
"  Use PCOORDA to obtain an initial configuration
*DCENTER O=outj.nts R=distCentered1j.nts
*EIGEN O=distCentered1j.nts N=3 R=init1j.nts
"  non-metric MDSCALE using initial solution
*MDSCALE O=outj.nts N=3 I=init1j.nts R=final1j.nts D=col SC=stress1
"  rotate result for ease in viewing
*SIMINT O=final1j.nts C=varcov R=vcv1j.nts D=row
*EIGEN O=vcv1j.nts N=3 R=vect1j.nts
*PROJ O=final1j.nts D=col F=vect1j.nts R=FinalRotated1j.nts
*OUTPUT O=FinalRotated1j.nts
" plot the final rotated configuration
*MXPLOT D=row O=FinalRotated1j.nts G=jmst.nts
"*MOD3D O=FinalRotated1j.nts G=jmst.nts
"  computer distance for output from mdscale
*SIMINT O=final1j.nts C=euclid R=euclidj.nts D=col
"  use mxcomp to get the coph. corr
*MXCOMP X=euclidj.nts Y=outj.nts
```

# APPENDIX VI

## SPECIES INCLUDED IN FIGURES 15-17

| | Fig. 15 | Fig. 16 | Fig. 17 |
|---|---|---|---|
| 1 | *Nematalosa erebi* | *Hypseleotris compressa* | *Hypseleotris compressa* |
| 2 | *Neosilurus hyrtlii* | *Nematalosa erebi* | *Leiopotherapon unicolor* |
| 3 | *Leiopotherapon unicolor* | *Neosilurus hyrtlii* | *Nematalosa erebi* |
| 4 | *Craterocephalus stercusmuscarum* | *Leiopotherapon unicolor* | *Neosilurus hyrtlii* |
| 5 | *Retropinna semoni* | *Melanotaenia splendida* | *Amniataba percoides* |
| 6 | *Hypseleotris klunzingeri* | *Amniataba percoides* | *Melanotaenia splendida* |
| 7 | *Hypseleotris* sp. A | *Glossogobius giurus* | *Glossogobius giurus* |
| 8 | *Macquaria ambigua* | *Craterocephalus cuneiceps* | *Craterocephalus cuneiceps* |
| 9 | *Hypseleotris* sp. B | *Ophisternon candidum* | *Ophisternon candidum* |
| 10 | *Amniataba percoides* | *Leiopotherapon aheneus* | *Leiopotherapon aheneus* |
| 11 | *Melanotaenia splendida* | *Hypseleotris aurea* | *Hypseleotris aurea* |
| 12 | *Scortum barcoo* | *Milyeringa veritas* | *Milyeringa veritas* |
| 13 | *Porochilus argenteus* | *Lepidogalaxias salamandroides* | *Glossamia aprion* |
| 14 | *Ambassis mulleri* | *Galaxias occidentalis* | *Porochilus rendahli* |
| 15 | *Mogurnda mogurnda* | *Galaxiella munda* | *Toxotes chatareus* |
| 16 | *Glossogobius aureus* | *Galaxiella nigrostriata* | *Ambassis mulleri* |
| 17 | *Bidyanus welchi* | *Tandanus bostocki* | *Mogurnda mogurnda* |
| 18 | *Philypnodon grandiceps* | *Bostockia porosa* | *Oxyeleotris selheimi* |
| 19 | *Mogurnda adspersa* | *Nannoperca vittata* | *Arius midgleyi* |
| 20 | *Galaxias olidus* | *Nannatherina balstoni* | *Glossogobius* sp. C |
| 21 | *Ambassis agassizii* | *Craterocephalus eyresii* | *Anodontiglanis dahli* |
| 22 | *Macquaria colonorum* | *Philypnodon grandiceps* | *Craterocephalus stramineus* |
| 23 | *Philypnodon* sp. | *Gadopsis marmoratus* | *Neosilurus pseudospinosus* |
| 24 | *Tandanus tandanus* | *Galaxias olidus* | *Hephaestus jenkinsi* |
| 25 | *Gadopsis marmoratus* | *Mogurnda adspersa* | *Craterocephalus lentigenosus* |
| 26 | *Nannoperca australis* | *Macquaria colonorum* | *Syncomistes trigonicus* |
| 27 | *Maccullochella peelii* | *Nannoperca australis* | *Mogurnda* sp. 1 |
| 28 | *Macquaria australasica* | *Retropinna semoni* | *Melanotaenia pygmaea* |
| 29 | *Hypseleotris compressa* | *Philypnodon* sp. | *Hannia greenwayi* |
| 30 | *Glossamia aprion* | *Craterocephalus stercusmuscarum* | *Leiopotherapon macrolepis* |
| 31 | *Porochilus rendahli* | *Ambassis agassizii* | *Toxotes oliglepis* |
| 32 | *Glossogobius giurus* | *Hypseleotris* sp. A | *Hypseleotris ejuncida* |
| 33 | *Toxotes chatareus* | *Hypseleotris klunzingeri* | *Hypseleotris kimberleyensis* |
| 34 | *Neosilurus ater* | *Tandanus tandanus* | *Hypseleotris regalis* |
| 35 | *Hephaestus fuliginosus* | *Macquaria ambigua* | *Neosilurus ater* |
| 36 | *Oxyeleotris lineolatus* | *Maccullochella peelii* | *Ambassis macleayi* |
| 37 | *Pseudomugil signifer* | *Macquaria australasica* | *Melanotaenia nigrans* |
| 38 | *Ophieleotris aporos* | *Hypseleotris* sp. B | *Syncomistes butleri* |
| 39 | *Gobiomorphus australis* | *Galaxias fuscus* | *Melanotaenia exquisita* |
| 40 | *Rhadinocentrus ornatus* | *Galaxias rostratus* | *Craterocephalus helenae* |
| 41 | *Pseudomugil mellis* | *Craterocephalus fluviatilis* | *Melanotaenia gracilis* |
| 42 | *Macquaria novemaculeata* | *Craterocephalus amniculus* | *Hephaestus epirrhinos* |
| 43 | *Gobiomorphus coxii* | *Melanotaenia fluviatilis* | *Syncomistes rastellus* |
| 44 | *Hypseleotris galii* | *Maccullochella macquariensis* | *Kimberleyeleotris notata* |
| 45 | *Craterocephalus marjoriae* | *Bidyanus bidyanus* | *Kimberleyeleotris hutchinsi* |
| 46 | *Melanotaenia duboulayi* | *Gadopsis bispinosus* | *Craterocephalus stercusmuscarum* |
| 47 | *Nannoperca oxleyana* | *Hypseleotris* sp. C | *Oxyeleotris lineolatus* |
| 48 | *Mordacia praecox* | *Galaxiella pusilla* | *Ambassis agrammus* |
| 49 | *Galaxiella pusilla* | *Nannoperca obscura* | *Glossogobius aureus* |
| 50 | *Craterocephalus eyresii* | *Nannoperca variegata* | *Parambassis gulliveri* |
| 51 | *Neosilurus gloveri* | *Gobiomorphus australis* | *Scortum neili* |
| 52 | *Neosilurides cooperensis* | *Macquaria novemaculeata* | *Syncomistes kimberleyensis* |
| 53 | *Craterocephalus centralis* | *Gobiomorphus coxii* | *Hephaestus fuliginosus* |
| 54 | *Craterocephalus dalhousiensis* | *Mordacia praecox* | *Denariusa bandata* |
| 55 | *Craterocephalus gloveri* | *Galaxias tanycephalus* | *Oxyeleotris nullipora* |
| 56 | *Scaturiginichthys vermeilipinnis* | *Paragalaxias mesotes* | *Pseudomugil gertrudae* |
| 57 | *Mogurnda* sp. 2 | *Galaxias auratus* | *Melanotaenia maccullochi* |
| 58 | *Chlamydogobius gloveri* | *Galaxias fontanus* | *Pseudomugil tenellus* |
| 59 | *Chlamydogobius eremius* | *Galaxias johnstoni* | *Kurtus gulliveri* |
| 60 | *Chlamydogobius micropterus* | *Galaxias parvus* | *Pingalla midgleyi* |
| 61 | *Chlamydogobius squamigenus* | *Galaxias pedderensis* | *Toxotes lorentzi* |
| 62 | *Chlamydogobius japalpa* | *Paragalaxias dissimilis* | *Hypseleotris* sp. D |
| 63 | *Galaxias fuscus* | *Paragalaxias eleotroides* | *Melanotaenia trifasciata* |
| 64 | *Galaxias rostratus* | *Paragalaxias julianus* | *Scleropages jardinii* |

| | Fig. 15 | Fig. 16 | Fig. 17 |
|---|---|---|---|
| 65 | *Craterocephalus fluviatilis* | | *Hephaestus carbo* |
| 66 | *Craterocephalus amniculus* | | *Iriatherina werneri* |
| 67 | *Melanotaenia fluviatilis* | | *Porochilus obbesi* |
| 68 | *Maccullochella macquariensis* | | *Craterocephalus marianae* |
| 69 | *Bidyanus bidyanus* | | *Scortum barcoo* |
| 70 | *Gadopsis bispinosus* | | *Ambassis elongatus* |
| 71 | *Hypseleotris* sp. C | | *Porochilus argenteus* |
| 72 | *Oxyeleotris selheimi* | | *Pingalla gilberti* |
| 73 | *Arius midgleyi* | | *Scortum hillii* |
| 74 | *Ambassis macleayi* | | *Awaous acritosus* |
| 75 | *Ambassis agrammus* | | *Variichthys lacustris* |
| 76 | *Anodontiglanis dahli* | | *Glossogobius* sp. A |
| 77 | *Scleropages jardinii* | | *Pseudomugil signifer* |
| 78 | *Hephaestus carbo* | | *Ophieleotris aporos* |
| 79 | *Ambassis elongatus* | | *Oxyeleotris gyrinoides* |
| 80 | *Craterocephalus stramineus* | | *Glossogobius celebius* |
| 81 | *Glossogobius* sp. C | | *Oxyeleotris aruensis* |
| 82 | *Kurtus gulliveri* | | *Oxyeleotris fimbriata* |
| 83 | *Parambassis gulliveri* | | *Neosilurus brevidorsalis* |
| 84 | *Pingalla gilberti* | | *Pingalla lorentzi* |
| 85 | *Scortum parviceps* | | *Glossogobius concavifrons* |
| 86 | *Neosilurus mollespiculum* | | *Mogurnda adspersa* |
| 87 | *Scortum hillii* | | *Ambassis agassizii* |
| 88 | *Scleropages leichardti* | | *Ambassis miops* |
| 89 | *Neoceratodus forsteri* | | *Tandanus tandanus* |
| 90 | *Maccullochella ikei* | | *Hypseleotris* sp. A |
| 91 | *Nannoperca obscura* | | *Cairnsichthys rhombosomoides* |
| 92 | *Nannoperca variegata* | | *Melanotaenia eachamensis* |
| 93 | | | Percichthyidae N. gen. N. sp. |
| 94 | | | *Hephaestus tulliensis* |
| 95 | | | *Glossogobius* sp. B |
| 96 | | | *Stiphodon allen* |
| 97 | | | *Neosilurus mollespiculum* |
| 98 | | | *Scortum parviceps* |
| 99 | | | *Philypnodon grandiceps* |
| 100 | | | *Gobiomorphus australis* |
| 101 | | | *Hypseleotris klunzingeri* |
| 102 | | | *Rhadinocentrus ornatus* |
| 103 | | | *Pseudomugil mellis* |
| 104 | | | *Macquaria ambigua* |
| 105 | | | *Scleropages leichardti* |
| 106 | | | *Retropinna semoni* |
| 107 | | | *Philypnodon* sp. |
| 108 | | | *Macquaria novemaculeata* |
| 109 | | | *Gobiomorphus coxii* |
| 110 | | | *Hypseleotris galii* |
| 111 | | | *Craterocephalus marjoriae* |
| 112 | | | *Melanotaenia duboulayi* |
| 113 | | | *Nannoperca oxleyana* |
| 114 | | | *Maccullochella peelii* |
| 115 | | | *Neoceratodus forsteri* |
| 116 | | | *Macquaria colonorum* |
| 117 | | | *Galaxias olidus* |
| 118 | | | *Maccullochella ikei* |
| 119 | | | *Mordacia praecox* |
| 120 | | | *Macquaria australasica* |
| 121 | | | *Gadopsis marmoratus* |
| 122 | | | *Nannoperca australis* |
| 123 | | | *Galaxiella pusilla* |
| 124 | | | *Nannoperca obscura* |
| 125 | | | *Nannoperca variegata* |
| 126 | | | *Galaxias tanycephalus* |
| 127 | | | *Paragalaxias mesotes* |