ECOLOGY OF SOME FISH SPECIES OF THE MCARTHUR RIVER

Common Name	Scientific Name	Max Length	Age at Sexual maturity (mths)	Longevity (yrs)	Temp Tolerance °C	pH	Conductivity (um.cm-1)	Turbidity (NTU)	Dissolved Oxygen (mg.L-1)	Feeding Area /Method	Food	Breeding Season	Breeding Area	Movements
Freshwater Sawfish	*Pristis microdon*	76-250cm in freshwater; up to 6m marine								benthos	carnivorous - molluscs, crustaceans, fish		marine	ovoviviparous, breeding in salt water; first 3-4 years in freshwater growing to about 2m
Bony Bream	*Nematalosa erebi*	commonly 15-20cm) max 32cm	12 - 15	5	15 - 38	4.8-8.6	2-198	0.7-120	2.7-12	surface, water column, benthos	primarily detritivore/algivore - some small microcrustaceans, insects, molluscs	year-round, peak in early wet season	shallow still-water habitats - lagoons, backwaters	adults probably move to spawning grounds, and juveniles and subadults make diurnal migrations upstream
Ox-eye Herring	*Megalops cyprinoides*	commonly to 50cm, max130cm	12 - 24		22.9 - 34	5.2-9.1	2-391	2.1-8.1	1.1-9.7	surface, water column, benthos	juveniles - plankton; adults - crustaceans, fish, insects	summer wet season	near-shore marine	most abubdant in marine and estuarine waters; juveniles and small adults move into freshwater reaches of rivers
Fork-tailed Catfish	*Arius spp.*	60cm	24 - 36	4-5?	11 - 38	4.8-8.7	4-478		0.1-9.7	benthos, water column, surface	omnivorous - fish, plant material, detritus, prawns, insects, molluscs, worms	Sept-Mar buccal inubation, parental care	possibly deeper freshwater	move upsteam in large numbers when water temperatures increase (over 23 degrees) mostly at night
Eel-tailed Catfish	*Neosilurus/Porochilus spp.*	40cm	12 ?	5?	21 - 36	5.2-9.1	4-620	0.4-120	1.0-11	benthos, nocturnal	omnivorous - aquatic insects, microcrustaceans, detritus, molluscs, worms	Dec-Mar		some upstream migration mostly at night during wet season

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Long Tom	*Strongylura krefftii*	commonly 30-40cm) max 85cm			22.9 - 38	4.6-8.6	6-700	2-7.1	2.4-9.1	near surface	primarily piscivorous - small fish, insects, crustaceans, algae	wet season Sept- Dec		paucity of information, but makes substantial movements within river systems and different life history stages utilise different habitats
Fly-specked Hardyhead	*Craterocephalus stercusmuscarum*	commonly 5-6cm, max 7.8cm	<12	2+	12 - 36	4.0-8.2	2-790	0.2-9.3	0.9-11.4	water column - still to fast flowing generally shallow water	primarily carnivore - aquatic insects, microcrustaceans, molluscs; some herbivory/planktonivory - algae,macrophytes	variable - early wet and mid-dry, peak Sept-Feb	instream rootmasses	local dispersion and recolonisation movements in wet season
Chequered Rainbowfish	*Melanotaenia splendida inornata*	commonly<8cm, max 14cm	<12 (probably 6-7)	1 - 2	15 - 32	5.1-8.5	6-790	0.1-16	1.1-11	benthos, water column, surface	omnivorous - algae,aquatic insects,terrestrial invertebrates, macroinvertebrates, detritus, macrophytes	early wet Aug-Feb	aquatic veg/root mass	diurnal upstream migration at onset of wet season, or late wet to dry season refugia; frequently forms aggregations near surface deeper pools where aquatic vegetation or woody debris

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Glassfish	*Ambassis spp.*	max 9-11cm	<12	probably <2	18 - 38	3.8-7.7	4-220	0.3-22	2.5-11	water column, aquatic vegetation, most active at night	opportunist - microcrustaceans, aquatic insects, detritus, algae, macrocrustaceans	wet season	lentic, aquatic vegetation	possibly downstream migration of adults to lentic spawning areas at start of wet season; movements at dusk and dawn upstream in late wet season (Mar-May) to dry season refugia
Purple-spotted Gudgeon	*Mogurnda mogurnda*	commonly 8cm, max 12cm	6	possibly 3+	12 - 32	5.6-8.5	13-65	0.1-200	0.6-12.8	benthos, water column, surface - quiet or slow moving areas among rocks and vegetation	omnivorous; young - microcrustaceans; adults - aquatic insects, crustaceans, molluscs, fish, plant material, algae, detritus	Sept-Mar	repeat spawner, rocky hard substrates, debris and aquatic veg	little information, maybe localised movements

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Barramundi	*Lates calcarifer*	commonly 120cm, max 180cm	36 (M), 72 (F)	14 - 20	25 - 35	4-9.1			1.1-6.8	woody debris in water column/benthos, and surface; predatory	carnivores - fish, crustaceans (juveniles also eat insects and other macroinvertebrates)	Sept-Mar with two peaks - Oct/Dec and Feb/Mar.	river mouths	Adults migrate from freshwater to estuary mudflats to spawn during wet season; larvae move into mangroves or floodplains for first year; then at 20cm long young move into shallow coastal seas and migrate upstream into freshwater upper reaches where spend next 3-4 years, favouring cover of undercut banks, submerged logs and overhanging vegetation.
Barred Grunter	*Amniataba percoides*	commonly 10-12cm, max 18cm	<12	3 - 4	21 - 35	4.5-8.6	2-780	0.3-17	0.2-11	mainly benthic, some water column, surface	omnivorous - aquatic insects, algae, plant material, crustaceans	late dry to wet season Aug-Mar	variety of habitats-creeks, lagoons	adapts to wide range conditions
Sooty Grunter	*Hephaestus fuliginosus*	commonly 25cm, max 45cm	12 (M), 24 (F)	probably 5 - 7	17 - 34	4.5-8.6	6-790	0.3-80	4.2-11	water column in variety habitats	omnivorous - aquatic insects, algae, molluscs, invertebrates, plant material, fish	early to mid wet season	probably flowing water	movement out of dry season refugia into ephemeral wet season habitats for spawning, juveniles move upstream diurnally

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Spangled Perch	*Leiopotherapon unicolor*	30cm	3 - 6	probably 2-3	5 - 42	4-10.2		1.52-260	0.4+	water column, benthic - wide range of habitats	omnivorous - aquatic insects, crustaceans, molluscs, fish, algae, macrophytes	Oct-Mar, peak Nov	shallow areas in backwaters and still pools	capable of rapid and extensive movements - move upstream in rivers or to shallows in lakes to spawn on soft substrates
Gulf Grunter	*Scortum ogilbyi*	commonly 25cm, max 40cm								benthic, water column	carnivorous - fishes, crustacens, insects, molluscs	probably wet season		
Spotted Scat	*Scatophagus argus*	max 38cm								benthic scavenger	omnivorous - algae, organic debris and small invertebrates			inhabit mangrove creeks and brackish lower reaches but freely moves upstream to freshwater, especially during summer
Mouth Almighty	*Glossamia aprion*	commonly 12cm, max 18cm	<12	probably <5	17 - 38	4.9-9.1	2-620	0.1-8.6	1.1-11.9	water column, sometimes surface; nocturnal ambush feeder	carnivorous - aquatic insects, small fish, crustaceans	late dry to early wet season	lentic (oral brooding)	possibly localised movements, adults to lowland lagoons to breed and juveniles up rivers after incubation, frequents well vegetated shallow margins

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Seven-spot Archerfish	*Toxotes chatareus*	commonly <25cm, max 40cm	24	3 - 5	21 - 36	4.6-8.4	2-790	0.6-20.8	1.1-9.7	surface - spit jets of water to catch terrestrial prey in bankside vegetation; varies methods, uses water column, surface	carnivorous - mainly terrestrial insects, some aquatic insects, crustaceans, small fish	early wet season	throughout range particularly in shallow muddy lowand lagoons	widespread dispersal during wet season, moves locally patrolling surface up and down strembanks for food around overhanging vegetation
Flathead Goby	*Glossogobius spp.*	max 14cm			23 - 29.4	5.1-8.2	6-391	3.3-8.6	2.5-9	benthic	omnivorous - aquatic insects, crustaceans, macroinvertebrates, small fish, detritus, algae	possibly dry season to early wet	marine but possibly sometimes freshwater	marine larval stage, with pronounced rapid migration upstream, adults inhabit freshwater
Sleepy Cod	*Oxyeleotris spp.*	commonly 20cm, max 45cm		probably 5-7	20 - 28	4.8-9.2	4-650	0.1-578	1-11	ambush predator - cover of log debris and undercut banks in slow-flowing/ quiet water	carnivorous - aquatic insects, fish, crustaceans	serial spawner Oct- Feb	rock ledges, debris, hollow logs; male guards nest	adults sedentary, some localised movement of juveniles likely
Selheim's Sole	*Brachirus selheimi*	commonly 10cm, max 15cm								bottom, deep still holes with rock	carnivorous - small fish, crustaceans, aquatic insects			nocturnally active

Information Sources

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