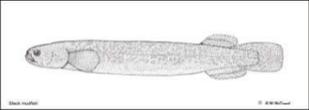
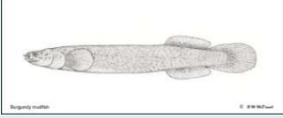
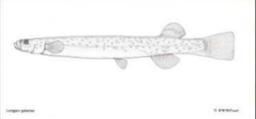
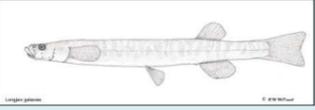
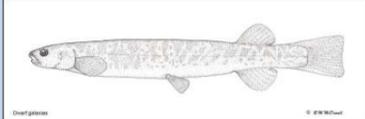
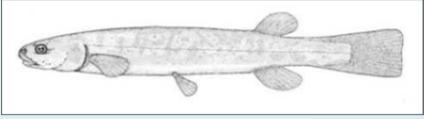
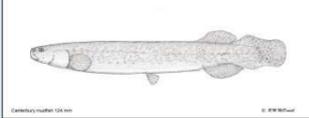
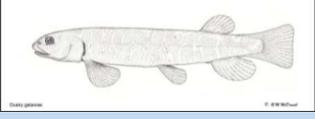
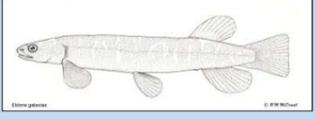
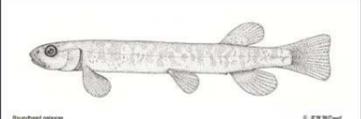
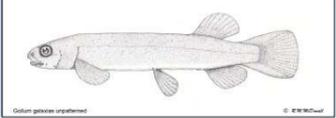
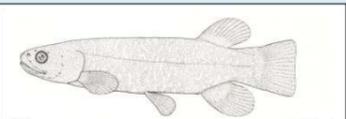
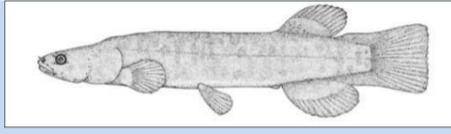
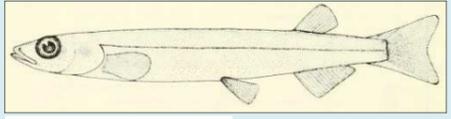
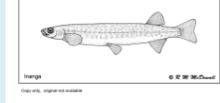
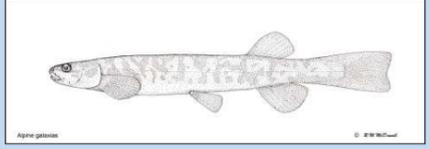
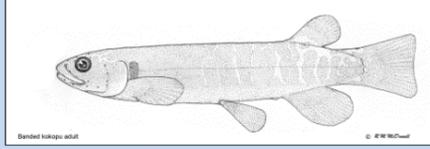
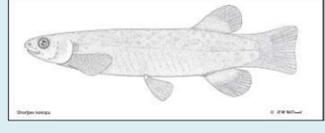
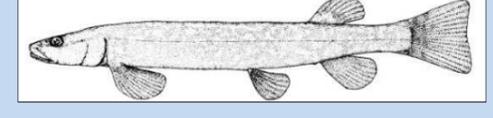
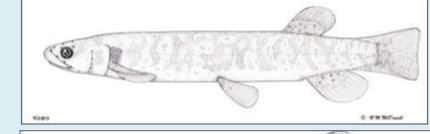
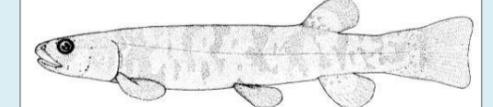


TAXONOMIC KEY FOR IDENTIFICATION OF GALAXIID SPECIES

No.	Characteristic	Species	Line drawings (copyright R. M. McDowall)
1	Pelvic fins present. Pelvic fins absent.	go to 4 go to 2	
2	Dorsal and anal fins long, usually 14 rays in each fin, mouth large.	go to 3	
	Dorsal and anal fins short, usually <14 fin rays in the dorsal fin. Dark coloured, snout blunt, small mouth (found from the Hauraki plains and Waikato to North Cape, but see range of <i>N. heleioides</i> below). Grows to about 160 mm.	Black mudfish (<i>N. diversus</i>)	
3	Caudal peduncle longer than deep; colour may include a distinct winey-red flush (around Bay of Islands) grows to at least 90 mm.	Burgandy mudfish (<i>N. heleioides</i>)	
	Caudal peduncle very short, deeper than long; body colour sandy-brownish (found from Taranaki to Wellington, Wairarapa and West Coast south to Okarito), grows to 175 mm.	Brown mudfish (<i>N. apoda</i>)	
4	Lower jaw upturned, distinctly longer than upper. Lower jaw not upturned, jaws equal size or lower jaw shorter than upper.	go to 5 go to 6	
5	Usually only 15 principle caudal fin rays and five pelvic fin rays; fins notably small (found from the Kauru River, tributary of the Kakanui River, lower Hukataramea in North Otago and quite widely in the Mackenzie Basin); generally up to 90 mm long.	Lowland longjaw (<i>G. cobitinis</i>)	
	Usually 16 principle caudal fin rays and seven pelvic fin rays; fins notably small (found in the foothills of the Southern Alps from Rakaia to Waitaki, also Maruia River in upper Buller River; up to 90 mm long.	Upland longjaw (<i>G. prognathus</i>)	
6	Usually 16 principle caudal fin rays. Usually <16 principle caudal fin rays.	go to 11 go to 7	
7	Usually 7 pelvic fin rays. Usually <7 pelvic fin rays.	go to 10 go to 8	
8	Usually six pelvic fin rays and 15 caudal fin rays.	Dwarf galaxias (<i>G. divergens</i>)	
	Usually 4-5 pelvic fin rays and <15 caudal fin rays.	go to 9	
9	Tail truncate, not rounded; caudal flanges weak; caudal peduncle much longer than deep (found in the Mackenzie Basin, Upper Waitaki River), grows up to about 80 mm long.	Bignose galaxias (<i>G. macronasus</i>)	
	Tail distinctly rounded, caudal flanges strong; caudal peduncle not much longer than deep; (found in Canterbury, from Oxford to the Waitaki); grows to 150 mm in length.	Canterbury mudfish (<i>N. burrowsius</i>)	
10	Usually only 14 principle caudal fin rays, two long pyloric caeca on stomach (can be quite stout in build); colour dull olive brownish with round spots and pale vertical bands (found in the Waipori River system and a few rivers immediately south, mostly in the Clutha river system); grows to 140 mm in length.	Dusky galaxias (<i>G. pullus</i>)	
	Usually only 15 principle caudal fin rays, no pyloric caeca (or very small and slender) on stomach (found in the Waipori River system and a few rivers immediately south, mostly in the Clutha River system); grows to 100 mm in length.	Eldon's galaxias (<i>G. eldoni</i>)	
11	Colour pattern often with fine speckling, with pattern along the back having a distinct mid-dorsal discontinuity (like mismatched wallpaper); no enlarged canine teeth in jaws; two long pyloric caeca on stomach.	go to 12	
	Colour pattern along back may be bilaterally asymmetric, but without a distinct discontinuity in the colour pattern along the back; no enlarged canine teeth in jaws; two pyloric caecae present on stomach.	go to 13	
12	Present in the upper Taieri River and Manuherikea River in the Clutha system.	Roundhead galaxias (<i>G. anomalus</i>)	
	Present across the Southland Plains, Stewart Island, Catlins and the Nevis River.	Gollum galaxias (<i>G. gollumoides</i>)	
13	Jaws about equal length; anal fin origin usually directly below dorsal fin origin. Lower jaw shorter than upper jaw (may tuck in behind upper jaw when mouth closed); anal fin origin distinctly behind dorsal fin origin.	go to 14 go to 19	
14	Mouth large, reaching back behind the rear of the eyes; colour a mass of coarse golden lines, rings and spots on a deep brown background; very stout build; grows to 400 mm or more in length.	Giant kokopu (<i>G. argenteus</i>)	
	Mouth small, may only reach the front or middle of the eye; does not have golden markings.	go to 15	

<p>15 Tail distinctly forked. Tail not distinctly forked, usually truncate or slightly concave.</p>	<p>go to 16 go to 18</p>	
<p>16 Caudal peduncle deep and has strong flanges along the upper and lower edges that extend to almost the dorsal fin; found in a few lakes on the Chatham Island; grows to 180 mm in length.</p> <p>Caudal peduncle slender, wrist like and lacking caudal flanges that extend forward to rear of dorsal and anal fins.</p>	<p>Chatam mudfish (<i>N. rekohua</i>)</p>	
<p>17 Has 17-25 long and slender gill rakers; found from a few lakes on the West Coast of Northland around the Kaipara Harbour; grows to 80 mm in length.</p> <p>Has 13-17 gill rakers; found in lowland areas; grows to 150 mm in length.</p>	<p>Dune lakes galaxias (<i>G. gracilis</i>)</p> <p>Inanga (<i>G. maculatus</i>)</p>	 
<p>18 Very slender, pencil-shaped gill rakers; short and stout body; caudal peduncle noticeably long and slender (i.e. depth less than half the length); no pyloric caeca on stomach; no enlarged canine teeth; found in high country streams of eastern South Island from Wairau River in Marlborough to the Oreti River; grows to 112 mm in length.</p> <p>Deep bodied and stout; gill rakers long and slender; caudal peduncle short and stout (i.e slightly longer than deep); pyloric caeca present on stomach; enlarged canine teeth; pale vertical banding across side of skin patterning; grows to 300 mm in length.</p>	<p>Alpine galaxias (<i>G. paucispondylus</i>)</p> <p>Banded kokopu (<i>G. fasciatus</i>)</p>	 
<p>19 Deep and stout body; snout rather long and smoothly rounded; dark chocolate brown markings between fin rays and around fin margins; fins may be distinctly orange; noticeable black blotch behind operculum; grows to 350 mm in length.</p> <p>Slender body with no chocolate brown markings between fin rays.</p>	<p>Shortjaw kokopu (<i>G. postvectis</i>)</p> <p>go to 20</p>	
<p>20 Head distinctly flattened dorsally; square profile of upper jaw when viewed from above or below; found across Otago, Southland and Stewart Island.</p> <p>Head slightly flattened when viewed from the side; rounded jaw profile when viewed from above.</p>	<p>Flathead galaxiids* (including <i>G. depressiceps</i>)</p> <p>go to 21</p>	
<p>21 Large pectoral fins reaching more than half the distance back to the pelvic fin origin; similarly with the pelvic fin relative to the anal fin; large black blotch present just above pectoral fin.</p> <p>Pectoral fins small, reaching less than half the distance back to the pelvic fin origin; small (if any) black blotch above pectoral fin; found on the east coast and top of the South Island down to the Waitaki River.</p>	<p>Koaro (<i>G. brevipinnis</i>)</p> <p>Canterbury galaxias* (<i>G. vulgaris</i>)</p>	 

* Indicates that distinct genotypes have been found of this species which may require description