

Expedition 317 Site U1353, Table T11. Invertebrate macrofossils. (See table notes.)

Taxon	Other	Hole, core, section, interval (cm)	Depth (mbsf)	Sediment type	Habitat	Age (Ma)		NZ stage	International timescale
						not > than	not < than		
		317-							
? <i>Tellinota edgari</i> (Iredale)		U1353A-1H-1, 3	0.79	S/Z	Shelf, eurybathyal	10.9	0.0	Tt-R	late Miocene to recent
<i>Dosinia lambata</i> (Gould)		U1353A-2H-3, 66	9.16	fS/Z	Inner to mid-shelf, 5–50 m; anoxic silt	5.3	0.0	Wo-R	early Pliocene to recent
<i>Nucula</i> sp. (<i>hartvigiana/nitidula</i> , <i>E. strangei</i>)		U1353B-2H-4, 96	13.46	S/Z	Inner shelf				
Lucinid yet to be identified		U1353B-2H-4, 96	13.46	S/Z	Shelf, eurybathyal				
<i>Divaricella (Divalucina) huttoniana</i> (Vanatta)		U1353B-2H-4, 96	13.46	fS/Z	Shoreface, usually <20 m	25.2	0.0	Ld-R	late Oligocene to recent
<i>Maorimactra ordinaria</i> (Smith)		U1353B-2H-4, 96	13.46	fS/Z	Shoreface, usually <20 m	5.3	0.0	Wo-R	early Pliocene to recent
<i>Scalpomactra scalpellum</i> (Reeve)		U1353B-2H-4, 96	13.46	fS/Z	Shoreface, usually <20 m	10.9	0.0	Tt-R	late Miocene to recent
<i>Bassina yatei</i> (Gray)		U1353B-2H-4, 96	13.46	S	Shoreface, usually <20 m	5.3	0.0	Wo-R	early Pliocene to recent
<i>Dosinia lambata</i> (Gould)		U1353B-2H-4, 96	13.46	fS/Z	Shoreface, usually <20 m	5.3	0.0	Wo-R	early Pliocene to recent
<i>Tawera spissa</i> (Deshayes)		U1353B-2H-4, 96	13.46	S/Z	Shelf to upper slope	2.4	0.0	Wn-R	late late Pliocene to recent
<i>Xymene</i> sp.		U1353B-2H-4, 96	13.46	S	Inner to middle shelf				
<i>Dosinia (Austrodozinia) anus</i> (Philippi)		U1353A-2H-CC, 10	9.28	S	Open ocean sandy shoreface, 0–15 m	2.4	0.0	Wn-R	late late Pliocene to recent
<i>Zeacolpus vittatus</i> (Hutton)		U1353A-3H-2, 120	12.00	fS/Z	Shelf, eurybathyal	5.3	0.0	Wo-R	early Pliocene to recent
<i>Antalis nana</i> (Hutton)		U1353A-3H-3, 140–150	13.70	Z	Shelf, eurybathyal	19.0	0.0	Pl-R	late early Miocene to recent
<i>Caryocorbula zelandica</i> (Quoy and Gaimard)		U1353A-3H-3, 140–150	13.70	Sg/Z	Shelf; clump fauna	5.3	0.0	Wo-R	
<i>Maorimactra ordinaria</i> (Smith)		U1353A-3H-6, 143	17.94	fS/Z	Shoreface, usually <20 m	5.3	0.0	Wo-R	early Pliocene to recent
<i>Stiracolpus symmetricus</i> (Hutton)		U1353A-4H-1, 19	18.39	Z	Shelf to upper slope	1.6	0.0	Wc-R	Pleistocene to recent
<i>Tiostrea chilensis lutaria</i> (Hutton)		U1353A-4H-1, 2	18.22	CF	Shelf; clump fauna; eurybathyal	6.5	0.0	Tk-R	late Miocene to recent
<i>Dosinia (Phacosoma) subrosea</i> (Gray)		U1353A-4H-1, 2	18.22	S	Bay or ocean sandy shoreface, 0–15 m	3.6	0.0	Wwp-R	late Pliocene to recent
<i>Tawera spissa</i> (Deshayes)		U1353A-4H-1, 2	18.22	S/Z	Shelf to upper slope	2.4	0.0	Wn-R	late late Pliocene to recent
<i>Stiracolpus symmetricus</i> (Hutton)		U1353A-4H-3, 62	21.60	Z	Shelf to upper slope	1.6	0.0	Wc-R	Pleistocene to recent
<i>Zeacolpus vittatus</i> (Hutton)		U1353A-4H-3, 62		fS/Z	Shelf, eurybathyal	5.3	0.0	Wo-R	early Pliocene to recent
<i>Glaphyrina</i> sp.		U1353A-4H-3, 140–150	22.60		Middle to outer shelf				
<i>Stiracolpus symmetricus</i> (Hutton)		U1353A-4H-3, 140–150	22.60	Z	Shelf to upper slope	1.6	0.0	Wc-R	Pleistocene to recent
<i>Austrofusius glans</i> (Roeding)		U1353A-4H-CC, 5	26.76	Z	Shelf, eurybathyal	1.6	0.0	Wc-R	Pleistocene to recent
<i>Stiracolpus symmetricus</i> (Hutton)		U1353A-4H-4, 140–150	24.10	Z	Shelf to upper slope	1.6	0.0	Wc-R	Pleistocene to recent
<i>Borsonella</i>		U1353A-4H-4, 140–150	24.10						
<i>Stiracolpus symmetricus</i> (Hutton)		U1353A-4H-5, 140–150	25.60	Z	Shelf to upper slope	1.6	0.0	Wc-R	Pleistocene to recent
<i>Stiracolpus symmetricus</i> (Hutton)		U1353A-4H-6, 101	26.70	Z	Shelf to upper slope	1.6	0.0	Wc-R	Pleistocene to recent
<i>Atrina pectinata zelandica</i> (Gray)		U1353A-5H-1, 57–87	27.27	S/Z	Estuarine to inner shelf, <20 m	12.7	0.0	Sw-R	middle Miocene to recent
<i>Tawera spissa</i> (Deshayes)		U1353A-5H-1, 57–87	27.27	S/Z	Shelf to upper slope	2.4	0.0	Wn-R	late late Pliocene to recent
<i>Austrofusius glans</i> (Roeding)		U1353A-5H-1, 57–87	27.27	Z	Shelf, eurybathyal	1.6	0.0	Wc-R	Pleistocene to recent
<i>Chlamys (Zygochlamys) patagonica delicatula</i> (Hutton)		U1353A-5H-1, 23	26.93	Sg/Z	CW; outer shelf to upper slope	3.6	0.0	Wwp-R	early late Pliocene to recent
<i>Tawera spissa</i> (Deshayes)		U1353A-5H-1, 54	27.24	S/Z	Shelf to upper slope	2.4	0.0	Wn-R	late late Pliocene to recent
<i>Stiracolpus symmetricus</i> (Hutton)		U1353A-5H-1, 54	27.24	Z	Shelf to upper slope	1.6	0.0	Wc-R	Pleistocene to recent
<i>Alcithoe</i> sp. (? <i>swainsoni</i>)		U1353A-5H-1, 54	27.24	S/Z	Inner shelf, usually <20 m				
<i>Stiracolpus symmetricus</i> (Hutton)		U1353A-6H-2, 140–150	37.10	Z	Shelf to upper slope	1.6	0.0	Wc-R	Pleistocene to recent
<i>Notocallista (Striacallista) multistriata</i> (Sowerby)		U1353B-6H-3, 57	38.77	Z	Shelf, eurybathyal	3.6	0.0	Wwp-R	late Pliocene to recent
<i>Zeacolpus vittatus</i> (Hutton)		U1353B-6H-5, 56	41.76	fS/Z	Shelf, eurybathyal	5.3	0.0	Wo-R	early Pliocene to recent
? <i>Nassicola</i> cf. <i>ultima</i> (Beu)	Rew.	U1353A-7H-4, 42	46.11	Z	Shelf, eurybathyal			Tt-Wp	late Miocene to early late Pliocene
<i>Aeneator elegans</i> (Suter)		U1353A-8H-4, 30	52.84	Z	Upper slope, >150 m	3.0	0.0	Wwm-R	early late Pliocene to recent
<i>Stiracolpus symmetricus</i> (Hutton)		U1353B-9H-3, 140–150	61.20	Z	Shelf to upper slope	1.6	0.0	Wc-R	Pleistocene to recent
<i>Tanea zelandica</i> (Quoy and Gaimard)		U1353B-9H-3, 140–150	61.20	S/Z	Inner shelf, usually <20 m	2.4	0.0	Wn-R	late late Pliocene to recent
<i>Stiracolpus symmetricus</i> (Hutton)		U1353B-10H-1, 140–150	63.40	Z	Shelf to upper slope	1.6	0.0	Wc-R	Pleistocene to recent
<i>Notocallista (Striacallista) multistriata</i> (Sowerby)		U1353B-10H-3, 140–150	66.40	Z	Shelf, eurybathyal	3.6	0.0	Wwp-R	late Pliocene to recent
<i>Stiracolpus symmetricus</i> (Hutton)		U1353B-10H-3, 140–150	66.40	Z	Shelf to upper slope	1.6	0.0	Wc-R	Pleistocene to recent
<i>Cominella (Eucominia) nassoides nassoides</i> (Reeve)		U1353B-10H-3, 140–150	66.40	Z	Outer shelf to upper slope; CW	2.4	0.0	Wn-R	late late Pliocene to recent
<i>Nucula</i> sp. (<i>hartvigiana/nitidula</i> , <i>E. strangei</i>)		U1353B-11H-1, 140–150	69.00	S/Z	Inner shelf				
<i>Tenuiactaeon ambiguus</i> (Hutton)		U1353B-11H-1, 140–150	69.00	Z	Shelf, eurybathyal	2.4	0.0	Wn-R	late Pliocene to recent
<i>Stiracolpus symmetricus</i> (Hutton)		U1353B-11H-3, 140–150	72.00	Z	Shelf to upper slope	1.6	0.0	Wc-R	Pleistocene to recent
<i>Ostrea</i> sp.	Frag.	U1353B-19H-2, 108	113.10	CF	Shelf; clump fauna; eurybathyal				
<i>Nemocardium (Pratulium) pulchellum</i> (Gray)		U1353B-19H-3, 140–150	114.58	Z	Shelf, eurybathyal	3.0	0.0	Wwm-R	late late Pliocene to recent
<i>Pellicaria convexa</i> (Marwick)		U1353B-23H-3, 140–150	134.60	Z	Shelf, eurybathyal	2.4	1.6	Wn	late late Pliocene
<i>Pellicaria convexa</i> (Marwick)		U1353B-24H-1, 39	135.79	Z	Shelf, eurybathyal	2.4	1.6	Wn	late late Pliocene
<i>Dosinia (Keria) greyi</i> Zittel		U1353B-24H-2, 120	137.06	Z	Shelf, eurybathyal	6.5	0.0	Tk-R	late late Miocene to recent
? <i>Phialopecten</i> sp.		U1353B-28H-1, 140	150.80	Sg/S	Inner to middle shelf	3.6	0.0	Wwp-Wn	late Pleistocene
? <i>Notomegabalanus</i> sp. (ridged)		U1353B-28H-1, 140	150.80	CF	Shelf to upper slope				
<i>Gonimyrtea concinna</i> (Hutton)		U1353B-48H-1, 85	229.64	fS/Z	Shelf, eurybathyal	5.3	0.0	Wo-R	
? <i>Keria</i> sp. (frag. heavy shell - ? <i>cottoni</i> [Marwick])		U1353B-56H-1, 93	251.05	Z	Shelf, eurybathyal	12.7	8.5	Sw-Tt	late middle Miocene to late Miocene
<i>Dentalium zelandicum</i> (Sowerby) or <i>solidum</i> (Hutton)		U1353B-56H-1, 93	251.05	Z	Shelf, eurybathyal	6.5	0.0	Tk-R or Tt	
? <i>Notomegabalanus</i> sp. (ridged)		U1353B-56H-1, 93	251.05	CF	Shelf to upper slope				
<i>Ostrea</i> sp.	Frag.	U1353B-57H-1, 25–68	251.85	CF	Shelf; clump fauna; eurybathyal				
<i>Marama</i> sp. - ? <i>murdochi</i> (Marwick)		U1353B-57H-1, 25–68	251.85	Z	Shelf, eurybathyal	6.5	1.6	Tk-Wn	late late Miocene to late late Pliocene
? <i>Notomegabalanus</i> sp. (ridged)		U1353B-57H-1, 25–68	251.85	CF	Shelf to upper slope				
Veneridae indet.	Dble.	U1353B-59H-1, 43	255.33	Z	Shelf, eurybathyal				
<i>Ostrea</i> sp.	Frag.	U1353B-59H-1, 10	255.00	CF	Shelf; clump fauna; eurybathyal				
<i>Zeacolpus vittatus</i> (Hutton)		U1353B-65X-1, 106–116	289.86	fS/Z	Shelf, eurybathyal	5.3	0.0	Wo-R	early Pliocene to recent
<i>Mesopeplum (Borehamia) crawfordi</i> (Hutton)		U1353B-65X-CC, 18	290.14	Sg/S	Inner to middle shelf	3.6	3.0	Wwp	early late Pliocene
<i>Austrofusius pagoda</i> (Finlay)		U1353B-65X-CC, 18	290.14	Z	Shelf, eurybathyal	5.3	2.4	Wo-Wwm	early to early late Pliocene
? <i>Phialopecten</i> sp.	Frag.	U1353B-66X-1, 28	298.68	Sg/S	Inner to middle shelf	3.6	0.0	Wwp-Wn	late Pleistocene
<i>Amalda (Baryspira)</i> cf. <i>mucronata</i> (Sowerby)		U1353B-66X-1, 28	298.68	Z	Inner to middle shelf	5.3	0.0	Wo-R	early Pliocene to recent
<i>Ostrea</i> sp.	Frag.	U1353B-67H-CC, 15	308.15	CF	Shelf; clump fauna; eurybathyal				
? <i>Marama</i> sp.	Frag.	U1353B-67X-CC, 15	308.15	Z	Shelf, eurybathyal				
<i>Maorimactra</i> sp., ? <i>chrydea</i> (Suter)		U1353B-85X-CC, 1	308.15	S/Z	Shoreface, usually <20 m	6.5	3.0	Tk-Wwp	late Miocene to late Pliocene
Veneridae indet.		U1353B-85X-CC, 1	490.30	Z	Shelf, eurybathyal				

Notes: Rew. = reworked, Frag. = fragment, Dble. = double valved. S = sand, Z = silt, fS = fine sand, Sg = shell gravel, CF = clump fauna. CW = cold water. For New Zealand (NZ) stage abbreviations, see Figure F5 in the "Methods" chapter. This table is also available in [ASCII](#).